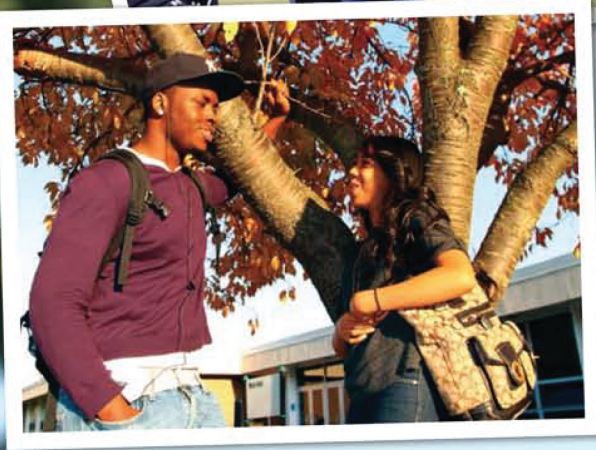


# MIDDLESEX

COUNTY COLLEGE



## COURSE CATALOG

# 2012-2013

**SUCCESS STARTS HERE**

## General Information

### Address, Foreword and Leadership

#### MAIN CAMPUS

2600 Woodbridge Avenue  
P.O. Box 3050  
Edison, New Jersey 08818-3050  
732.548.6000

#### NEW BRUNSWICK CENTER

140 New Street  
New Brunswick, NJ 08901  
732.745.8866

#### PERTH AMBOY CENTER

60 Washington Street  
Perth Amboy, NJ 08861  
732.324.0700

#### FOREWORD

The catalog is the contract between the College and the student. This catalog provides information for students, faculty, and administrators regarding the College's policies. Requirements, course offerings, schedules, activities, tuition and fees in this catalog are subject to change without notice at any time at the sole discretion of the administration. Such changes may be of content of any of the foregoing; and the cancellation of a schedule of classes or other academic activities. Payment of tuition or attendance in any class shall constitute a student's acceptance of the administrator's rights as set forth above. The office of the Registrar prepares the catalog. Any questions about its contents should be directed to the Registrar in Chambers Hall.

The most current information can be found on the MCC website: [www.middlesexcc.edu](http://www.middlesexcc.edu)

#### MIDDLESEX COUNTY BOARD OF CHOSEN FREEHOLDERS

Christopher D. Rafano, Freeholder Director  
Ronald G. Rios, Deputy Director  
Carol Barrett Bellante  
Stephen J. Dalina  
H. James Polos  
Charles E. Tomaro  
Blanquita Valenti

#### MIDDLESEX COUNTY COLLEGE BOARD OF TRUSTEES

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Thomas Tighe, Vice Chairman  
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Robert Sica, Secretary  
Frank T. Antisell  
Charles Hahn '12  
George J. Lisicki  
John Mulkerin  
Robert A. Oras  
Eileen Palumbo '78  
Praful Raja  
Samuel B. Stewart

#### MIDDLESEX COUNTY COLLEGE EXECUTIVE COUNCIL

Joann La Perla-Morales, Ed.D., President  
Walter DeAngelo, Director, Human Resources  
Donald R. Drost, Jr., Executive Director, Facilities Management  
Karen L. Hays, Ph.D., Vice President for Academic and Student Affairs  
Patrick Madama, Vice President for Institutional Advancement  
Susan K. Perkins, Vice President for Finance and Administration  
Neil S. Sachnoff, Executive Director, Information Technology

#### Accreditation

The Middle States Commission on Higher Education accredits Middlesex County College. Inquiries may be sent to: Middle States Commission on Higher Education, 3624 Market Street, 2nd Floor West, Philadelphia, PA 19104, 267.284.5000.

Program accreditations and approvals include:

The Civil Engineering Technology Program, the Electrical Engineering Technology Program, and the Mechanical Engineering Technology Program are accredited by the Engineering Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, 410.347.7700, <http://www.abet.org>.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation (CODA) of the American Dental Association, 211 E. Chicago Avenue, Chicago, IL 60611-2678, 312.440.2500.

The Dietetic Technology Program is granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the accrediting agency for the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312.899.0040 extension 5400, <http://www.eatright.org/ACEND>.

The Medical Laboratory Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, 773.714.8800, <http://www.naacls.org>.

The Nursing Program is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road, Suite 850, Atlanta, Georgia 30326 and approved by the New Jersey Board of Nursing, 124 Halsey Street, 6th floor, Newark, NJ 07102.

The Paralegal Studies Program is approved by the American Bar Association.

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology, JRCERT, 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182.312.704. 5300, <http://www.jrcert.org> and the Radiologic Technology Board of Examiners, New Jersey Department of Environmental Protection, Bureau of X-ray Compliance/Technologist Certification Section, <http://www.state.nj.us/dep/rpp/tec/rtboard.htm>.

The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), 1248 Hardwood Road, Bedford, TX 76021-4244, 817.283.2835, <http://www.coarc.com>.

### Affirmative Action and Compliance Statement

Middlesex County College is firmly committed to a policy of Equal Opportunity and Affirmative Action. The College will implement this policy to assure that the educational programs, activities, services, benefits and employment opportunities offered by the College are available to all persons regardless of sex, race, creed, national origin, ancestry, nationality, color, marital status, civil union or domestic partnership status, affectional or sexual orientation, gender identity, age, handicap (and/or disability), service in the armed forces, atypical hereditary cellular or blood trait, genetic information, refusal to submit to genetic tests, or refusal to make available results of genetic tests, in accordance with State and Federal laws. All employees and students are expected to accept these principles and to reflect their spirit in everyday relationships with fellow employees and students. Inquiries regarding compliance may be directed to the Affirmative Action Officer, Middlesex County College, Chambers Hall, 2600 Woodbridge Avenue, Edison, New Jersey 08818-3050.

### Diversity Statement

#### DIVERSITY STATEMENT

The practice of diversity at Middlesex County College embraces, recognizes, and respects individual perspectives while fostering an environment that reflects the rich and unique composition of our community.

### Accessibility for Persons with Disabilities

Middlesex County College provides reasonable accommodations for qualified individuals with disabilities. The campus facility is accessible to students with mobility impairments. Students requesting information regarding policies and procedures should contact the Counselor for Students with Disabilities at 732.906.2546.

### Vision, Mission, Institutional and Strategic Goals

#### VISION

Middlesex County College puts learning first and measures its success only by the success of its students. All members of the College community contribute to student success.

#### MISSION

The mission of Middlesex County College is to provide access to an affordable, quality education for diverse students and to promote lifelong learning opportunities to strengthen the economic, social and cultural life of the community.

#### INSTITUTIONAL GOALS

- To provide an excellent education to students pursuing professional, academic and/or personal goals.
- To foster knowledge, encourage self-awareness and support personal and intellectual growth while stimulating lifelong learning.
- To work collaboratively with private, public and corporate groups to respond to the changing needs of the community.
- To offer access to education and resources that enrich the quality of life for the community.
- To provide a variety of learning experiences to promote success.

#### STRATEGIC GOALS

- Provide a welcome and effective "front door" to Middlesex County College.
- Provide a first-year developmental education program.
- Provide comprehensive resources and services to enable students to achieve their academic and career goals.
- Be the college of choice for students in Middlesex County.
- Provide academic and cultural programs and services for the community.
- Provide an excellent education to students pursuing professional, academic and personal goals.
- Create opportunities to develop content knowledge and personal and intellectual growth.

### Academic Calendar

#### FALL 2012

Aug 27	<b>First Day of Obligation, State of the College, Faculty Meetings</b>
Aug 28	<b>Faculty Development Day, Mandatory Day for Faculty</b>
Aug 29-30	<b>Change of Program, Advisement by Faculty</b>
Sep 3	<b>Labor Day – No Classes</b>
Sep 4	<b>Classes Begin – Fall Semester</b>
Oct 8	<b>Columbus Day – No Classes</b>
Nov 12	<b>Veteran's Day – No Classes</b>
Nov 22-25	<b>Thanksgiving – No Classes</b>
Dec 14	<b>Last Day of Classes; Last Day of Faculty Obligation</b>
Dec 15, 17, 18	<b>Specially Scheduled Final Examinations</b>
Dec 20	<b>Winter Recess Begins</b>
Dec 24-25	<b>Holiday – No Classes</b>

#### WINTER SESSION 2013

Dec 26	<b>Wintersession Classes Begin (December 26, 27, 28; January 2, 3, 4, 5, 7, 8, 9, 10, 11)</b>
Dec 29	<b>Wintersession Snow Day</b>
Dec 31	<b>No Classes</b>
Jan 1	<b>Holiday - No Classes</b>
Jan 11	<b>Last Day of Wintersession Classes</b>

Jan 14	<b>If needed - Wintersession Snow Day</b>
Jan 15	<b>Winter Recess Ends</b>

**SPRING 2013**

Jan 16	<b>Faculty Meetings; First Day of Faculty Obligation</b>
Jan 17-18	<b>Change of Program, Advisement by Faculty</b>
Jan 21	<b>Martin Luther King Jr. Day – No Classes</b>
Jan 22	<b>Classes Begin – Spring Semester</b>
Feb 18	<b>Presidents' Day – No Classes</b>
Mar 9	<b>Spring Recess Begins – No Classes</b>
Mar 16	<b>Weekend Classes Resume</b>
Mar 18	<b>Regular Classes Resume</b>
Mar 29	<b>Holiday – No Classes</b>
Mar 30-31	<b>No Classes</b>
May 8	<b>Last day of Classes</b>
May 9-11	<b>Specially Scheduled Final Examinations</b>
May 14	<b>Last day of Faculty Obligation</b>
May 16	<b>Graduation – No Classes</b>

**SUMMER SESSION 2013**

May 20	<b>14-Week Summer II Session F begins</b>
May 20	<b>1st 4-Week Summer I Session A begins</b>
May 20	<b>1st 7-Week Summer I Session C begins</b>
May 27	<b>Memorial Day – No Classes</b>
May 28	<b>Classes Resume</b>
Jun 13	<b>1st 4-Week Summer I Session A ends</b>
Jun 17	<b>2nd 4-Week Summer I Session B begins</b>
Jul 3	<b>1st 7-Week Summer I Session C ends</b>
Jul 4	<b>Independence Day – No Classes</b>
Jul 8	<b>2nd 7-Week Summer II Session E begins</b>
Jul 11	<b>2nd 4-Week Summer I Session B ends</b>
Jul 15	<b>3rd 4-Week Summer II Session D begins</b>
Aug 8	<b>3rd 4-Week Summer II Session D ends</b>
Aug 22	<b>14-Week Summer II Session F ends</b>
Aug 22	<b>2nd 7-Week Summer II Session E ends</b>

**FALL 2013**

Aug 26	<b>First Day of Obligation, State of the College, Faculty Meetings</b>
Aug 27	<b>Faculty Development Day, Mandatory Day for Faculty</b>
Aug 28-29	<b>Change of Program, Advisement by Faculty</b>
Sep 2	<b>Labor Day – No Classes</b>
Sep 3	<b>Classes Begin – Fall Semester</b>
Oct 14	<b>Columbus Day – No Classes</b>
Nov 11	<b>Veteran's Day – No Classes</b>
Nov 28-30	<b>Thanksgiving – No Classes</b>
Dec 1	<b>Thanksgiving – No Classes</b>
Dec 13	<b>Last Day of Classes; Last Day of Faculty Obligation</b>
Dec 14, 16, 17	<b>Specially Scheduled Final Examinations</b>
Dec 19	<b>Winter Recess Begins</b>

**WINTER SESSION 2014**

Dec 23	<b>Wintersession Classes Begin (December 23, 26, 27, 30, 31; January 2, 3, 6, 7, 8, 9, 10)</b>
Dec 24-25	<b>Holiday – No Classes</b>
Dec 28	<b>Wintersession Snow Day</b>
Jan 1	<b>Holiday - No Classes</b>
Jan 4	<b>Wintersession Snow Day</b>
Jan 10	<b>Last Day of Wintersession Classes</b>
Jan 14	<b>Winter Recess Ends</b>

## SPRING 2014

Jan 15	<b>Faculty Meetings; First Day of Faculty Obligation</b>
Jan 16-17	<b>Change of Program, Advisement by Faculty</b>
Jan 20	<b>Martin Luther King Jr. Day – No Classes</b>
Jan 21	<b>Classes Begin – Spring Semester</b>
Feb 17	<b>Presidents' Day – No Classes</b>
Mar 8	<b>Spring Recess Begins – No Classes</b>
Mar 15	<b>Weekend Classes Resume</b>
Mar 17	<b>Regular Classes Resume</b>
Apr 18	<b>Holiday – No Classes</b>
Apr 19-20	<b>No Classes</b>
May 7	<b>Last day of Classes</b>
May 8-10	<b>Specially Scheduled Final Examinations</b>
May 13	<b>Last day of Faculty Obligation</b>

## SUMMER SESSION 2014

May 19	<b>14-Week Summer II Session F begins</b>
May 19	<b>1st 4-Week Summer I Session A begins</b>
May 19	<b>1st 7-Week Summer I Session C begins</b>
May 26	<b>Memorial Day – No Classes</b>
May 27	<b>Classes Resume</b>
Jun 12	<b>1st 4-Week Summer I Session A ends</b>
Jun 16	<b>2nd 4-Week Summer I Session B begins</b>
Jul 3	<b>1st 7-Week Summer I Session C ends</b>
Jul 4	<b>Independence Day – No Classes</b>
Jul 7	<b>2nd 7-Week Summer II Session E begins</b>
Jul 10	<b>2nd 4-Week Summer I Session B ends</b>
Jul 14	<b>3rd 4-Week Summer II Session D begins</b>
Aug 7	<b>3rd 4-Week Summer II Session D ends</b>
Aug 21	<b>14-Week Summer II Session F ends</b>
Aug 21	<b>2nd 7-Week Summer II Session E ends</b>

## The College In Brief

### College Governance

Students may participate in college governance via the College Assembly, its task forces, and the Academic Divisional Councils. Academic policy, student life, and college affairs are all areas in which students have a voice in the decision-making process.

### College Assembly

The College Assembly is the College-wide body of students, faculty, staff and administrators charged to make recommendations to the President regarding academic, student and other College affairs. Students, chairs/directors and faculty members of the assembly are nominated and elected through the division councils and appointed by the Chair of the College Assembly.

Task Forces are committees of the College Assembly established to address specific issues. The standing task forces of the College Assembly include: Academic Standards, Accessibility for Persons with Disabilities, Bylaws, Campus Diversity, Campus Life and Community Concerns, Curriculum, and Educational Resources.

Students interested in participating in any of these task forces or other organizations should contact the chair of their division council or their division dean. Student elections for these governance positions are held annually in February by the respective divisions. Students interested in participating in the College Assembly should contact the Assembly Chair (through the College Assembly Office, Raritan Hall Room 122, 732.906.4239, or extension 4239 from a campus phone), the chair of his or her division council or the division dean. The College Assembly meets on the first Thursday in October, November, December, February, March, April, and May.

## College Activity Hours

The College Hours are times when meetings of student clubs, the College Assembly, as well as other meetings and activities, are scheduled. Generally, no formal classes are scheduled at these times: Monday from 11:15 a.m. to 12:10 p.m. and Thursday from 2 p.m. to 3:20 p.m.

## Middlesex County College Alumni Association

All graduates of degree or certificate programs at the College, and students, who have completed 60 credits or more and are not currently enrolled, are automatically members of the Association, an organization uniting more than 48,000 Middlesex County College alumni throughout the world.

The Alumni Association is organized to work collaboratively with the College's Office of Development and Alumni Relations in the Division of Institutional Advancement. A Board of Trustees conducts the affairs of the Association. The Association's purpose is to establish and maintain relations among the College, its alumni, emeriti and current students in support of the College's mission of providing access to an affordable, quality education.

The Alumni Association and the Office of Development and Alumni Relations jointly coordinate programs, services and communications. The College magazine, Middlesex Now and the Association's newsletter provides members with news about their classmates and developments at the College.

Three alumni are cited each year and inducted into the Middlesex County College Alumni Association Hall of Fame based on professional achievements, leadership support and community service.

Two Alumni Association Scholarships are awarded annually. The Middlesex County Alumni Scholarship is for a full or part-time second year student who is a dependent of an MCC Alumni Association member. The MCC Alumni Scholarship for Academic Excellence recognizes a high achieving, full or half-time student who has completed a full year of study at MCC.

For further information, e-mail: [alumni@middlesexcc.edu](mailto:alumni@middlesexcc.edu).

## Middlesex County College Foundation

The Middlesex County College Foundation, Inc., founded in 1966 is a not-for-profit 501(c)(3) corporation that raises private support from organizations and individuals to fulfill the College's mission of providing access to an affordable, quality education.

The Foundation is organized to work collaboratively with the College's Office of Development and Alumni Relations in the Division of Institutional Advancement. A Board of Trustees, composed of ex officio and elected members, conducts the affairs of the Foundation. The Foundation's purpose is to raise, accept, invest and grant all charitable gifts, bequests and property for the College and its students.

The Middlesex County College Foundation has established more than 100 scholarships for students at the College. These are both merit and need-based awards issued as financial credit to tuition and educational expenses. Since 1967, more than \$9 million in scholarships has benefited over 13,000 students.

The Foundation holds fund raising events including a Scholarship Gala, Golf Classic and a Casino Night. Proceeds from these events supplement the private contributions made by donors, foundations and corporations.

For further information, e-mail: [foundation@middlesexcc.edu](mailto:foundation@middlesexcc.edu).

## Community Outreach

### Career Training Center

#### Adult Training Programs

The Career Training Center provides adults with the opportunities to enhance their present career or prepare for a new career through computer-based training programs. These programs, which meet the needs of businesses, include training in health care, accounting, and software technology. Programs vary in duration from one day to 22 weeks and are available in day, evening and weekend sessions.

The Center's programs provide career development and job placement services. A series of career development seminars are presented to all students. Topics include resume preparation, interviewing skills and job search. These interactive sessions enhance employability skills and prepare students for the demands of the corporate workplace. *For information regarding Career Training Center programs, call 732.906.4231.*

#### Youth Work Readiness Program

The Youth Work Readiness program provides Middlesex County at risk youth (18 – 21 years old) with skills necessary for the workforce. Through a combination of classroom work in career readiness, customer service, leadership, basic computer, study skills, and individual advising, participants will be prepared for success as employees or students in an occupational training program or courses. An eligibility process is required. *For information regarding the Youth Work Readiness Program, call 732.906.4653.*

#### Youth GED Program

Through a combination of classroom work in basic skills, work readiness, customer service, leadership, study skills, and individual advising, participants will be prepared for the GED exam and employment. Participants are required to be 16 – 21 years old and reside in Middlesex County. An eligibility process is required. *For information regarding the Youth GED Program, call 732.906.4158.*

### New Brunswick Center

Guided by the motto "Educate to Elevate," the New Brunswick Center opened in April of 1980 and provides educational opportunities to meet the needs of the community. The Center was established through the efforts of New Brunswick Tomorrow, the city's redevelopment organization, aided by an advisory committee comprising of representatives of government, business, industry and community groups. The Center is located in the greater New Brunswick community, easily accessible by public transportation and main highways. The Center offers an extensive list of liberal arts courses in disciplines including but not limited to English, Spanish, public speaking, criminal justice, education, psychology, mathematics, computer science, history and biology. Courses are scheduled throughout the day, evenings and Saturdays. The Center also offers non-credit courses for adults interesting in skill development/personal enrichment. Common offers include American English Pronunciation, Word Building, English as Second Language, Computer Confidence and Spanish for Health Care Professionals. The New Brunswick Center provides onsite enrollment services including admissions, registration, on site testing, financial aid assistance and payment processing. Key student support services such as counseling and library services and individualized tutoring and career workshops are available on site. The New Brunswick Center is located at 140 New Street, corner of New Street and Joyce Kilmer Avenue and within walking distance of the New Brunswick train station. The staff is bilingual in English/ Spanish. *For more information, call 732.745.8866.*

### Perth Amboy Center

The Perth Amboy Center offers college credit and non-credit courses as well as a variety of student activities. The staff is bilingual and includes administrators, advisors, career counselors and teachers. The center would like the community to envision higher education as an opportunity to a better future. This idea is the basis for its motto, "Juntos podemos – together we can."

The Perth Amboy Center provides academic offerings which include a full range of English as a Second Language courses; developmental courses in reading, writing and math; and college credit courses in liberal arts and business. Courses are scheduled during the day, evening hours and Saturdays for the students' convenience.

The Center also offers comprehensive enrollment services, which include admissions, ESL and college placement tests, academic and financial aid advisement, registration and payment plans. During the fall and spring semester, the Perth Amboy Center provides library and tutoring services for its students. Textbooks for classes offered at the Center can be purchased at the beginning of each semester. Also, a variety of counseling services, including vocational assessment, training and job referral services, are available on an individual basis by appointment or through group sessions. All counseling services are offered in English and/or Spanish. A variety of cultural and social activities are held each semester for students at the Center.

The Perth Amboy Center is located at 60 Washington Street, Perth Amboy, NJ 08861. The newly built center is on the corner of Washington and High Streets. There is free parking for students on Mechanic Street. *For more information, call 732.324.0700.*

### Off-Campus Course Offerings

In addition to centers in New Brunswick and Perth Amboy, the College offers credit courses at public high schools in the evening.

### Office of School Relations

The Office of School Relations is the College's liaison to the K-12 school districts. Middlesex County College provides academic and career development programs for students and professional development workshops for teachers. For middle and high school students, the Office of School Relations offers academic enrichment and career exploration programs such as High School School

ars, Algebra Summer Institute, Biotechnology Summer Institute, and GATEway, a summer program for academically gifted students who have completed seventh, eighth, or ninth grade.

For teachers, professional development opportunities include in-district customized workshops to meet the needs of local schools, on-campus workshops to increase content knowledge and assist in the integration of the Common Core Standards, and summer institutes for Advanced Placement teachers.

For those interested in becoming a teacher, School Relations offers the New Pathways to Teaching in NJ (NPTNJ) program. New Pathways takes teacher candidates through the process of certification and includes 'Introduction to the Teaching Profession: 24-Hour Course' required by the NJ Department of Education in order to receive a Certificate of Eligibility (CE) to teach grades K-12. Once teacher candidates receive a CE, New Pathways offers the 200-hours of study required of all alternate route teachers.

For information on any of the programs listed, please call 732.906.2554 or visit the college website under K-12 Community.

### The Center for the Study of Prejudice, Genocide, and the Holocaust

Recognizing the negative and deleterious impact prejudice and discrimination have on people and society, the Board of Trustees in 1992 authorized the establishment of the Center for the Study of Prejudice, Genocide, and the Holocaust. Through a variety of academic programs and courses, the Center seeks to promote understanding and respect for people of diverse backgrounds and cultures. In 2011 the Center hosted the Annual Yom HaShoah Observance, "Commemorating the Holocaust and Heroism: He Who Saves a Life, it is as if He Saved an Entire World," cosponsored by the State of New Jersey Commission on Holocaust Education, the Office of the Governor, and the Jewish Federation of Greater Middlesex County. Over 450 people attended from across the region to pay tribute to the six million slaughtered and the righteous gentiles who risked their lives to save thousands.

## Professional and Community Programs

### Professional

A variety of professional, non-credit programs are available to men and women who wish to make a change – to develop new skills in their field, to earn more money, to get a better job, or to try an entirely new career. Taught by business professionals in high demand fields, these courses are developed with commercial applications in mind. Comprehensive training is available in a wide range of areas that include: Allied Health, Web Design, Project Management, Health Information Coding, Construction Management, Training and Development, and ESL. Most courses are offered evenings and weekends to accommodate the schedules of working people. In addition to courses on the main college campus, a selection of courses is also available in the New Brunswick and Perth Amboy Centers. For additional information, call 732.906.2556 or visit [www.middlesexcc.edu](http://www.middlesexcc.edu).

### Community

A wealth of personal enrichment courses are offered to enhance your life with leisure time activities, to improve your health, reduce stress and meet new friends. There are no prerequisites, no tests and adults of all ages are welcome! Courses include Dance – Bollywood Bhangra, Dancing for Special Occasion, Salsa and Belly Dancing; Health and Fitness – Smoking Cessation, Yoga for Weight Loss and Tai Chi Chuan; General Interest—How to Buy and Sell on eBay, Beading and Botanical Drawing, and Financial Planning and Investments. For additional information, call 732.906.2556 or visit [www.middlesexcc.edu](http://www.middlesexcc.edu).

### Summer Camp

Camp Middlesex offers a large number of educational and enjoyable activities in a safe and secure environment. Specialty camps include theater, basketball, magic, golf, clowning, chess, baseball, cartooning, sewing, specialized computer techniques, mosaics, science and so much more! Camps are offered as individual modules with an extended program option for working parents. Children ages 6-18 are welcome! For additional information, call 732.906.7740 or visit [www.middlesexcc.edu](http://www.middlesexcc.edu).

### Today's Table

Classes for contemporary cooks are offered in our brand new state-of-the-art demonstration kitchen and include generous samples of the evening's menu for tasting. Each class features a different theme such as Slow Cooking, Cake Decorating, Creative Hors d'oeuvres, Quick and Easy Healthy Meals and French and Italian Cooking. To find out "What's Cookin'" at Middlesex, call 732.906.2556 or visit [www.middlesexcc.edu](http://www.middlesexcc.edu).

### Project Span

The Supportive Parent Aid Network (SPAN) is a unique community volunteer program that provides a wide range of supportive services to families where there are varying degrees of existing or potential cases of child abuse and/or neglect.

By placing trained adult volunteers in contact with these families, SPAN offers, on a one-to-one basis, practical guidance, information and emotional support.

SPAN volunteers are first carefully trained in the dynamics of abusive families, parenting skills, early childhood development, crisis intervention, and community resources. They are then assigned to a family who has consented to accept a SPAN volunteer. Great care is taken to match the right volunteer with the family. Under this professional supervision, the SPAN volunteer becomes an integral part of the community effort to prevent child abuse. To participate or receive more information, call 732.906.2553.

### The Institute for Management and Technical Development

The Institute provides customized training services for business, industry, non-profit organizations, municipalities, and professional groups. Since its inception, more than 270 companies have been served, from multinational organizations to small businesses. Institute programs provide training in manufacturing skills, management, English as a Second Language (ESL) mini-courses, customer service, and information technology. Computer-based training is provided in College labs or with a portable laptop lab at an organization's site.

A partner with the New Jersey Department of Labor and the New Jersey Community College Consortium for Workforce and Economic Development, The Institute provides its clients with training assessments, program delivery and assistance with grant application and billing. For further information on The Institute's services, call 732.906.4681.

### Workforce Development Program

Assistance for students sponsored by NJ Employment Services begins at the local One-Stop Career Center office. (To find a Center, check [www.wnjin.net](http://www.wnjin.net) or [http://lwd.dol.state.nj.us/labor/wnjin/wnjin\\_index.html](http://lwd.dol.state.nj.us/labor/wnjin/wnjin_index.html).)

### Work Readiness Program

Through grants provided by the Middlesex County Workforce Investment Board, Middlesex County College assists recipients of public assistance with life and academic skills necessary to support them in becoming financially independent. These grants include training in the areas of life skills, English as a Second Language and adult basic education. In addition, career development and exploration, resume writing and job interviewing techniques are included as part of the program. The Work Readiness Program is offered at the Perth Amboy Center.

## Enrollment Services, College Programs and Activities

### Admissions Policy

#### 1. Policy

The College provides educational opportunities for all students who have a reasonable chance of benefiting from college level work and who have a reasonable chance of successfully participating in the educational program for which enrollment is sought.

#### 2. Program Categories

The College recognizes the following categories of students as either part-time or full-time:

- a. Matriculated students enrolled in programs of study leading to a degree or certificate.
- b. Non-matriculated students taking credit courses for personal interest, career advancement, enrichment or transfer back to another institution.
- c. Non-credit students taking programs of varying lengths for which no credit is assigned, for purposes of personal enrichment, career advancement or professional education.

#### 3. Admission Eligibility and Conditions for Credit Programs and Credit Courses

Except for admission to restricted programs listed in Section 6, admission to credit programs and courses is open to all individuals with a high school diploma or general equivalency diploma (GED) and individuals not possessing a high school diploma or GED who are at least 18 years of age. In addition, high school students meeting the criteria under Section 4 may apply for admission.

**4. Credit Programs for High School Students**

High school students are permitted to enroll in credit courses for which they meet the prerequisites, with the written acknowledgment of a high school counselor or principal and permission of a parent or guardian. *\*Some course selections will require applicants to take the College Placement Test and/or receive test exemptions.*

**5. Documentation Required**

All applicants are required to complete and file the online application form for admission prescribed by the College. The student should arrange to have high school/college authorities forward official transcripts in sealed envelopes to the Office of Admissions. The student must also provide a valid record of immunization.\*

*\*New Jersey law requires that as a condition of enrollment all degree seeking applicants present a valid record of immunization against measles, mumps and rubella. All matriculated students carrying 12 or more credits born after 1956 are required to submit to the Health Services Office a valid record of immunization against measles, mumps, and rubella, and as of 2008, New Jersey Law requires that students carrying 12 or more credits must submit an immunization record for Hepatitis B as well.*

**6. Selective Enrollment**

Admission into certain programs is restricted or may be limited if the number of applicants exceeds the number that can be enrolled at a particular time. Accordingly, admission to the following specialized selective programs is subject to additional criteria: Respiratory Care, Radiography, Medical Lab Technology, Nursing, and Dental Hygiene.

**7. Part-Time Enrollment**

A part-time student is one who takes fewer than 12 credit hours per semester.

**8. Transfer Students**

Applicants who have attended another college must submit official transcripts of all college and high school work to the Office of Admissions. Transfer credit, subject to the approval of the dean of the division, is generally defined as coursework required in the curriculum and equivalent in content and credit hours to courses offered by Middlesex County College. Only letter grades of "C" and above are accepted.

Students seeking transfer credit for courses taken at a foreign institution should submit a course-by-course evaluation from World Education Services (WES) or another evaluation service which is a member of the National Association of Credential Evaluation Services (NACES).

The College grants transfer credit for certain non-collegiate educational programs in accordance with the recommendation of the American Council on Education contained in "The National Guide" or "A Guide to Educational Programs in Non-collegiate Organizations." These credits are granted consistent with graduation requirements for college-level courses as determined by appropriate academic departments with the concurrent approvals of the chairperson and dean.

Transfer credit from another institution is listed on the transcript with a "T" grade. Courses completed at another institution will not be applicable for a grade point average recalculation.

**Course Time Limits** – Math, Science, and Computer Science courses are subject to review after five years and all other courses after 10 years. The review procedure also applies to the evaluation of transfer credits.

**9. Advanced Placement Credit**

The College may grant credit for Advanced Placement Examinations (minimum grade of 3). The Advanced Placement Program, sponsored by the College Entrance Examination Board, offers students the opportunity to pursue college-level study while in secondary school and receive advanced placement and/or credit upon entering college.

**10. Placement Testing Requirements**

MCC students are required to complete the College's placement test. Performance on the test will determine eligibility for enrollment in credit courses.

See "Placement Test Exemptions" under **Academic Standards and Regulations**.

ESL students do not take the college placement test until completion of the ESL sequence.

Visiting students will not be asked to complete the College's placement test. It is highly recommended that visiting students meet with their home institution advisor and review the MCC course descriptions to ensure appropriate academic preparedness for the course(s) to be taken at MCC and that the course(s) meets program requirements and will transfer back to the home college. It is the Visiting Student's responsibility to verify that the course(s) he or she takes at Middlesex County College will transfer to the home institution and that the student has the prerequisites necessary to succeed in the course.

**11. International Students**

Middlesex County College is authorized under federal law to enroll non-immigrant alien students. International applicants must follow degree programs as full-time students if they require a Certificate of Eligibility (Form I-20).

Students from other countries apply to Middlesex County College in the same way as all other students. In addition to admission requirements for other students, international students must submit documentary evidence of sufficient funds for college and living expenses in the United States. A sponsor must submit financial documentation, including an Affidavit of Support form which is supplied by the College.

International students are not eligible for federal study grants, nor is there any financial aid or scholarship program for international students.

Some international students with visas other than F-1 may be eligible for admission subject to approval by the director of admissions.

**12. Admission to Non-Credit Courses**

Eligibility for admission to developmental non-credit courses is determined by performance on the college placement test.

Eligibility for admission to other non-credit courses is determined on a course-by-course basis as a function of course level, content, and requirements.

**13. Insurance Requirements**

All full-time students shall maintain health insurance coverage which provides basic hospital benefits. This insurance coverage shall be maintained throughout the period of the student's enrollment. Group basic health insurance coverage shall be automatically provided and billed as a mandatory charge to all full-time students. A full-time student may waive this coverage and associated charge upon presentation of satisfactory evidence of individual coverage through an alternate basic hospital benefit health insurance arrangement.

All students enrolled within a Health Technologies curriculum shall purchase and maintain a group malpractice policy throughout the period of enrollment. This insurance shall be automatically provided and billed as a mandatory charge to all students so enrolled. The malpractice insurance may not be waived or substituted without regard to such other coverage as the student may enjoy.

**Academic Advising**

Students should meet with an academic advisor each term to review curriculum requirements for their majors and to discuss problems that may interfere with academic success. It is the student's responsibility to meet all curriculum and College requirements.

Full-time students are assigned a faculty advisor, usually from the academic division that contains their academic program. Full-time faculty members maintain a regular schedule of office hours, which is posted on their office doors. It is the student's responsibility to make appointments with their advisor. Names of advisors for full-time students are on file in the Academic Advising Center in Chambers Hall. Advisors may refer students to a counselor in the Department of Counseling and Career Services when appropriate.

Part-time students may meet with an advisor in the Academic Advising Center in Chambers Hall 109 on a drop-in basis.

For more information, please call 732.906.2596 or contact [advising@middlesexcc.edu](mailto:advising@middlesexcc.edu).

**Admissions Counseling**

To learn more about the College, to obtain help in selecting a major, to learn more about specific courses of study, or to simply schedule a campus tour, students are invited to make an appointment by emailing the Office of Admissions at [admissions@middlesexcc.edu](mailto:admissions@middlesexcc.edu) or calling us at 732.548.6000.

**Admissions Guidelines**

Middlesex is a public college with an open admission policy. Applications are accepted to degree and certificate programs from anyone who holds an official high school diploma or GED, and adults (18 years of age or older). Home-schooled students may submit an official home-schooling diploma. Some programs have specific entrance requirements and/or limited seating. SAT scores are optional. For questions or additional information, please email the Admissions Office at [admissions@middlesexcc.edu](mailto:admissions@middlesexcc.edu) or calling us at 732.548.6000.

The majority of programs begin in the Fall, Spring or Summer and can be completed by studying full- or part-time. Applications for most programs are reviewed on a rolling admission basis. The exceptions are those full-time programs beginning only in the Fall semester: Dental Hygiene, Medical Laboratory Technology, Nursing, Radiography Education, and Respiratory Care. These programs have application deadline dates.

The College provides educational opportunities for all students who may benefit from college level work and who have a reasonable chance of successfully participating in the educational program for which enrollment is sought.



**1. Program Categories**

The College recognizes the following categories of students as either part-time or full-time:

- a. Matriculated students enrolled in programs of study leading to a degree or certificate.
- b. Non-matriculated students taking credit courses for personal interest, career advancement, enrichment or transfer back to another institution.
- c. Non-credit students taking programs of varying lengths for which no credit is assigned, for purposes of personal enrichment, career advancement or professional education.

**2. Admission Eligibility and Conditions for Credit Programs and Credit Courses**

Except for admission to restricted programs listed in Section 6, admission to credit programs and courses is open to all individuals with a high school diploma or general equivalency diploma (GED) and individuals not possessing a high school diploma or GED who are at least 18 years of age and have not attended high school. In addition, high school students meeting the criteria under Section 4 may apply for admission.

**3. Credit Programs for High School Students**

High school students are permitted to enroll in credit courses for which they meet the prerequisites, with the written acknowledgment of a high school counselor or principal and permission of a parent or guardian. *\*Some course selections will require applicants to take the College Placement Test and/or receive test exemptions.*

**4. Documentation Required**

All applicants are required to complete and file the online application form for admission prescribed by the College. The student should arrange to have high school/college authorities forward official transcripts in sealed envelopes to the Office of Admissions. The student must also provide a valid record of immunization.\*

*\*New Jersey law requires that as a condition of enrollment all degree seeking applicants present a valid record of immunization against measles, mumps and rubella. All matriculated students carrying 12 or more credits born after 1956 are required to submit to the Health Services Office a valid record of immunization against measles, mumps, and rubella, and as of 2008, New Jersey Law requires that students carrying 12 or more credits must submit an immunization record for Hepatitis B as well.*

**5. Selective Enrollment**

Admission into certain programs is restricted or may be limited if the number of applicants exceeds the number that can be enrolled at a particular time. Accordingly, admission to the following specialized selective programs is subject to additional criteria: respiratory care, radiography, medical lab technology, nursing, and dental hygiene.

**6. Part-Time Enrollment**

A part-time student is one who takes fewer than 12 credit hours per semester.

**7. Transfer Students**

Applicants who have attended another college must submit official transcripts of all college and high school work to the Office of Admissions. Transfer credit, subject to the approval of the dean of the division, is generally defined as coursework required in the curriculum and equivalent in content and credit hours to courses offered by Middlesex County College. Only letter grades of "C" and above are accepted.

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International students are not eligible for federal study grants, nor is there any financial aid or scholarship program for international students.

Some international students with visas other than F-1 may be eligible for admission subject to approval by the director of admissions.

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All students enrolled within a Health Technologies curriculum shall purchase and maintain a group malpractice policy throughout the period of enrollment. This insurance shall be automatically provided and billed as a mandatory charge to all students so enrolled. The malpractice insurance may not be waived or substituted without regard to such other coverage as the student may enjoy.

**Audit**

Most courses may be audited. Students may elect to change a course from credit to audit through the refund period, or the 10th day of the semester, by submitting the change to the Office of the Registrar. Students auditing a class are not obligated to complete examinations or other requirements, nor do they receive any grade or credit for the course. However, students must pay the same tuition whether auditing a course or taking it for credit. The course will appear on the official academic transcript with a grade of "X."

**Bilingual Counseling**

Bilingual counselors are available for Spanish, Urdu and Malayalam speaking students. Special assistance is also available for other students with English language difficulties.

**Blue Colt Bookstore**

Located between the College Center and Crabiel Hall, the Blue Colt Bookstore is operated by the Middlesex County College Retail Services Corporation, a not-for-profit auxiliary organization of the College. The Blue Colt Bookstore is the place to obtain all textbooks and course materials, including uniforms, medical equipment, and art and engineering supplies. The Blue Colt Bookstore also offers clothing, gifts, snacks, paperbacks, imprinted insignia, as well as U.S. Postage stamps and greeting cards. Free gift wrapping is available for all in-store purchases. Services include MCC Fitness Memberships, college rings, discounted Great Adventure tickets, full color copying, faxing, engraving, laminating, as well as commencement apparel and diploma frames. The Bookstore

store offers in-store used book buy-back seven times a year and on-line buy-back year round. *For more information, hours of operation or on-line purchasing, please call 732.906.2540 or go to the bookstore website at [www.bluecoltbookstore.com](http://www.bluecoltbookstore.com).*

### CampusCruiser / WebAdvisor

CampusCruiser / WebAdvisor is the online portal available to all students, faculty and staff at Middlesex County College. CampusCruiser / WebAdvisor allows students to access both general and personalized College-related services from the internet. Services are available seven days a week, 24 hours a day except during scheduled maintenance. Some of the features of CampusCruiser / WebAdvisor include: weather-related closings, the emergency notification system, schedules, grades, transcripts and financial aid information. Students may also register for classes and pay tuition bills online. Other features are: e-mail, calendars, national and school news, sports, web pages, chat and message boards, course listings & descriptions and specific class information including syllabi, assignments, resources and links. Students must access their grades online through CampusCruiser / WebAdvisor. Grade reports are not mailed. Official grade reports/transcripts may be ordered at the Office of the Registrar. See "Transcripts" under **Academic Standards and Regulations**.

All official communication with students containing personal information will be conducted using the FERPA guidelines. Students will be responsible for checking their official college-provided CampusCruiser/WebAdvisor email regularly and maintaining the security of that address. *Anyone who needs more information about CampusCruiser/WebAdvisor, please e-mail [Cruiser\\_Help@portal.middlesexcc.edu](mailto:Cruiser_Help@portal.middlesexcc.edu) or call 732.906.2616 during business hours.*

### Career Services

Assistance with full-time, part-time, or seasonal employment is available to students and graduates. Services include workshops for employment preparation, on-line job listings, career and interest assessment, resume referral and career counseling. The Career Resource Center in Edison Hall, Room 100, provides electronic and print information on career choices, employment trends, job-search materials and specific vocational fields. *For additional information, call 732.906.2595 or visit [www.middlesexcc.edu/career](http://www.middlesexcc.edu/career).*

### Certification of Enrollment

The National Student Clearinghouse is the authorized agent for providing Certification of Enrollment to outside agencies such as the Social Security Administration, credit card companies, insurance companies, lending institutions and prospective employers. Students who need to have their enrollment certified should log onto CampusCruiser to reach the National Student Clearinghouse self-service site to make a request. Students who are not currently enrolled and cannot access the site through CampusCruiser may contact the National Student Clearinghouse directly at: [www.studentclearinghouse.org](http://www.studentclearinghouse.org), e-mail: [enrollmentverify@studentclearinghouse.org](mailto:enrollmentverify@studentclearinghouse.org). For current students, the Certification of Enrollment is available after the 10th day of each term. All verifications are official and do not require an institutional signature or seal.

### Change of Major

Students may change their major if they meet the admissions requirements for the new major and space is available. Students who are currently seeking a degree or certificate or are in Open College must submit a Change of Major/Addition of Second Major form to the Office of the Registrar signed by the dean or department chairperson of the academic department/division which administers the new major or a staff member in the Department of Counseling and Career Services, EOF, MAPS, or the Academic Advising Center.

Students who want to change their major to Dental Hygiene, Medical Laboratory Technology, Nursing, Radiography Education or Respiratory Care must file an Application for Admission with the Office of Admissions and Recruitment. Students who want to change their major to Automotive Technology must consult with the chairperson of the Engineering Technologies department. Non-Matriculated and English as a Second Language (ESL) students who wish to declare a degree or certificate program must also file an application with the Office of Admissions and Recruitment.

### Child Care Services

Child care is available on-campus in a modern child care center for the children of students, staff, and residents of the community. Professionals offer child care and preschool education during the day for children between 2-5 years of age. Evening care is available from 5:15-9 p.m. for children, ages 3-9, of college students only.

Students enrolled in Middlesex County College education programs provide individualized attention to the children in the Center. *For information on Child Care Center services, call 732.906.2542.*

### College Center

Students who want to relax in informal surroundings should go to the College Center. Here students can enjoy campus activities, buy lunch in the cafeteria, or just find a comfortable place to talk with friends, faculty, and staff. The following facilities are available within the College Center: an Automated Teller Machine (ATM), vending machines, lounges, meeting rooms, and student organization offices.

### College Center Programming Board

Students who enjoy planning and presenting a variety of cultural, recreational, and social events should consider joining the College Center Programming Board. They can become a member of one of the five committees that make up this board. Throughout the year, these committees plan and present popular and classical concerts, film programs, art exhibits, forums for speakers, theater and museum trips, and social functions.

Students interested in becoming part of a student organization have approximately 75 chartered organizations from which to choose. Students can develop current interests, explore new areas, and meet new people.

### Cooperative Education and Internships

Cooperative Education integrates academic study and practical work experience. Students gain college credit along with career-related work experience.

*For more information, stop by Career Services in Edison Hall, Room 100, or visit [www.middlesexcc.edu/career](http://www.middlesexcc.edu/career). Call 732.906.2595.*

### Counseling

The Department of Counseling and Career Services offers a full complement of professional counseling services designed to help students cope with academic demands, choose a career or major and cope with personal problems. Because counselors believe that each individual problem merits privacy and confidentiality, professional counseling ethics are practiced throughout the department. *The office is located in Edison Hall, Room 100. Call 732.906.2546.*

### Course Load

Enrollment for fewer than 12 credits or credit equivalents is considered part-time and enrollment for 12 or more credits or credit equivalents is full-time.

Students who want to enroll in more than 20 degree credits (or their equivalent) in any semester must have the written permission of the Academic Advising Center, located in Chambers Hall.

### Democracy House

Democracy House is Middlesex's Center for Civic Engagement and it runs a number of programs, including the NJ Americorps, the Bonner Leaders Program, the Democracy House club, as well as advises Faculty on integrating service into the classroom. Diverse groups of students are united and work together to address the unmet needs of the local community by tutoring homeless children, feeding the hungry, restoring local rivers, completing community based research projects for local nonprofits, organizing local youth to identify and complete their own neighborhood improvement projects — and much more. Most students receive an hourly stipend and a college scholarship for their commitment and desire to learn and serve their community. *For more information call 732.548.6000, extension 3262 or visit Democracy House in Raritan Hall (003).*

### Dental Hygiene Clinic

The Dr. Sidney Danzis Dental Hygiene Clinic, located on the main floor of L'Hommedieu Hall, offers the following dental services to the College and the surrounding community: dental exam, dental scaling and polishing, x-rays, fluoride treatments, oral cancer screening, sealants and instruction in maintaining good oral health. A nominal fee is charged. *For an appointment, call 732.906.2536.*

### Educational Opportunity Fund

The Educational Opportunity Fund (EOF) program is an academic program that provides individual and group counseling services, academic support, and financial aid to educationally and economically disadvantaged students who might not otherwise attend college. Students must complete a Free Application for Federal Student Aid form (FAFSA) and an Educational Opportunity Fund program application. *For information about admission to the program, contact the EOF Office in South I. Call 732.906.2544.*

### English as a Second Language

Those whose native language is not English can study and prepare for college courses or gain needed language skills for the current job market in the ESL program. The college will test language skills and place students in a program of study to meet their specific needs. TOEFL is not needed. *For more information, call the ESL/Languages and Culture Department at 732.906.2597.*

### Grade Reports

Students access their grades online through CampusCruiser/WebAdvisor. Students may request a paper copy to be mailed or may order an official transcript in-person at the Office of the Registrar or online through CampusCruiser/WebAdvisor. Students may also download the Transcript Release Form from the MCC website and submit it to the Office of the Registrar.

### High School Scholars Program

High school students may take college courses for credit if they have completed the prerequisites that the courses require. To register for a course, all students must complete the "High School Scholars" application (available online), have the recommendation of their school guidance counselor, and parental permission.

Students may attend classes on the Middlesex County College campus, at the New Brunswick or Perth Amboy Centers, or at any of the off-campus locations. High schools may partner with Middlesex County College to provide dual enrollment courses during the regular school day. Where there is sufficient interest, courses may be offered on the school premises after regular school hours.

During the Fall and Spring semesters, students pay only \$125.00\* (plus fees where applicable) and are limited to one course per semester. Students choosing to take summer courses pay the regular tuition and fees. *For more information, call 732.906.2554.*

\*Price as of Fall 2012

### Honor Societies

Middlesex has several honor societies for students who excel in the classroom. Phi Theta Kappa, the national honor society that recognizes the academic achievements of community college students, provides leadership training and a free exchange of ideas in an intellectually stimulating atmosphere. Students will be invited to join if they earn a 3.5 semester and overall GPA based on a minimum of 12 credits and a maximum of 42, pledge an interest in developing leadership skills, and are willing to perform community service. Phi Theta Kappa students may be eligible to apply for over \$37 million in scholarships reserved by four-year colleges. Alpha Mu Gamma, the national collegiate foreign language honor society, welcomes students who maintain a 4.0 GPA in upper level language courses along with an overall 3.0 GPA. Psi Beta, the national psychology honor society for community colleges, recognizes and encourages scholarship and stimulates interest in psychology. Students are eligible for membership if they have completed at least one psychology course with a grade of "B" or better and have an overall GPA of at least 3.25.

Lambda Epsilon Chi is the honor society for the Paralegal program and recognizes excellence in that field.

### Honors Program

The Honors Program offers curricula that are innovative, interdisciplinary, and appropriate for advanced learners, with an emphasis on stimulating and participatory course work, experiential and service learning activities, and the effective use of primary sources for research. Honors students will develop advanced communication, reasoning, problem solving and critical thinking skills.

The Honors Program is designed to be flexible and easily accessible to those students who excel and thrive in stimulating academic environments. Students who participate in the Honors Program experience can choose from one of three options: Departmental Honors, Divisional Honors, or the Full Honors Program.

Benefits of an MCC Honors course include small class size, field trips and research opportunities, guest lecturers, access to a private study and lounge area, and priority registration guidance from Honors advisors.

Honors students will be seriously considered and / or have automatic eligibility for several MCC merit-based scholarship/ tuition credit opportunities.

Honors students will be recognized for their achievement through Honors course designation on their transcripts which will make them more competitive in the transfer process.

Honors students will receive additional recognition at graduation.

### Immunization

All students taking 12 or more credits are required to submit immunization records to the Health and Safety Department located in South II.

Additional immunization records are required of students in the Health Technology programs and the Dietetic Technology program. For more information, visit the Office of Health and Safety in South II or call 732.906.2530.

### Independent Study Program

Highly motivated self-directed learners who want to determine their own pace of instruction should consider the College's Independent Study courses in English composition and American literature. The Independent Study Program provides a flexible approach toward college instruction. Course components include a textbook, study guide and other support material. An instructor is available during regularly scheduled consultation hours for in-person or telephone communication. Students e-mail assignments to the instructor. They must take all exams on campus.

### Intercollegiate Sports

Middlesex is a member of Region XIX of the National Junior College Athletic Association. Competing teams come from New Jersey, Pennsylvania, and Delaware. Middlesex is also a charter member of the Garden State Athletic Conference, which oversees athletic competition among New Jersey's community colleges. *Students who want more information or wish to participate should contact the Director of Athletics at 732.906.2558 after enrolling at Middlesex.* Women's intercollegiate sports include basketball, cross country, golf, indoor and outdoor track and field, soccer, and softball. Men's intercollegiate sports include baseball, basketball, cross country, golf, indoor and outdoor track and field, soccer, and wrestling.

### International Student Counselor

International Student Counselors assist international students in maintaining their lawful immigration status by providing continuous education on immigration regulations, policies and procedures. They also assist these students with their adjustment to campus and community life by facilitating their academic, personal and social experiences. *The International Student Office is located in Edison Hall room 100. 732.906.2546.*

### Leave of Absence

New Jersey STARS and students in selective programs may apply for up to one year leave of absence from the College by completing a form that is available in the Department of Counseling and Career Services. The leave allows them to return to the College within a year without applying for readmission and without a change in requirements for a degree or certificate program. Failure to obtain a Leave of Absence means that they must apply for readmission to return.

### Library Services

Librarians are available to help students find and evaluate information sources needed for research papers and class assignments. We offer individual 1:1 and group instruction to guide you on your research projects or other information needs. The College Library subscribes to 66 online databases - available 24/7 from on and off campus -- with e-texts of magazines, newspapers and journals, plus e-book collections, audio books, and streaming videos. We will also help you find materials in the county system of 50 local libraries (iBistro) and the nationwide interlibrary loan network (OCLC). MCC's Library hosts an open computer lab with Microsoft Office and Internet and has wireless access for your laptop. Areas for quiet or silent study are available, along with small group study rooms. We have course reserves, current newspapers & magazines, headsets, and portable devices for loan. Come and use our facilities, our resources, and talk with our librarians today -- we can help!

### Military Veteran and Current Servicemember Applicants

The U.S. Department of Veterans Affairs approves degree and certificate programs for veterans education benefits. Those applicants wishing to obtain governmental educational entitlements through the Department of Veterans Affairs or any additional information about such programs should contact the Center for Veterans Services.

Individuals have a limited timeframe from their date of separation from active duty to use their educational entitlement. Please refer to the specific guidelines of the chapter you are entitled to use for more information. Veterans who began active duty between January 1977 and June 1985, may be eligible for veterans' benefits if they contributed to the Veterans Education Assistance Program (Chapter 32).

Veterans who began active duty after June 30, 1985 may be eligible for veterans' entitlements if they participated in the Montgomery G.I. Bill (Chapter 30) or the Active Duty Educational Assistance Program of the Selected Reserve and National Guard (Chapter 1606).

Veterans who served on active duty on or after September 11, 2001 may be eligible for entitlements under the Post-9/11 GI Bill (Chapter 33).

Reservists and National Guard members who were activated for at least 90 days after September 11, 2001 may be eligible for entitlements under the Reserve Educational Assistance Program (Chapter 1607).

Veterans entitlement recipients must apply for admission to a degree or certificate program.

To maintain benefits, veterans must comply with the Standards of Progress established by the College. These Standards include degree requirements, standards and regulations, and compliance with the College's Code of Student Conduct. Failure to observe these regulations will jeopardize the receipt of entitlements. Additional information may be found in the Middlesex County College Pathfinder and on schedule bulletins.

The Center for Veterans Services certifies the enrollment status of all students who apply for veteran's entitlements. Middlesex County College is included in the Education Directory, Part 3: Higher Education.

#### Contact Information

Web page: <http://www2.middlesexcc.edu/services-and-support/veterans-services.html>

Middlesex County College  
Center for Veterans Services  
Location: Edison Hall, Room 104  
Office Phone: 732.906.7770  
Alternate Phone: 732.548.6000, extension 3370  
Email: [vets@middlesexcc.edu](mailto:vets@middlesexcc.edu)  
Fax: 732.908.4655

### Minority Student Affairs

A number of programs and services are designed to improve the success of minority students on campus. They are provided with a support system to help them reach their goals, whether they are to enter the workforce or transfer to a four-year college or university. The Peer Mentor Program matches a first-year student with an outstanding second-year minority student. *Contact the Minority Student Affairs Office in the Johnson Learning Center, Room 243 or call 732.906.2532.*

### NJ STARS

The New Jersey Student Tuition Assistance Reward Scholarship (NJ STARS) Program is an initiative created by the State of New Jersey that provides New Jersey's highest achieving students with free tuition at their home county college. The NJ STARS award covers the cost of tuition, less any State and/or Federal grants and scholarships, for up to five semesters. Students can complete their freshman and sophomore years of college with no tuition costs, and after graduating, transfer to a bachelor's degree program for the final two years. If they qualify, they may receive a NJ STARS II scholarship for use at a four-year public college or university in New Jersey participating in the NJ STARS II Program. *Call Admissions at 732.548.6000 for further details.*

### Open College Program

The Open College Program gives students the opportunity to enroll full time without selecting a major. Open College is for students who are unsure of educational goals, or wish to explore before choosing a major. Students in this program are required to enroll in writing each term until English Composition II is successfully completed. Open College students do not qualify for financial aid so students need to declare a major before applying for financial aid. *For more information, please call 732.906.2596.*

### Peer Guidance Organization

"For Students by Students" is the philosophy of the Peer Guidance Organization (PGO). Students are available to listen and assist their peers with personal, social and academic problems. They are trained by counselors in the Department of Counseling and Career Services and make referrals to the department as well as to others on campus. *For more information, call or drop by the Department of Counseling and Career Services, Edison Hall Room 100, 732.906.2546.*

### Physical Education Center

At the Physical Education Center, students can get in shape and stay in shape on any of the collegiate-size basketball courts, on the racquetball courts, in the Fitness Center, at the swimming and diving complex, or in the dance studio. The air-conditioned Fitness Center is complete with closed-circuit television, state-of-the-art treadmills, computerized exercise bikes, and steppers. In addition, students using free weights have available to them dumbbells, barbells, and various Precor machines. Registered students who pay the student service fee may use the swimming pool, gymnasium and outdoor track, as scheduling permits, and join the Fitness Club. Fitness Club memberships are also available to staff and graduates of Middlesex. Membership entitles students to free use of all the facilities except the racquetball courts, which require an hourly usage fee. *To receive a complete schedule, contact the Physical Education Center at 732.906.2558.*

### Project Connections

Project Connections, the comprehensive program for highly motivated, college-able students with specific learning disabilities, provides support services to students through comprehensive psycho-educational support. Both academic and counseling services are available to assist students in meeting with success in completing their college program. Admission is selective and a supplemental application is required. *To request an application, please call 732.906.2507.*

### Readmission

Students who have not been enrolled at the college for 12 months must apply for readmission before re-enrolling. They will be subject to the degree or certificate requirements in effect at the time of readmission.

### Registration

#### Current Students Who Have Been Admitted to a Degree or Certificate Program

Current students who are eligible may register online through CampusCruiser/WebAdvisor during the designated registration period for the upcoming term. Students are encouraged to meet with a faculty advisor prior to registering. The advisor assists with course selection and approves the schedule.

#### New Students Who Have Been Admitted to a Degree or Certificate Program

New students, once they are admitted to the college and have taken the placement test, must meet with an academic advisor. Faculty advisors assist them at the time of enrollment by answering questions about the College and helping choose appropriate classes.

#### New and Current Non-Matriculated Part-Time Students

Current part-time students and those currently enrolled who have not been admitted to a degree or certificate program (non-matriculated) are encouraged to register online through CampusCruiser/WebAdvisor. New part-time and nonmatriculated students may register by mail or in person during the designated registration period for the upcoming term. All new students are sent a CampusCruiser/WebAdvisor log-in ID and password after they have been admitted which will provide them with access to web registration in subsequent semesters. Class schedules are available on the College website: [www.middlesexcc.edu](http://www.middlesexcc.edu).

#### First Week of a Fall or Spring Semester or First Day of Summer or Wintersession

Students are required to obtain an instructor's signature (or a printed copy of an e-mail from the instructor giving permission) during the first week of classes if the class has met and the section is open. In addition, students will be required to obtain signatures from both the chair and instructor (or a printed copy of an e-mail from both the instructor and chairperson giving permission) if the class has already met and the section is closed. It is the student's responsibility to contact his or her professor as soon as possible to make up the work that was missed in the course.

### Reserve Officers Training Corps (ROTC)

Middlesex County College and Rutgers University have an agreement permitting students at Middlesex to cross-enroll in the Army Reserve Officers Training Program at Rutgers without a military commitment. Scholarships of various award levels and lengths are available. Additionally, NJ Army National Guard members can attend college under the NJARNG tuition-free waiver program. The Army ROTC program provides students the opportunity to study and train for careers in the U.S. Army, Army National Guard, and the Army Reserve. Students who successfully complete the program are commissioned as second lieutenants, and, depending on their career choices, can serve full-time on active duty, or part-time, one weekend a month. *For more information, call 732.932.7313, extension 11 or e-mail [ebutac@rci.rutgers.edu](mailto:ebutac@rci.rutgers.edu). For more information, visit <http://armyrotc.com/edu/rutgers>.*

### Semesters and Sessions

#### Fall and Spring

Courses offered during the Fall and Spring semesters are taught over a 14-week period. These courses are offered on the main campus in Edison, at the New Brunswick Center, the Perth Amboy Center and numerous high schools within Middlesex County.

#### Fall II and Spring II

Within each of the regular 14-week semesters is a concentrated session with a limited schedule of course offerings that begin several weeks after the start of the semester. These courses are offered at off-campus locations, as well as the main campus in Edison.

#### Fall and Spring 7-Week Sessions

During the Fall and Spring semesters, the College also offers two 7-week sessions.

**Summer**

During the summer, the College offers four-week, seven-week and 14-week sessions.

**Wintersession**

In December and January, the college offers a concentrated session. A limited schedule of classes runs five mornings, afternoons or evenings per week. This mini-semester allows students to earn credits without increasing their regular semester course load, to fulfill a prerequisite for a course they wish to take in the spring or to repeat a fall course to improve their grade.

**Students with Disabilities**

Students requiring assistance are strongly encouraged to contact the Counselor for Students with Disabilities (*Edison Hall, Room 100, 732.906.2546 or TTY 732.906.2547*) early in the application process so that the College may respond to their needs in a timely and effective way. Students may request a copy of the Special Services brochure and policies and procedures for additional information.

**Transfer Services**

Students interested in transfer after Middlesex County College can receive assistance with educational planning and choosing transferable courses appropriate to the four-year college and degree of their choice. The latest catalogs, reference books, scholarship guides, on-line sites, and other specialized information are available at the Transfer Services Center in Edison Hall, Room 100. *Call 732.906.2546.*

**Tutoring Centers**

The Tutoring Center, located in the Johnson Learning Center, room 240, provides academic assistance to all registered MCC students in a variety of courses (excluding English, reading, writing and ESL). Tutoring is offered on a drop-in basis. The service is free of charge, and is provided on a daily basis including some evening and weekend hours (depending on the semester or term). *For more information, call 732.906.2631, or visit <http://www.middlesexcc.edu/tutoring>. Assistance in reading, writing and developmental mathematics is available in the Johnson Commons Learning Center, located in the Instructional Resources Center (IRC-241). For more information call 732.548.6000, extension 3222. Assistance in ESL is available through the ESL Department. For more information, call 732.548.6000, extension 3218.*

**Withdrawal from a Course**

Students who decide to withdraw from a Fall or Spring course must do so officially.

**Prior to the first day of class:**

Students may drop a course online through CampusCruiser/ WebAdvisor or by completing an ADD/DROP Change Form and submitting it to the Office of the Registrar. Dropping a course at this time has no effect on the Grade Point Average, and the course is not recorded on the permanent academic record.

**First 10 days from the first day of a Fall or Spring semester:**

Students may drop a course in person by using an ADD/DROP Change Form. Withdrawing from a course at this time has no effect on the Grade Point Average, and the course is not recorded on the permanent academic record. For developmental course withdrawal, a signature is required from either the curriculum chair, the dean of the student's division, an academic advisor in the Advising Center or a faculty advisor. All forms must be submitted to the Office of the Registrar.

**Eleventh day through the end of the withdrawal period:**

Students may drop a course in person by using an ADD/DROP Change Form. A grade of "W" will appear on their permanent academic record. For developmental course withdrawal, a signature is required from either the curriculum chair, the dean of the student's division, an academic advisor in the Advising Center or a faculty advisor. All forms must be submitted to the Office of the Registrar. The dropped course will be designated as having been taken one time according to the Repeated Course requirement.

**After the withdrawal period ends:**

A student may appeal to the dean of his or her academic division should withdrawal be necessitated for reasons of health or circumstances beyond the student's control.

**For all withdrawals:**

- Students should retain the copy of the withdrawal form given them by the registrar until final grades are assigned.
- Withdrawal from a developmental course may limit the courses for which you may register next semester.
- Students withdrawing from Fall II or Spring II, Wintersession or Summer Session, should refer to the Academic Calendar on the college's website for deadline dates.
- The withdrawal period ends 10 business days after midterm grades are available. The exact date will be posted each semester throughout the campus.
- International Students who are on F-1 visa/status must meet with an international student counselor before they can withdraw from a class or from the College.
- Failure to attend a class does not constitute a withdrawal. Students who wish to officially withdraw from classes should adhere to College withdrawal policies and procedures.

**Withdrawal from the College**

Full-time students who need to withdraw from all courses must go to the Department of Counseling and Career Services in Edison Hall, Room 100, to complete the proper withdrawal form and confer with one of the counselors. All degree and certificate students who withdraw completely and who intend to return to the College are advised to apply for a leave of absence. For more information about the Leave of Absence Policy and Readmission, refer to the section on **Enrollment Services, College Programs and Activities**.

Students who officially withdraw from the College after the 10th day of the semester but before 10 business days after midterm grades are available will receive the grade "W" in all courses. Should withdrawal be necessitated for reasons of health, or circumstances beyond the student's control, the student may appeal to the Tuition Appeals Committee.

International Students who are on F-1 visa/status must meet with an international student counselor before they can withdraw from the College.

Financial Aid students who withdraw from all of their courses prior to the end of the enrollment period will have their aid awards adjusted according to the Refund/Repayment Policy as referenced under **Expenses, Financial Aid and Scholarships**.

*Withdrawal procedure is subject to change.*

**Expenses and Financial Aid****Residency and Expenses**

A student's residency status determines the amount of his or her tuition and fees. Students maintaining a permanent domicile in New Jersey for at least 12 months and permanent domicile in Middlesex County for at least 30 days immediately prior to the first day of classes are defined as Middlesex County residents and are entitled to the in-county tuition rate.

**Independent students are those who are:**

1. 24 years of age by January 1 of the award year
2. A veteran of the U.S. Armed Forces
3. Married
4. Wards of the court or whose parents are deceased
5. Claiming legal dependents, other than a spouse, as defined by the Internal Revenue Service.

A dependent matriculated student who has been determined to be a New Jersey resident shall continue to be eligible for the in-county tuition rate despite a change of domicile to another state by the student's supporting parent(s) or guardian(s) provided that the student maintains New Jersey residency during each academic year of enrollment.

United States military personnel and their dependents living in New Jersey and enrolled at the College shall be regarded as residents of New Jersey for the purpose of determining tuition.

The following documents may be submitted to the Office of the Registrar to verify permanent residency in the county.

**Evidence of Residency**

1. Sign and submit the Middlesex County College Residency Documentation Form (available from the website and from the Registrar's Office); stating his or her residence.
2. Two of the following documents:
  - Original current lease or deed
  - Recent property tax bill
  - Current utility bill
  - Current credit card statement
  - A signed Voter Registration Certificate
  - Valid New Jersey motor vehicle license or registration.
  - Two pieces of current business mail sent from an address other than the College to the student at the Middlesex County residential address
  - Where none of the verifying documents listed in (a) through (g) are available, a notarized affidavit shall set forth the place and commencement date of permanent residence, relationship to the owner of the property, and the term of any lease.
3. A student under 24 years old, claiming himself or herself for tax purposes, and not living with his or her parents or guardian must submit:
  - a. A copy of his or her most recent New Jersey income tax form.
  - b. A copy of his or her parent's/guardian's most recent New Jersey income tax form.

## International Students

Non-Immigrant Alien Students whose permanent domicile is outside the United States and its possessions are defined as out-of-state residents.

## Chargeback

Middlesex County residents who are taking courses at another community college in New Jersey may have a portion of their tuition paid through the Chargeback process. Middlesex County residents may obtain a Chargeback application from the Office of the Registrar. Chargeback applies to students who are matriculated at another NJ community college in a degree program not offered at Middlesex County College or for non-matriculated students in a course(s) not offered at Middlesex County College. To be eligible, students must submit the Chargeback application along with two forms of identification showing permanent domicile in Middlesex County, acceptance letter, detailed program and course descriptions and college placement test scores/transcripts indicating completion or that no more than one course area of remediation (English, math, reading) is required. Matriculated students will be evaluated on a program-to-program basis. Non-matriculated students will be evaluated on a course-by-course basis.

It is recommended that students submit the Chargeback Application as soon as they are admitted and tested. Retroactive requests for previously completed semesters are not eligible for Chargeback. Chargeback Applications must be submitted in accordance with the submission dates listed below:

### Semester Dates Due

Fall	Submit by October 15
Spring	Submit by February 15
Summer	Submit before August 1

Non-Middlesex County residents who wish to attend Middlesex County College may also be eligible for Chargeback through their home community college.

## Senior Citizens Tuition Waiver

Middlesex County residents who are 65 years or older may take any course on a space-available basis and have the tuition waived. Senior citizens who have been admitted to a degree or certificate program at Middlesex may register during the normal registration period. However, senior citizens who have not declared a major cannot register until the late registration period begins, typically two days prior to the start of classes. The College will waive the late registration fee. They will be responsible for paying all other fees and related expenses, including student activity fees, general fees, technology fees, course and laboratory fees, books and all other college fees.

## Volunteer Tuition Waiver

Volunteer firefighters, first aid or rescue squad members or their spouse or dependent child may qualify for a tuition waiver and may take any course on a space-available basis. To be eligible, volunteers shall agree to serve as a member volunteer for a minimum of four years. Following each year of volunteer service performed, the person or family member is entitled to receive a maximum of \$600 per academic year of tuition credit. The cumulative maximum tuition credit is \$2,400. The student must complete a waiver form available in the Bursar's Office each semester. All remaining expenses must be paid by the regular due date. The student must maintain a minimum 2.0 GPA.

## Expenses

The tuition and fees and other expense amounts below are provided for informational purposes for 2012 -2013 and are subject to change.

### Tuition and Fees

The College reserves the right to change these rates for subsequent semesters.

### Tuition

Middlesex County Residents .....	\$102.00 per credit or credit equivalent
Out of County Residents.....	\$204.00 per credit or credit equivalent

### Fees

#### General Service

Middlesex County Residents .....	\$18.00 per credit or credit equivalent
Out of County Residents.....	\$36.00 per credit or credit equivalent

#### Student Service

Middlesex County Residents .....	\$3.50 per credit or credit equivalent
Out of County Residents.....	\$7.00 per credit or credit equivalent

#### Technology

Middlesex County Residents .....	\$13.00 per credit or credit equivalent
Out of County Residents.....	\$26.00 per credit or credit equivalent

### General Expenses

**Course Fees** .....\$30 to \$170

*Per course with clinical, laboratory, computer, or other appropriate non-replaceable materials including energy uses. Refer to the schedule bulletins for specific information.*

#### Registration Fee

Fall/Spring.....\$25.00 per semester

Winter/Summer.....\$15.00

**Insurance**

Accident/Health and Sickness ..... \$70.00 per year

*Required of students registering for 12 or more credits. Students who are covered by their own insurance policy can have the fee waived. The form can be obtained from the Bursar's Office. The waiver must be returned within 10 days from the first day of class or the fee is non-refundable.***Clinical Liability** .....\$36.00*Mandatory annual fee for students enrolled in Dental Hygiene, Dietetic Technology, Medical Laboratory Technology, Nursing, Psychosocial Rehabilitation, Respiratory Care or Radiography Education courses with clinic requirements.***Miscellaneous Fees****These miscellaneous fees are non-refundable.**

Application Fee .....\$25.00

Curriculum Change Fee.....\$10.00

Late Registration Fee .....\$40.00

*Begins two weeks immediately prior to the first day of classes and continues through the registration period.*

Graduation Application Fee .....\$40.00

*Students pay this fee only once for each degree or certificate awarded.*

Dishonored Check Fee ..... \$25.00 per dishonored check

Reinstatement Penalty Fee .....\$102.00 per credit

*Students who attend class without being properly registered may be subject to a \$102.00 per credit late registration penalty.***Special Fees****International Student Fee**

All international students must pay .....\$300.00 per semester

*Fall and Spring semester only.***Nursing**

NRB courses/credit cost determined by RBMC –

Fall 2012 and Spring 2013 cost/credit.....\$545.00

ATI Testing Fee – Fall 2012 fees .....\$140.00

For 1st semester; each semester after is \$110.00 for the class starting September 2012; For the class starting their second year, each semester is \$102.00.

NCLEX Predictor Test –

Last Semester ..... approximately \$55.00

Software Fee ..... \$100.00 (total)

*("The Neighborhood" . . . \$35.00; "Neehr Perfect" . . . \$65.00)***Program Supplies****These charges are approximate and subject to change.****Dental Hygiene**

Instrument Kit..... approximately \$2,000.00

Uniform .....\$200.00

Background Check ..... approximately \$75.00

**Dietetic Technology**

Knives .....\$80.00

Uniform .....\$100.00

Background Check ..... approximately \$75.00

**Engineering Program**

Drawing Kits.....\$50.00

**Hospitality, Culinary Arts & Dietetics**

Knives .....\$80.00

Uniform .....\$100.00

**Media Arts & Design***A 35mm film camera with adjustable shutter speed and aperture settings and a non-automatic metering system is required.**A secondhand camera in good working condition meeting these specifications may be used.*

Art and photographic equipment and supplies ..... \$150.00-\$350.00

**Medical Laboratory Technology**

Uniform ..... approximately \$50.00

**Nursing**

Uniform .....\$100.00

**Radiography Education**

Uniform .....\$200.00

Drug Screening.....\$50.00

Background Check .....\$41.00

**Respiratory Care**

Uniform ..... approximately \$150.00

Stethoscope..... approximately \$80.00 - \$100.00

**Middlesex County College Fitness Club Rates****Middlesex County College Students (full and part time)****Individual**

Fall or Spring Semester .....\$25.00

Summer Session .....	\$15.00
Winter Session.....	\$10.00

**Family**

Fall or Spring Semester .....	\$70.00
Summer Session .....	\$45.00
Winter Session.....	\$25.00

**Adjuncts, Retirees & Grant Personnel****Individual**

Annual.....	\$100.00
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**Family**

Annual.....	\$260.00
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**All Full-Time Employees, Trustees and HS Academy Instructors****Individual**

Annual.....	FREE
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**Family**

Annual.....	\$260.00
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**Middlesex County College Alumni****Individual**

Annual.....	\$130.00
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**Family**

Annual.....	\$330.00
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*Family membership will be limited to the individual and three (3) additional family members living in the household. The above rates will be prorated as appropriate for alumni, full-time faculty, staff and grant personnel with contracts of less than one year. Adjuncts must be at the College for four consecutive semesters in order to apply.*

**Other Athletic Fees****Swimming Pool**

*The general public is charged \$5.00 per person per session. Children 5 years of age and under are free. Those 16 years old and under need a parent/guardian in a bathing suit on the pool deck to enter the pool. There is a ratio of two (2) children to one (1) adult.*

Rentals-School .....	\$70.00/hour
Community nonprofit and county organizations.....	\$80.00/hour
Other groups.....	\$100.00/hour

**Weight Room**..... before 4 p.m. free/after 4 p.m..

*(see PE Center)*

*Children under 16 are not permitted in the weight room.*

**Racquetball Courts**

Monday-Friday

7 a.m. - 4 p.m. ....\$10.00/hour Middlesex County College community

\$10.00/hour general public

4-9 p.m.....\$10.00/hour Middlesex County College community

\$20.00/hour general public

Saturday .....\$10.00/hour Middlesex County College community

\$20.00/hour general public

*Each participant is entitled to play with one free guest. Additional guest will be charged \$2.00 each. Middlesex County College community members include registered students charged the student service fee, full-time employees and adjuncts.*

**Payment Policy**

All tuition and fees must be paid on or before the date shown on the class schedule/invoice. If an employer pays the tuition, the student must submit an employer tuition voucher prior to the payment due date. **Students are obligated for the payment of tuition and fees regardless of whether or not they attend class. A completed withdrawal form must be submitted to the Office of the Registrar. Refunds are determined by the policy below.** Overdue accounts will be referred to a collection agency and all collection costs and fees will be added to the account. If the account is overdue, the student will be prohibited from registering and official transcripts will not be released.

**Refund Policy**

To be eligible for a refund, students must officially drop individual classes, or all classes, prior to the dates specified below.

Students who withdraw prior to the first day of classes will receive a full (100 percent) refund of tuition and fees, except the non-refundable late registration fee. The first day of class is the first day classes are in session for a given semester, not the first day a particular course meets.

A student who withdraws prior to the first day of the second week of classes will receive a 75 percent refund of all tuition and fees, except the non-refundable late registration fee.

A student who withdraws prior to the first day of the third week of classes will receive a 50 percent refund of all tuition and fees, except the non-refundable late registration fee.

The semester refund/withdrawal schedule is posted around campus and is available online at [www.middlesexcc.edu](http://www.middlesexcc.edu) for specific withdrawal deadlines for each semester. Summer and Wintersession rules vary.

Appeals regarding the College's refund policy must be filed no later than 30 days after the last day of classes for the semester being appealed. Appeals must be documented and submitted to the Office of the Registrar. The Tuition Appeals Committee will review all appeals.

**Financial Appeals**

Students may file a written appeal for an exception to tuition and fee refund policies. The Tuition Appeals Committee will consider appeals in the case of serious illness or death of a family member, and requires that proper supporting documentation be submitted with the appeal. Financial appeals should be submitted to the Office of the Registrar for review by the Committee. Appeal forms are available in the Office of the Registrar. Financial appeals must be submitted within 30 days of the last day of the semester related to the appeal. Appeals received after 30 days of the last day of the semester related to the appeal or without adequate supporting documents may not be reviewed/approved.

**Financial Aid Refund Policy**

Federal regulations require that the College must calculate refunds using federal guidelines for all financial aid students who withdraw before completing the enrollment period for which they were charged.

Financial aid students who withdraw prior to the 60% point of the semester will have their aid recalculated following federal and state requirements. Students who receive midterm grades of all "Fs" will be treated as unofficial withdrawals and these students' aid awards and loans will be recalculated. Recalculations may result in the student owing a refund to MCC.

Financial aid students who withdraw after the 60% point of the semester will not have their aid reduced.

The College's Business Office will return the undisbursed student loan check to the lender for any borrower who has not met loan requirements, who has fewer than 6 credits or who has withdrawn completely from the College. If the loan has been disbursed, the College will use federal regulations to determine the amount to be returned to the lender.

**Financial Aid**



Middlesex County College makes every effort through its financial aid programs to overcome financial barriers that may prevent students from completing their education. Funds from federal, state and College sources are available to those who demonstrate need and meet eligibility requirements. Loans must be repaid, but grants need not be repaid. Students with a bachelor's degree are not eligible for federal and state grants but may apply for student loans.

All applicants for Federal, State, and College aid must complete the Free Application for Federal Student Aid (FAFSA). Students may apply electronically through the Internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Students may also mail their FAFSA to the processing center but should allow four extra weeks for processing.

The FAFSA must be filed each academic year. Apply as early as possible; applications become available each January. Students must also be accepted into an eligible academic program of study. Students should apply by May 1 to ensure priority processing especially for limited campus aid funds.

The federal processing agency takes the information provided on the FAFSA and determines each applicant's family contribution using a federal methodology formula. The NJ Higher Education Student Assistance Authority receives the FAFSA information from the Federal agency and calculates the student's eligibility for State funds using a State formula. Financial need is computed by subtracting the Federal family contribution figure from the student's cost of attendance. Data verification may also be required.

The Financial Aid Office reviews applications and documents and develops appropriate financial aid packages for eligible students. An aid package may include a combination of grants, loans and part-time employment. Eligibility is determined by the requirements of each aid program. The Financial Aid Office monitors the academic progress of financial aid recipients, and terminates aid awards if students do not demonstrate satisfactory academic progress (SAP). Federal aid will not fund more than 30 credits of developmental courses. State aid will not fund more than five semesters of attendance at the community college level.

For further information, call the Financial Aid Office at 732.906.2520. Consumer information is available upon request, or on the College's website. The address for financial aid consumer information is [www.middlesexcc.edu/financial-aid](http://www.middlesexcc.edu/financial-aid).

## Financial Aid Programs

Student eligibility for the following programs is based on the specific requirements of the program as well as evidence that the student is making satisfactory academic progress toward a degree. Students apply for these programs by completing the Free Application for Federal Student Aid (FAFSA).

### Federal Grants

#### Pell Grant Program

- Awards range from \$555 to \$5,550.
- The U.S. Department of Education uses a standard formula to determine student eligibility.
- The student is notified via a Student Aid Report (SAR).

#### Supplemental Educational Opportunity Grant

- Awards range from \$250 to \$1,000.
- The College determines eligibility based on federal guidelines.
- The student is notified via an award notice from the College.

### New Jersey Grants

#### Tuition Aid Grant (TAG)

- Awards range from \$488 to \$2,268.
- The NJ Higher Education Student Assistance Authority uses a State formula to determine eligibility.
- The student is notified via a Student Eligibility Notice (SEN) from the State.

#### Educational Opportunity Fund Program

- Awards range from \$263 to \$525 per semester.
- The College uses State guidelines to determine eligibility.
- The student is notified via a Student Eligibility Notice (SEN) from the State.

#### Garden State Scholarship Program

- Awards range from \$200 to \$900.
- The NJ Higher Education Student Assistance Authority uses academic achievement guidelines to determine recipients.
- The student is notified via a Student Eligibility Notice (SEN) from the State.

### Middlesex County College Grants

See *Scholarships*.

### Federal Work Study Program

#### Federal Work Study Program

- Awards range from \$500 to \$4,000.
- The College uses federal guidelines to determine eligibility and places students in part-time on-campus jobs.
- The student is notified via an award notice from the College.

### Federal Direct Loan Program

#### Federal Direct Loan Program

- Loans range up to \$10,500, depending on student's dependency status.
- Direct Loans are low-interest loans for students and parents to help pay for the cost of a student's education after high school.

To apply for a Direct Loan, a student must complete the Free Application for Federal Student Aid (FAFSA). A student must be enrolled at least half time for a semester, submit all required documents and/or forms, and the direct loan must be originated prior to the last date of the student enrollment. Lastly, students must meet general eligibility requirements for federal student aid programs.

- The Department of Education is the lender for all Direct Loans rather than a bank or other financial institution(s). Direct Loans are repaid after the student leaves college or enrolls less than a half time. The interest rate is fixed for repayment of new loans.

There are three types of Direct loans: the Subsidized, Unsubsidized, and Parent Loan (PLUS). Direct Subsidized and Unsubsidized loans are for students who demonstrated financial need, as determined by federal regulations. Direct PLUS loans are low-interest loans available to parents of dependent students. In addition to completing the FAFSA, a Direct Loan Master promissory Note and entrance interview counseling must be completed. For more information regarding the Direct Loan Program, contact the Financial Aid Office or visit the Direct Loan website at [www.studentloans.gov](http://www.studentloans.gov).

### Other Sources of Assistance

#### Part-Time Jobs

Many students work part-time in the surrounding area. The Middlesex County College Career Services Office can assist in locating part-time jobs. Call 732.906.2595.

#### Cooperative Education

Students in most majors may have the opportunity to gain work experience in their fields while earning money to help finance their college costs. Contact the College's Career Services Office for further information at 732.906.2595.

#### Electronic Sources of Financial Aid Information

The following addresses provide on-line information about financial aid publications, scholarship information and general financial aid application assistance.

- A Guide to Financial Aid Information & Assistance from the US Government  
<http://www.finaid.org>
- National Association of Student Financial Aid Administrators  
<http://www.NASFAA.org>
- HESAA (Higher Education Student Assistance Authority)  
<http://www.hesaa.org>

## Scholarships

### Middlesex County College Scholarships

The Middlesex County College Foundation has established more than 100 scholarships for students at the College. These are both merit and need-based issued as financial credit to your tuition and educational expenses at MCC. Since 1967, more than \$9 million of scholarships have benefited more than 13,000 students. Each of these scholarships is funded by private donations from individuals and organizations in support of the Middlesex County College mission of affordable, accessible, quality education.

Scholarships are granted only after verification of eligibility with the College's Office of Financial Aid; the completion of the Free Application for Student Financial Assistance (FAFSA) is often required.

The Scholarship Office requires that you use Scholarship Tracking and Review System (STARS Online\*)  
<http://www2.middlesexcc.edu/scholarships/stars-online-guidelines.html> to apply.

Some scholarships are not available every semester. *For additional eligibility requirements, restrictions, and further information on how to apply, please visit the Scholarship Office located in South 1, Room 118, call 732.548.6000, extension 3995, or go to the webpage, <http://www2.middlesexcc.edu/scholarships.html>.*

### Other Scholarships

New Jersey Student Tuition Assistance Reward Scholarship (NJ STARS) is a program exclusively for New Jersey residents that covers the cost of tuition at New Jersey's 19 community colleges. Students who graduate in the top 15 percent of their high school class may be eligible. *Contact the NJ STARS Office located in South 1, Room 117, call 732.548.6000, extension 3787, email: [NJSTARS@middlesexcc.edu](mailto:NJSTARS@middlesexcc.edu), or go to webpage, <http://www.njstars.net/>.*

The Scholarships Office maintains a list of scholarship opportunities and webpage links to help students and their family members seek other merit and need-based awards. Contact the office as above for assistance.

*\*STARS Online has no relation to the NJ STARS program.*

### Middlesex County College Scholarship Eligibility Highlights

#### The Accounting Financial & Tax Professionals of NJ Annual Award

Departmental award for accounting students presented at the spring awards ceremony.

#### Advanced Technologies and Regenerative Medicine, LLC (ATRM) Annual Scholarship

Full-time Biotechnology majors who maintain a 3.0 GPA or better.

#### Affinity Federal Credit Union Annual Scholarship

Full-time students who have completed 12 credits, have achieved a 2.75 GPA or better and who are residents of Middlesex County.

#### Maris and Mary Alexander Memorial Endowed Scholarship

Student with financial need who is a resident of Middlesex County and is majoring in Nursing.

#### Baker Family Annual Scholarship

Female student who is raising her children as a single mother, who has financial need and who is taking a minimum of six credits at MCC.

#### Dr. John A. Bakum Endowed Scholarship

Older MCC students who are overcoming major life challenges such as divorce, drug or alcohol rehabilitation, history of incarceration, death of a spouse, etc.

#### Dr. Bori Berkow Memorial Endowed Scholarship

#### Professor Paul Bhatia Award

Award presented in the spring to a student with financial need who demonstrates excellence in computer science.

#### Blahe Battaglia Family Scholarship

Preference given to a student who has demonstrated academic merit and who has financial need.

#### Suseela D. Botlagudur, M.D. Endowed Scholarship

Student enrolled in a Health Technologies major with preference given to a female, minority student who has financial need.

#### Mary Braun Memorial Scholarship

Full-time students with a 3.0 GPA or better and who are 1st Generation college students whose parents or siblings have not attained a college degree.

#### Bristol-Myers Squibb Company Biotechnology Scholarship

Full-time students majoring in biotechnology with a 3.0 GPA or better and who may be ineligible for federally funded financial aid.

#### Bristol-Myers Squibb Company Scholarship

Preference given to nursing students with interests in oncology care or psychosocial rehabilitation and treatment and other nursing students.

#### Zoraida Calvo Scott Endowed Scholarship

Full-time student residing in Middlesex County who is active in the Hispanic-American Club. Student is ineligible for Financial Aid, but has demonstrated financial need.

#### Central New Jersey EMPOWER High School Mentoring Program

New Brunswick High School students who participated in EMPOWER program during their senior year. EMPOWER members are judged on attendance, punctuality to classes, volunteerism and verification of financial need.

#### Robert J. and Elaine L. Ciatto Endowed Scholarship

Full- or part-time business student who was raised by a single parent, with financial need who has completed 12 or more credits and has a 2.5 GPA or better.

#### Larry L. Cohen Endowed Scholarship

Minority student with financial need and a 3.0 GPA or better in humanities or social science curriculum.

#### College Center Planning Board Scholarship

#### Computer Science/EMC/Paradigm Publishing Award

Departmental Award

#### Gale Cooperstein Annual Scholarship

Dental Hygiene student who has returned to school after a five-year lapse in formal education and who has financial need.

**Costa Chica Mexican Restaurant EMPOWER Program Scholarship**

Latino college bound high school students who have successfully completed the EMPOWER program offered by MCC, New Brunswick Center.

**The Csizmarik Family Endowed Scholarship**

Accounting or business majors with financial need.

**Rose Channing Danzis Endowed Scholarship**

Health Technologies students with financial need.

**Dr. Sidney Danzis Memorial Scholarship**

Health Technologies students with demonstrated academic merit and a 3.0 GPA or better.

**Delta Dental Annual Award**

Student in the MCC Dental program, with financial need. A letter of recommendation and essay required.

**Ann Dobshinsky Memorial Award Math**

Department Award

**Ann Goodwin Memorial Award**

Dental Hygiene Department Award

**Margarete K. M. Driver Modern Languages Scholarship**

Student majoring in modern languages. Essay required.

**Edison Chamber of Commerce / Annamae Baerenbach Business Endowed Scholarship**

Student who has completed 12 credits with a 3.0 GPA; lives or works in Edison for four years; studying business, computer science or engineering technologies.

**ESL - Dr. Eileen Hansen Award for Academic Excellence**

Departmental Award

**Excellence in Technology Award**

Award is presented to a graduating Electrical Computer Engineering Technology or Mechanical Engineering Technology student who has demonstrated professionalism and commitment to the field of engineering.

**Excellence Endowed Scholarship for Part-time Students**

Current part-time student with a 3.5 or higher GPA, who has completed 9 non-remedial credits at MCC with outstanding academic achievement. Scholarship is renewable second year if student maintains a 3.5 GPA.

**ExxonMobil Chemical Company Scholarship**

Process Technology student who has demonstrated academic merit and financial need.

**Financial Aid Scholarship**

Candidates must meet federal guidelines for financial aid and have completed 12 credits with 2.0 GPA or better.

**Freeholder Director David B. Crabiell Memorial Scholarship**

Full-time (at least 12 credits per semester) student who demonstrate academic achievement with a minimum 3.0 GPA, demonstrate leadership qualities through involvement in civic/community activities, who are majoring in liberal arts with a focus on political science or a related discipline and who plan to continue their education at a four-year institution.

**GMB North America Annual Scholarship**

Students pursuing a degree in Engineering with a 3.0 GPA or better.

**Murray Geltzer Endowed Scholarship**

Entering full-time student who has worked while in high school and maintained a B average.

**Dorothy I. Good Endowed Scholarship**

Medical Technology student with financial need with a 3.0 GPA or better.

**Susan Green Annual Scholarship**

Second-year student majoring in Media, Arts & Design with 3.0 GPA or better and is active in the Art and Photography Club.

**John J. Gutowski, Jr. Memorial Scholarship**

Preference given to a Criminal Justice major with financial need. Essay required.

**Habib American Bank Endowed Scholarship**

Students with a 3.0 GPA or better who have completed at least one semester at MCC with 12 credits, majoring in business.

**Hispanic-American Club Scholarship**

Full-time student residing in Middlesex County who is active in the Hispanic-American Club. Student is ineligible for Financial Aid, but has demonstrated financial need.

**Professor Jeffrey Hochbaum Memorial Endowed Scholarship**

Full-time, second year Health Technologies student with a 3.5 GPA or better in Science courses and a 3.0 or better overall GPA. Two letters of recommendation from Health Technologies professors and essay required.

**Rush Holt / Margaret Lancefield Annual Scholarship**

Part-time student who is working and has family obligations, and who resides in New Jersey's 12th Congressional District.

**J & J Health Technologies Scholarship**

Preference given to students in health-related careers.

**J & J Summer Bridge/New Brunswick Program Scholarship**

Students who have successfully completed the Summer Bridge/New Brunswick program who attend MCC during the fall semester carrying a 12 credit course load and have achieved a 2.75 GPA or better.

**JFK Medical Center Auxiliary Scholarship**

Full-time health technologies students from Metuchen, Edison or Woodbridge.

**Ernest A. Johnson Memorial Endowed Scholarship**

Student pursuing an Associate's Degree in Business Administration and Management, who has demonstrated academic merit and financial need and who is involved in community service.

**Karma Foundation Endowed Scholarship**

Female student who is older than traditional college age, who is not coming straight from high school and has financial need.

**Jerome F. Katcher, CPA and Estelle Katcher Business Achievement Award**

Second year business major with outstanding academic achievement of 3.5 GPA or better.

**Joseph Klegman Memorial Scholarship**

A second year student majoring in business administration or management.

**The L'Hommedieu Family Scholars Program**

Students pursuing careers in health technologies.

**Sam Landis Endowed Scholarship**

Full-time second year student in each College division with 3.0 GPA or better.

**Languages & Cultures Award**

Departmental Award

**Lieutenant Colonel Willard Blohm, US Army and Lieutenant Arch Updike, US Navy Scholarship**

High achieving students who are preferably in a transfer program who have completed 12 or more college level courses in science, math or Health Technologies.

**Master Sergeant Franklin T. Wilson Memorial Annual Veteran's Scholarship**

For Military Veteran's who are full-time with a 2.5 GPA or better and who live in Middlesex County. Preference given to Veteran's in good academic standing who have overcome obstacles.

**MCC Alumni Scholarship for Academic Excellence**

High achieving second year students with a 3.0 GPA or better. Preference given to students who perform community service and who have documented financial need.

**Menlo Engineering Scholarship**

Student with demonstrated financial need and academic merit who is pursuing a degree within the engineering technologies program.

**Metuchen Savings Bank / Annamae Baerenbach Memorial Scholarship**

Second year student pursuing a degree in business, nursing or teaching, who is a child of a single parent who lives in Metuchen or Edison, a U.S. Citizen and has low to moderate income.

**Thomas J. McCoy Annual Scholarship**

Outstanding students in legal studies and accounting.

**Middlesex County Bar Association Annual Award**

Annual award given to a high achieving paralegal student by the Paralegal Studies Department.

**Middlesex County College Alumni Scholarship**

Full- or part-time second year student who is a dependent of an MCC alumnus.

**Middlesex County College – Reading in Bioscience Award**

Departmental Award to encourage non-Bioscience majors who are taking bioscience courses.

**Middlesex County Association of Realtors Endowed Scholarship**

Student with a documented disability and demonstrated financial need.

**Middlesex County Fraternal Order of Police Annual Scholarship**

Student enrolled in the second year criminal justice program with Police Option. Student must have completed 25 credits with a GPA of 3.0 or better and be involved in community service.

**Alfred Miller - New Jersey Transportation (NTR) Annual Scholarship**

Preference given to a second year student in transportation, materials handling, warehouse or distribution. If there are no students who meet this academic criteria, this scholarship may be awarded to a second year student with a 3.0 GPA or better.

**Anna Morgan Memorial Endowed Scholarship**

Nursing major from South Amboy.

**John P. Mulkerin Endowed Scholarship****Robert Sydney Needham Memorial Scholarship**

For a full-time MCC student who graduated from a NJ High School, who has a 3.0 GPA or better and who is actively involved in community service or campus leadership.

**New Brunswick Housing Authority Endowed Scholarship**

New Brunswick Housing resident taking two or more courses.

**New Jersey Association of Women Business Owners Endowed Scholarship**

Second year female student who has returned to school after a lapse in formal education with 3.0 GPA or better. Middlesex County resident enrolled in one of the following divisions: business, engineering, health technologies or social science and humanities.

**Nolan & Rubino Engineering Associates Award**

Full- or part-time second year student in mechanical/civil/ construction engineering technology program.

**Northfield Bank Annual Scholarship**

Students who have financial need but may be ineligible for federal financial aid. Students must live in East Brunswick, Milltown, Avenel, Monroe, Woodbridge, Linden or Rahway where Northfield Bank has locations.

**Old Bridge / Sayreville Rotary Endowed Scholarship**

Old Bridge or Sayreville residents who are high school graduates. Preference given to Rotary Interact and Rotary members, students with financial need, and those who participate in community service.

**Harry Payne Endowed Scholarship**

Hispanic or African-American students who have overcome obstacles.

**Nancy Yusko Peters Endowed Scholarship**

A full- or part-time student who has overcome obstacles to attend MCC.

**Provident Bank Foundation Endowed Scholarship**

Business or accounting student with 3.0 GPA or better. Preference given to Middlesex County College Educational Opportunity Fund students.

**Prudential Endowed Scholarship**

Full-time minority students in accounting, computer science, or office systems technology.

**Psi Beta / PIE Clubs Annual Award**

Divisional Award - criteria to be determined.

**Ron Romano Academic Achievement Award**

High achieving students who are preferably in a transfer program who have completed 12 or more college level courses in science, math or health technologies. Awarded in spring for following fall semester.

**Joaquin Rosa, Sr. Memorial Scholarship**

Latino student who resides in Perth Amboy or New Brunswick with 24 credits, documented history of community service and who has financial need but may be ineligible for financial aid.

**Steven B. Rosengarten Memorial Endowed Scholarship for Current MCC Students**

Second year student who volunteers, and has completed one psychology class with a grade of B.

**Steven B. Rosengarten Memorial Scholarship for Graduating MCC Senior**

Graduating senior planning to major in psychology or education at a four-year institution. Essay required.

**Anne Stevens Memorial Scholarship**

Full-time Nursing student who is raising a family while attending MCC.

**Fernando Santiago Endowed Scholarship**

Student with proven financial need, registered for at least two classes at the Perth Amboy Center. Essay required.

**Goldelie and Stanley Schneider Endowed Scholarship**

Female student who is a custodial parent, 25 years or older, returning after a lapse in formal education.

**Frank E. Schultz Endowed Scholarship**

Student with 3.0 GPA or better with plans to continue education in graphic design or visual arts after MCC.

**The Shailesh and Dr. Bharti Shah Endowed Scholarship**

High achieving student of Indian origin (student and/or parent born in India) who is a full-time second year student with at least 12 credits. Student selection based on financial need, academic merit, and involvement in the community.

**Carol A. Siperstein Memorial Endowed Scholarship**

Student with 3.0 GPA or better. Applicant should reflect some or all of the following: an interest in teaching, appreciation for fine and performing arts and sensitivity to gender diversity. Preference will be given for persons who are gay, lesbian, and/or transgendered.

**Morris and Mildred Siperstein Memorial Endowed Scholarship**

Student in health technologies courses with a 3.0 GPA or better.

**Ian Smith Endowed Scholarship**

Graduating senior with a 3.8 GPA, transferring to a four-year institution. One faculty recommendation and an essay are required.

**Southpole Foundation Annual Scholarship**

Full-time student with financial need and a 3.0 GPA or better.

**Frank R. Steele / H.O.N.O.R. Endowed Scholarship**

African-American students with financial need, enrolled in Science, Engineering or Business courses.

**Joan D. Sulva Endowed Scholarship**

Student with documented disability, taking 12 non-remedial credits with a 2.5 GPA. Essay required.

**Telcordia Pioneers, Chapter 99 Endowed Scholarship**

Full-time student with economic need, majoring in telecommunications network technology or related computer majors, with significant community service participation.

**Mary E. Trickle Endowed Scholarship**

Full- or part-time custodial parent returning after a five-year lapse in formal education and who is not covered by tuition reimbursement. 12 credits, remedial or college level with a 2.0 GPA or better. Essay required.

**Verizon Scholars Program**

Full-time students with financial need who are interested in pursuing careers in telecommunications or business.

**Frank D. Visceglia Endowed Scholarship**

Student with financial need pursuing a career in health care.

**The Wachovia Foundation Annual Scholarship**

Full-time, second year minority student majoring in business with financial need and a 3.0 GPA or better.

**Betty Whalen, MPA Health Technologies Scholarship**

Hispanic female student with unmet financial need who may be ineligible for Financial Aid and who is enrolled in a Health Technologies major.

**Barbara A. and Samuel E. Wike Endowed Scholarship**

Custodial parent returning to school after a five-year lapse in formal education. Essay required.

**Women's Rehabilitation Group of New Jersey Scholarship**

Female student of Asian-Indian origin who has financial need and a GPA of 3.0 or better. Entering high school students' transcripts will be reviewed.

**Shirley Zall Memorial Annual Scholarship**

Single mother raising children while attending MCC full-time.

## Students' Rights and Responsibilities

### Student Rights

#### Family Educational Rights and Privacy Act of 1974 (FERPA)

The Family Educational Rights and Privacy Act of 1974 protects the privacy of education records, establishes the right of students to inspect and review their education records, and provides guidelines for the contesting of inaccurate or misleading data.

Students have the right to inspect and review all education records maintained by the College. The College is not required to provide copies unless, for reasons such as great distance, it is impossible for students to inspect the records.

Students have the right to request that the College correct records believed to be inaccurate or misleading. If the College decides not to amend the record, the student has a right to a formal hearing with the Dean of Enrollment and Student Support Services. After the hearing, if the College still decides not to amend the record, the student has the right to place a statement with the record commenting on the contested information in the record.

The College will not release any confidential information from a student's record without the written consent of the student, with the exception of the following: to College officials, including contractors and volunteers performing institutional functions, with a legitimate educational interest, to other Institutions at which a student seeks or intends to enroll, to certain government officials in order to carry out lawful functions, to appropriate parties in connection with financial aid to a student, to organizations conducting certain studies for the College, to accrediting organizations, to individuals who have obtained court orders or subpoenas, and to persons who need to know in cases of health and safety emergencies.

The College may disclose directory information without the written consent of the student. Directory information includes the following: name, address, telephone number, email address, dates of attendance, anticipated graduation date, enrollment status, class, previous institutions attended, major field of study, awards, honors (including Dean's list), degrees/ certificates conferred including date, past and present participation in officially recognized activities, student's photograph and photographic images, height and weight (for athletes only), and date and place of birth.

Students may request the withholding of disclosure of directory information. To ensure that a request is properly processed, it must be submitted on the official "Request to Prevent Disclosure of Directory Information" Form, which is available in the Office of the Registrar. In order to prevent all disclosures of directory information, the official request must be filed prior to the first day of the semester. However, the College will accept requests at any point during the semester. The request will remain in effect until the student submits signed authorization to allow disclosure of directory information. The College assumes that failure on the part of any student to specifically request on the official form the withholding of release of directory information indicates individual approval of disclosure.

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. Contact the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC. 20202.

#### Clery Act

Middlesex County College maintains security and crime statistics in compliance with the Clery Act. Clery Act information can be found on the College website.

### Student Responsibilities

#### Conduct

Expected standards of behavior have been established to provide for the maximum safety and well-being of the College community and to ensure an optimum learning environment at Middlesex County College. These standards are referred to below. The Code of Student Conduct and related policies and procedures are also outlined in the Pathfinder, the student handbook for the College. Enrollment in the college confirms students' acceptance of exemplary standards of behavior and unqualified commitment to academic integrity.

Students who violate these procedures may be subject to disciplinary action as outlined in the Code of Student Conduct.

#### Acceptable Use Policy for Computer Facilities

Inherent in the mission of Middlesex County College is to provide the College community, including faculty, staff, students and other authorized users, access to the computing resources needed to support academic and instructional activities required for effective learning. Access to these resources assumes they will be used in a professional, ethical and legal manner and that the user is obliged to abide by the computer use rules and regulations, which are outlined in the Pathfinder.

The College will make every effort to ensure the integrity of the computer resources and the information stored on them. However, Middlesex County College is not responsible for the loss of information from computing misuses, malfunction of computing and networking hardware, malfunction of computing and networking software or external contamination of data or programs. (Refer

rence Code of Student Conduct in the Pathfinder.)

#### Dress

Students are expected to exercise good judgment with respect to attire worn in the classroom and on the campus. For reasons of safety, footwear is required.

#### Identification

Students obtain a photo identification card from the Office of Student Activities after they register for the first time. Students may use the card for library privileges, computer lab facilities, processing transactions in the Office of the Registrar and for admission to all athletic events, social activities, and other College functions. Therefore, students must carry their identification card with them whenever they are on campus. Students who need to replace the card will be charged a replacement fee.

#### Animals on Campus

Animals are not permitted in College buildings. Exceptions will be made for those animals assisting disabled individuals, comfort animals, those related to a classroom requirement, and all campus residences.

#### Transportation

Students are responsible for arranging their own transportation to and from the campus. Public transportation is available. Copies of bus schedules are in the Office of Student Activities.

#### Parking

The College is designed as a compact walk-on campus with perimeter parking. Students may park in any white-lined space. Students with State handicapped plates or placards will be allowed to park in the designated parking areas/spaces for persons with disabilities. The placards must be displayed so they are readily visible.

#### College Police

The College Police are authorized to enforce all regulations regarding parking and traffic and to issue citations for violations.

#### Living Accommodations

The College does not maintain dormitories. Students who live away from home while enrolled at Middlesex are responsible for arranging their own living accommodations.

### Code of Student Conduct

In order to provide for the maximum safety and well-being of the College community, including guests, certain standards of behavior have been established at Middlesex County College. Upon admission to the College, all students accept an unqualified commitment to adhere to such standards and to conduct themselves in a manner that reflects pride in themselves and the College. These standards of conduct will apply to students engaging in College sponsored activities both on and off-campus.

Conduct that adversely affects a student's responsible membership in the academic community shall result in appropriate disciplinary action. The College will not tolerate deliberately disruptive behavior, violence, or physical interference with the rights of any member of our college community.

The Code of Student Conduct outlines behavior deemed unacceptable at Middlesex County College. Infractions of the Code include, but are not limited to, the actions listed below.

#### Violations

1. Unauthorized use or possession on the campus of weapons, ammunition, explosives, fireworks, or other dangerous substances or materials.
2. Threatening, harassing or inflicting bodily harm or physical abuse or injury to the person of a fellow student, faculty or staff member, administrative officer or guest of the College.
3. Harassment, intimidation or bullying to the person of a fellow student of the College. Harassment, intimidation or bullying is defined as any actual or perceived characteristic, such as race, color, religion, ancestry, national origin, gender, sexual orientation, gender identity and expression, or a mental, physical or sensory disability, or by any other distinguishing characteristic, that takes place on the property of the College or at any function sponsored by the College that substantially disrupts or interferes with the orderly operation of the institution or the rights of other students' and that:
  - a reasonable person should know, under the circumstances, will have the effect of physically or emotionally harming a student or damaging the student's property, or placing a student in a reasonable fear of physical or emotional harm to his person or damage to his property;
  - has the effect of insulting or demeaning any student or group of students in such a way as to cause disruption in, or interference with, the orderly operation of the College; or
  - creates a hostile educational environment for the student at the College; or
  - infringes on the rights of the student at the College by interfering with a student's education or by severely or pervasively causing physical or emotional harm to the student.
4. Obstruction or disruption of teaching, learning, research, administration, discipline procedures or other College authorized event. Disruptions of teaching and learning which may include tardiness, offensive language or behavior, noise and improper use of personal communication devices (eg: cell phones, headphones, pagers, PDAs and laptops).
5. All forms of academic dishonesty, including but not limited to cheating, copyright infringement, facilitating academic dishonesty and plagiarism or assisting others to engage in those activities.
6. The failure to report any action or plan of dishonesty whether knowledge of such act or plan is obtained directly or indirectly.
7. The soliciting of assisting another to do any act which would subject a student to probation, suspension or expulsion.
8. Unauthorized distribution, use, or possession of any substance constituting a "controlled dangerous substance" within the meaning of the New Jersey Controlled Dangerous Substance Act, N.J.S.A. 24:21-1 et seq., or any illegal drug, on College property or at College sponsored activities.
9. Failure to comply with the College's policy on smoking.
10. Illegally gambling on College property.
11. Any charge relating to the violation of any of the criminal statutes of the State of New Jersey, which violation occurs either on the campus, at off campus sponsored events or directly affects the College community. The College will cooperate fully with any law enforcement agency investigating such violations.
12. Falsification, alteration or withholding information related to records or documents maintained by the College.
13. Theft, misappropriation, vandalism, non-accidental damage, grossly negligent damage or arson to any College property or private property of a fellow student, faculty or staff member, administrative officer or guest of the College.
14. Failure to present student identification to a College employee in response to a request.
15. Unauthorized entry into any secured building or facility, obstructing access to any campus building or facility, the unauthorized use or occupation of any classroom, public or common indoor areas, recreational or athletic facility, faculty office or any other components of the College's physical plant or property.
16. Failure to register the dissemination of printed material or unauthorized display of posters and advertising material.
17. Abusive or unauthorized use and operation of outdoor and indoor sound systems, public address systems sound tracks, or bull horns.
18. Unauthorized consumption and/or unauthorized possession of alcoholic beverages on campus.
19. Failure, after a warning, to wear adequate clothing and foot covering while attending classes or utilizing any campus facility.
20. Consumption of food and beverages outside of authorized areas unless authorization has been given by a faculty member, staff or administrator.
21. Soliciting or assisting another to do any act which would subject that student to any sanction within the Code of Student Conduct.
22. A failure to abide by the "acceptable use policies for computers."

23. It is the policy of this College that membership in secret fraternities or sororities or in other clubs or gangs not sponsored by established agencies or organizations is prohibited. Organizations that initiate, advocate or promote activities which threaten the safety or well-being of persons or property on College grounds, which disrupt the program environment or are harmful to the education process, are prohibited. Activities involving initiations, hazing, intimidation, and/or related actions of such group affiliations which are likely to cause bodily danger, physical harm, personal degradation or disgrace resulting in physical or mental harm to students are prohibited. Any student causing and/or participating in activities which intimidate or adversely affects the attendance of another student or staff member will be subject to disciplinary action.

24. Engaging or the soliciting of any activity which would interfere with the normal operation of the College.

#### Sanctions

The various penalties for the commission of a violation are set forth hereafter. Upon a finding of or plea of guilty for any violation, one or more of the listed sanctions may be imposed independently or cumulatively.

1. **Warning:** Notice, orally or in writing, that continuation or repetition of conduct found wrongful may be cause for more severe disciplinary action.

2. **Probation:**

- Exclusion from participation in privileged or extracurricular College activities for a period not to exceed 1 year.
- Fine, restitution and or community service not to exceed 50 hours and/or counseling services as may be required.

3. **Disciplinary Suspension:** Temporary separation from the College for a period of time not to exceed 2 years.

4. **Expulsion:** Permanent separation from the College for all programs academic or extracurricular.

#### Administrative Suspension or Dismissal

The Vice President of Academic and Student Affairs or her/his representative shall have the authority and responsibility to assure the well being of the college community and to insure the College's ability to carry out its mission. To provide for this environment, any act or threat which, in the opinion of the Vice President of Academic and Student Affairs, endangers any individual, or which results in terrorizing any member of the college community or guests may warrant immediate suspension or dismissal. Similarly, any act which may result in the disruption of college activities or inciting others to disrupt college activities or interference with the right of any member of the college from performing assigned duties or attending class may also warrant immediate suspension or dismissal. A suspension shall remain in effect until the Vice President of Academic and Student Affairs determines that the presence of the accused does not pose a threat to any member of the college community.

#### Disciplinary Procedures

Detailed information on procedures for filing complaints, hearings, the Judicial Board and appeals are available in the Office of Student Activities.

#### Student Grievance Procedure

Students who wish to appeal a grade should follow the Academic Appeals process as outlined in the section on "Academic Standards and Regulations". Grievances regarding other issues should be handled in the following manner. Students are encouraged to discuss their concerns with the faculty member involved or with their academic advisor, prior to presenting a formal grievance. Whenever a student brings a grievance against a faculty member to the attention of a college administrator, the following procedure will be followed:

1. Should the student grievant so request, the time sequence outlined below will be extended to the end of the semester.
2. The administrator shall inform the faculty member of the nature of the allegation prior to conducting an investigation.
3. Upon investigation, if the administrator or his or her designee finds probable cause, but the nature of the grievance is not of a serious nature to warrant disciplinary action, the administrator will attempt to resolve the matter informally.
4. If the administrator or his or her designee finds probable cause and the nature of the grievance is of a serious nature to potentially warrant disciplinary action, the administrator shall advise the faculty member, the union and the divisional dean of the nature of the complaint and the name of the grievant.
5. The dean of the division shall complete the investigation and hold a hearing within fifteen (15) school days. Following the hearing, the dean shall, within ten (10) school days, render a final decision. Students may appeal the decision of the division dean to the Vice President for Academic and Student Affairs of the College.

#### Sexual Harassment Policy

Middlesex County College reaffirms its desire to create an academic/work environment for all students, faculty and staff that is not only responsible but supportive and conducive to the achievement of educational/career goals. All students, faculty and staff at Middlesex County College have the right to expect an environment which allows them to enjoy the full benefits of their work or learning experiences.

Therefore, it is the policy of the College to prohibit sexual harassment from occurring at the College or at any other location where a College-sponsored event takes place. The purpose of this policy is to demonstrate a strong commitment to maintaining a working and learning environment free of harassment.

Sexual harassment is prohibited by the Civil Rights Act of 1964, Title VII, Section 703, and by the Educational Amendment of 1972, Title IX. Immediate and appropriate corrective action will be taken should any student, faculty member, staff or administrative employee engage in behavior contrary to this policy or who engages in any form of retaliation against individuals who report unwelcome conduct or who cooperate in the investigation of such reports in accordance with this policy.

The complete Sexual Harassment Policy and complaint procedure is available in the Pathfinder.

## Academic Standards and Regulations

### General Education

The purpose of the General Education program is to ensure that graduates develop competencies that enable them to analyze and evaluate information, think critically and independently, and be informed and articulate. The General Education program at Middlesex County College meets the goals and criteria established for community colleges in New Jersey. The courses are organized into the following categories:

- [Communication \(GE COM\)](#)
- [Diversity \(which includes ethical reasoning\) \(GE DIV\)](#)
- [History \(GE HIS\)](#)
- [Humanities \(GE HUM\)](#)
- [Mathematics, Science and Technology \(GE MST\)](#)
- [Social Science \(GE SS\)](#)

General Education courses are included in each degree program and noted on the program outlines and in course descriptions included in the catalog. In addition to these general education courses, discipline specific and other degree requirements are included in each program. Please see Degree and Certificate Requirements and the program outline information found in this catalog.

### Skill Assessment and Placement

Middlesex County College believes appropriate skills assessment and placement in all basic learning areas is vital to student success in every course offered at the College. In addition, each class experience is enhanced by the enrollment of prepared students.

The College's placement test, Accuplacer, is given to determine skill levels and to help place students in appropriate courses. All full-time students must be assessed in reading, writing and mathematics prior to enrolling for their first semester of study. Part-time non-degree students are allowed to attempt 11 credits over multiple semesters prior to taking the placement test. No one may enroll in English or mathematics courses or any course that requires reading, English or mathematics courses as prerequisites without completing the placement test or being granted an exemption from the placement test.

Students whose native language is not English must take the English as a Second Language placement test, which includes an interview. At that time, students will be placed in English as a Second Language courses or directed to take the College placement test.

## Placement Test Exemptions

Middlesex County College may exempt the following students from the College placement test:

- Students who already hold an Associate's Degree or higher from a regionally accredited U.S. college or university.
- Students whose foreign degree had been equated to a U.S. Bachelor's Degree after evaluation by a certified evaluation service are exempt from taking the Accuplacer Test. However, students in this category are required to take the ESL placement test unless they submit an acceptable TOEFL score to be used in place of the full ESL placement test. Students need a score of 550 for the paper based TOEFL, 213 for the computer-based TOEFL, and 79 for the Internet-based TOEFL to be exempt from ESL classes.
- Students who attended a regionally accredited U.S. college or university and completed one semester of English composition or one semester of college-level math with a grade of "C" or better may be exempt from appropriate categories of the placement test.
- Visiting students will not be asked to complete the College's placement test. It is highly recommended that visiting students meet with their home institution advisor and review the MCC course descriptions to ensure appropriate academic preparedness for the course(s) to be taken at MCC and that the course(s) meets program requirements and will transfer back to the home college. It is the Visiting Student's responsibility to verify that the course(s) he or she takes at Middlesex County College will transfer to the home institution and that the student has the prerequisites necessary to succeed in the course.

### Please Note

- Non-native speakers of English who did not complete four years of high school English at an accredited U.S. high school must take the ESL placement test. Students who take the ESL placement test followed by an oral interview may be exempt from ESL courses. If so, the student must take the College placement test.
- Prueba de Aptitud Academica (PAA) scores will not be accepted as a basis for exempting prospective students from the College placement test.

## Developmental Education Procedures

Students may be required to complete developmental courses based upon the results of the placement test. The following procedures are designed to provide the best academic path for students who are working to achieve college level skills in mathematics, reading, and writing. Early remediation helps ensure success in other college courses. No credit-bearing courses in English or mathematics (or any course that requires reading, English or mathematics as prerequisites) may be taken prior to successful completion of required developmental courses in these areas.

1. Full-time students must satisfactorily complete all required developmental courses in the first two semesters of study. If a student's major requires a second level of algebra, one semester will be added to the time allowed for completion. Appropriate level developmental courses are taken in sequence, and all areas must be addressed each semester until all are completed. Students who are required to include developmental courses may carry no more than a combined total of 15 credits or credit equivalents. Students who wish to take more than 15 credits may do so only by submitting an appeal to the Academic Advising Center, located in Chambers Hall.

2. Part-time non-degree students may take up to 11 credits before taking the placement test. No student may enroll in a Mathematics [MAT], Reading [RDG], or Writing [ENG] course, or any course with these subjects as a prerequisite, before taking the College placement test or receiving an exemption. Completion of developmental requirements should be in the following order:

- Reading courses
- Writing courses
- Mathematics Computation
- Elementary Algebra
- Intermediate Algebra (when required for the major)

3. Students required to take both RDG 009, Reading Skills for College I, and RDG 011, Reading Skills for College II, must enroll in the appropriate reading course each semester, until each course is successfully completed with a grade of "C" or better.

4. MAT 013, Algebra I is a prerequisite for all programs. Students enrolled in the following degree and certificate programs who need remediation in algebra must successfully complete MAT 014, Algebra II, with a grade of "C" or better before they may enroll in any credit-bearing mathematics course.

Biology Transfer  
 Biology Pre-Professional  
 Biotechnology  
 Business Administration Transfer  
 Chemistry Transfer  
 Civil Engineering Technology  
 Civil Engineering Technology Certificate of Achievement  
 Computer Aided Drafting Certificate  
 Computer Science Information Systems  
 Computer Science Network Administration and Support  
 Computer Science Certificate of Achievement in Programming  
 Computer Science Network Administration Certificate  
 Computer Science Technical Certificate in Internet/Web Page Development  
 Computer Science Technical Certificate in Information Systems Security  
 Computer Science Technical Certificate in Windows/PC Support  
 Computer Science Transfer  
 Dietetics Transfer  
 Earth Science Transfer  
 Electronic and Computer Engineering Technology  
 Electronic and Computer Engineering Technology Certificate of Achievement  
 Engineering Science  
 Mathematics Transfer  
 Mechanical Engineering Technology  
 Physics Transfer  
 Surveying Engineering Technology

5. The Student Success Course (SSD 101) is open to all students. SSD is mandatory for all students who place into two or more developmental subject areas Mathematics [MAT], Reading [RDG], and/or Writing [ENG] which include the following courses:

ENG 009 Writing Skills for College I  
 ENG 010 Writing Skills for College II  
 MAT 010 Basic Mathematics  
 MAT 013 Algebra I  
 RDG 009 Reading Skills for College I  
 RDG 011 Reading Skills for College II

**Note:** ESL courses are not developmental, and ESL students are not required to take SSD 101.

### Completion Standards for Developmental Courses

Students needing remediation in the following areas must earn a grade of "C" or better in these courses before advancing to the next level:

BIO 010 Basic Biology  
 CHM 010 Basic Chemistry  
 ENG 009 Writing Skills for College I  
 ENG 010 Writing Skills for College II



MAT 010 Basic Mathematics  
 MAT 013 Algebra I  
 MAT 014 Algebra II  
 RDG 009 Reading Skills for College I  
 RDG 011 Reading Skills for College II

## College Credit by Examination

There are several programs at the College through which applicants may earn credit for knowledge gained in nontraditional ways. The College Level Examination Program (CLEP) and the Credit By Examination Program (CBE) described below, are two such programs.

Applicants for these programs include anyone who:

- Has extended work experience and wishes to demonstrate it
- Has taken courses at a non-accredited educational institution and wishes to earn college credit
- Has taken courses through correspondence or adult education programs, or in the military service
- Has done extensive independent study and wishes to earn college credit.

Applicants are encouraged to consult the Testing Center or a counselor in the Department of Counseling and Career Services about these test opportunities to determine which program would best meet their needs.

The policies of four-year institutions vary with respect to accepting the College Level Examination Program (CLEP) and Credit By Examination Program (CBE). All applicants who plan to transfer from Middlesex County College are advised to consult the registrar at the prospective transfer college regarding the institutional policy on accepting transfer credit earned by CLEP and CBE. Policy statements of those New Jersey colleges that have a formal policy on this matter are on file in the Department of Counseling and Career Services.

### College Level Examination Program (CLEP)

College credit can be awarded for the College Level Examination Program (CLEP). For further information, call the Testing Center, 732.906.2508.

### Credit by Examination (CBE)

This program provides the opportunity to earn course credit for specific courses offered at the College. There are examinations for courses in every division at the College and the offerings are updated frequently. Information (including an application form, the current listing of courses offered through this program, and dates and fees) is available in the Testing Center.

### Prior Learning Assessment

In Prior Learning Assessment (PLA), students document their college-level learning by preparing a portfolio. Experiential learning must correlate with a course listed in the student's curriculum plan. Please consult the Department of Corporate and Community Education at 732.906.4681.

### Advanced Placement Exams

The College may grant credit for Advanced Placement Examinations (minimum grade of 3.0). The Advanced Placement Program, sponsored by the College Entrance Examination Board, offers students the opportunity to pursue college-level study while in secondary school and receive advanced placement and/or credit upon entering college.

Upon successful completion of the AP exam, applicants should have the official scores sent to the Office of the Registrar for evaluation.

These scores may be requested by writing to:

Advanced Placement Examination Program  
 College Entrance Examination Board  
 P.O. Box 6671  
 Princeton, NJ 08541-6671

For more information, please call 1.888.225.5427 or e-mail [apexams@info.collegeboard.org](mailto:apexams@info.collegeboard.org).

## Credit for Noncollegiate Educational Programs

Middlesex grants transfer credit for certain non-collegiate educational programs in accordance with the recommendation of the American Council on Education contained in "The National Guide" or "A Guide to Educational Programs in Non-collegiate Organizations." These credits are granted when they are evaluated as equivalent to graduation requirements for college-level courses as determined by the academic departments with the concurrent approvals of the chair and dean.

## Credit for Educational Experience in the Armed Services

Middlesex grants transfer credit for coursework taken in the armed services in accordance with the recommendations of the American Council on Education contained in "A Guide to the Evaluation of Educational Experiences in the Armed Services." These credits are granted when they are evaluated as equivalent to college-level courses as determined by appropriate academic departments with the concurrent approvals of the chair and dean. Basic military training is accepted through a waiver for credit toward the physical education requirement.

## Dantes Tests

College policy regarding USAFI/DANTES tests is as follows: The college will grant credit to students who achieve a rating of "S" (Satisfactory) or "D" (With Distinction) in USAFI/DANTES courses where the measure of achievement is an end-of-course test or a subject examination. Where the measure of achievement is a USAFI/DANTES Subject Standardized Test, the College may grant credit for a percentile rating of 35 or above. No final decision is made until the scores have been received from DANTES.

These scores may be sent to the Office of Admissions and Recruitment by requesting a transcript online at: [www.dantes.doded.mil](http://www.dantes.doded.mil)

Defense Activity for Non-Traditional Education Support  
 Educational Testing Service  
 Contract Representative for DANTES  
 Box 2819  
 Princeton, NJ 08541

Correspondence should include the student's military service number(s) and social security number.

## Previous College Credit

Students who have attended another college must submit official transcripts of all such work to the Office of Admissions and Recruitment. Only letter grades of "C" and above are accepted. Students seeking transfer credit for courses taken at a foreign institution should submit a course-by-course evaluation from World Education Services (WES) or another evaluation service which is a member of the National Association of Credential Evaluation Services (NACES).

## Prerequisites

All prerequisites for courses must be successfully completed prior to enrollment in the course unless written approval of the department chair is obtained. Non-declared students who submit proof of an earned bachelor's degree or higher from a regionally accredited college or university within the United States may be exempt from course prerequisites if they believe they have the appropriate academic background to succeed in the course.

## Course Time Limits

Students who have been admitted to a degree or certificate program are expected to make continuous progress towards the satisfaction of all program requirements. They should consult with the department chair of their major for information on course time limits. Courses in the student's major are subject to review after five years and all other courses after 10 years. Students may need to repeat some courses if they have exceeded the time limit. The time limit review procedure also applies to the evaluation of transfer credits.

## Degree and Certificate Requirements

**Degree Requirements**

1. Satisfactory completion of all courses in an approved program that requires not fewer than 60 nor more than 66 semester credit hours, except when required for licensure, accreditation, or transfer of full junior status.
2. Minimum grades of "C" in English composition courses.
3. Minimum cumulative grade point average of 2.0.
4. Residency Requirements: Individual programs may require a minimum number of courses in the major to be taken at Middlesex County College. The College may accept up to 45 credits for courses successfully completed at another college.

**Associate in Arts Degree**

1. 9 credits in communication
2. 12 credits in mathematics, science, technology
3. 6 credits in social science
4. 9 credits in humanities
5. 6 credits in history
6. 3 credits in diversity
7. A minimum of 1 credit in physical education or health education
8. A minimum of 12 credits in one area of concentration
9. Additional credits as detailed in the sample plan of study to comply with general college requirements

**Associate in Fine Arts Degree**

1. A minimum of 6 credits in communication
2. A minimum of 3 credits in mathematics, science, technology
3. A minimum of 3 credits in humanities or social science
4. A minimum of 8 other general education credits
5. A minimum of 1 credit in physical education or health education
6. Additional credits as detailed in the Associate in Fine Arts to comply with the specific Fine Arts discipline requirements

**Associate in Science Degree**

1. A minimum of 6 credits in communication
2. A minimum of 3 credits in the humanities
3. A minimum of 3 credits in social science
4. A minimum of 3 additional credits in social science or humanities
5. A minimum of 9 credits in mathematics, science, technology
6. A minimum of 6 additional credits in general education
7. A minimum of 1 credit in physical education or health education
8. Additional credits as detailed in the sample plan of study to comply with general College requirements

**Associate in Applied Science Degree**

1. A minimum of 6 credits in communication
2. A minimum of 3 credits in social science or humanities
3. A minimum of 3 credits in mathematics, science, technology
4. A minimum of 8 additional credits in general education
5. A minimum of 1 credit in physical education or health education
6. Additional credits as detailed in the degree requirements to comply with general College requirements

**Second Associate Degree**

A second Associate's Degree may be awarded upon completion of degree requirements for the second degree.

**Certificate Requirements**

1. Satisfactory completion of all courses in an approved program that requires not fewer than 30 and no more than 36 credit hours
2. Minimum grades of "C" in English composition courses when those courses are required in the approved program
3. Minimum cumulative grade point average of 2.0
4. Individual programs may require a minimum number of courses in the major to be taken at Middlesex County College. The College may accept up to 15 credits for courses successfully completed at another college
5. A minimum of 6 credits of General Education courses comprised of 3 credits in communication and 3 credits in mathematics, science or technology

**Certificate of Achievement Requirements**

1. Satisfactory completion of all courses in an approved program which requires no more than 29 degree credit hours
2. Minimum cumulative grade point average of 2.0
3. The College may accept up to 9 credits for courses successfully completed at another college

**Graduation****Application**

Degrees and Certificates are awarded in August, January, and May. Students must submit an application for graduation. The application fee is \$40. The deadlines for filing are: July 1 for August graduation, December 1 for January graduation, and April 1 for May graduation. Students who do not meet all degree or certificate requirements for the graduation date stated in the application must reapply in order to be considered for graduation at a later date and are not charged an additional application fee.

**May Commencement Ceremony**

The following students may participate in the College Commencement held each May. Eligible students include those who:

- Completed degree and certificate requirements in January or May
- Have one or two courses remaining and expect to graduate by August.
- Completed their requirements during the previous summer but did not participate in the Commencement Ceremony the year before.

Additionally, candidates for degrees in Automotive Technology, the Culinary Arts Option in Hotel, Restaurant and Institution Management, Radiography Education, Respiratory Care and candidates for the certificate in Culinary Arts who are required to enroll in clinical courses in the Summer Session may participate in the ceremony. To be eligible, candidates must submit an application for August graduation by April 1.

**Honors and Awards****The Frank M. Chambers Award for Academic Achievement**

This award for academic excellence is presented each year at Commencement to those graduates who have achieved a 4.0 cumulative grade point average at Middlesex County College. The award is named in honor of Dr. Chambers, founding president, who served from 1965 to 1975. Certificate candidates aren't eligible for the Chambers Award.

**Transcripts**

Middlesex County College uses Electronic Transcripts (ET) to send/receive transcripts electronically. Using ET, MCC can send a transcript to a participating two-year or four-year institution via the NJ Transfer server. Current or former students who have a CampusCruiser/WebAdvisor login and password may submit requests for official transcripts online. Issuance of official transcripts routinely takes four business days from the time the request is received in the Office of the Registrar. However, processing time may be longer during periods of peak registration or at the end of t

he semester. There is no fee for this service. Students who choose to pick up their transcript rather than having it mailed must present identification. If the student has another person pick up the transcript, that person must present picture identification and a signed letter from the student authorizing them to pick up the transcript. Students with outstanding financial or other obligations are not issued official transcripts.

## Academic Integrity Policy

Academic integrity is essential to all educational endeavors and demands that every individual adhere to its basic ethical principles.

All academic work must be wholly the product of the individual or individuals who submit it except as properly noted; joint efforts are legitimate only when assigned or approved by the instructor. Academic dishonesty can take the form of plagiarism or cheating.

### Plagiarism

To plagiarize is to copy someone else's writing or ideas and to present them as one's own. Even if the author's exact words are not used, it is plagiarism if his or her ideas are used without giving credit. Types of plagiarism include:

- Copying word-for-word from a source without giving credit to the author is plagiarism. This includes copying all of, or portions of, a paper, book, periodical, CD-ROM, web page, or other material written by another person. Text that is copied must be referenced using a standard citation style. Examples of this type of plagiarism include copying a paper written by another person, and cutting a sentence or paragraph from any source and pasting it into one's paper.
- Paraphrasing without giving credit to the original source for the idea is plagiarism. To paraphrase is to restate a text or passage in another form or in different words. Credit must be given to the author for his or her idea.
- Using language that is almost identical to the language of another author is plagiarism. Students should either rewrite the passage in an original style, with attribution given for the idea, or they should use a direct quotation and credit the author.

### Copyright Infringement

As defined by the U.S. Copyright Office, as a general matter, copyright infringement occurs when a copyrighted work is reproduced, distributed, performed, publicly displayed, or made into a derivative work without the permission of the copyright owner.

### Cheating

To cheat is to give or receive assistance with an assignment, or during an exam, which is not authorized by the instructor. Examples of cheating include, but are not limited to:

- Consulting or possessing unapproved materials during a test
- Copying from another student's exam paper or allowing another student to copy from one's exam paper
- Receiving or providing assistance during an exam through an electronic device such as a cell phone, beeper, or PDA
- Falsifying data collected for a lab report or other assignment
- Collaborating on an assignment without approval
- Sabotaging another student's work
- Submitting for a grade an assignment that was completed by another person, or giving an assignment to another student so that he or she can submit it as his or her own work.
- Using a stand-in to take an exam or acting as a stand-in to take an exam
- Altering a graded assignment to obtain a better grade without the instructor's permission
- Possessing exam questions or other test materials without approval
- Forging, altering, or misusing a College document
- Unauthorized or prohibited use of works under copyright
- Aiding and abetting another in committing an act of academic dishonesty

### Penalties

Any violation of the principles of academic integrity is a serious offense. Penalties imposed by the instructor can range from an alternate assignment to failure in the course. The instructor may file code of student conduct charges which may result in suspension from the College.

## Attendance

To obtain the maximum benefit from educational opportunities, students must establish habits of regular class attendance. The College values educational growth that results from such class attendance where ideas and concepts, social development, knowledge, and success derive from the interaction of students and faculty. Therefore:

1. Students are expected to attend all classes, laboratories and clinical sessions for which they are enrolled.
2. Students are graded solely on the basis of quality and quantity of work, as stated in the course goals, objectives, and grading requirements distributed by the instructor at the beginning of each term. Students are responsible for all subject matter presented or assigned and should understand that work or tests missed may jeopardize their grades.
3. Students whose absence is caused by personal illness or serious personal matters should contact their instructors and will be allowed to make up work when possible. It is the prerogative of the instructor to excuse absences provided the student will be able to fulfill course requirements. Middlesex County College / 34 It is the student's responsibility to arrange promptly with the instructor to make up missed work which has been agreed to by the instructor. Excessive absences may result in not meeting the course objectives and a failing grade as defined in the instructor's grading requirements.
4. Failure to attend a class does not constitute a withdrawal. Students who wish to officially withdraw from classes should adhere to College withdrawal policies and procedures.

## Grading System

Letter Grade	Point System
A	4
A-	3.7
B+	3.5
B	3
B-	2.7
C+	2.5
C	2
D	1
F	0

#### Other Grades (Not included in cumulative average)

Letter Grade	Description
E	Credit by examination
GU	Grade unreported by the instructor due to emergency situation
I	Incomplete work is to be made up within the agreed time frame between student and faculty or by special arrangement of the department. An "I" grade is temporary and will expire 6 months from the end of the semester in which it was assigned. If make-up work is not accomplished within this extension, the grade will automatically be changed to an "F".
IP	Course in progress grade has not yet been assigned
T	Transfer credit from another institution
W	Withdrawal from course
X	Audit

#### Credit Equivalent

Credit equivalent is a term used to calculate cost, determine student status, and indicate a comparable level of class time and/or workload for developmental education courses. Credit equivalent courses are indicated on the transcript with a "Q" preceding the assigned grade. Credit equivalent courses count in the term GPA but not the cumulative GPA.

#### Grade Changes - Time Limit

Grade changes should be made as soon as the error is detected or an appeal is granted. All approved grade changes must be submitted to the Office of the Registrar within one year of the original grade assignment.

#### Repeated Courses

Students must file a written appeal with the Academic Advising Center, located in Chambers Hall, to repeat a course more than three times. Students may repeat any course regardless of the grade first received. If the course number or title has changed, students must submit a student appeal to the academic division dean first requesting that an equivalent course be approved. Any grades assigned including "F" or "W" constitute enrollment in a course. All previous courses will remain on record. Only the highest grade will count in the average, regardless of the number of times the course has been taken. The recalculation of the grade point average occurs automatically after grades are posted to the transcript at the close of each semester. Courses completed at another institution will not be eligible for such a grade point average recalculation. Credit by Examination may be used in lieu of repeating a course. Nursing students should contact the academic dean for an explanation of the repeat policy pertaining to their program. Students transferring to another college are advised that every institution has its own policy regarding repeated courses and the calculation of the cumulative grade point average. Other colleges may not apply Middlesex County College's policy when calculating the student's GPA for admissions purposes.

#### Calculation of Grade Point Average

- GHR (Graded Hours) is obtained by totaling all of the credits from courses for which grades were given (A, B, C, D, F)
- GPT (Grade Point Total) is determined by multiplying the course credits by the grade points per credit

Grade	Course Credit	x	Grade Points Per Credit	=	Grade Point Total
A	1	x	4	=	4
B	1	x	3	=	3
C	1	x	2	=	2
D	1	x	1	=	1
F	1	x	0	=	0
	5 GHR				10 GPT

Therefore, if a student took 5 courses, each 1 credit, and received a grade of A, B, C, D, F, the total grade points (GPT) would be 10 and the graded hours registered (GHR) would be 5.

Grade point average (GPA) is calculated using the following formula:

$$\frac{GPT = 10}{GHR = 5} = 2.00 \text{ GPA}$$

Consider another example. A student initially enrolled in 5 courses (14 credits) and received on his or her grade report the following:

Grade	Course	Credits	Grade Points Per Credit	Grade Point Total
A	English Composition I	3	4	12
B	Child Psychology	3	3	9
C	General Chemistry I	4	2	8
W	Principles of Economics	0	0	0
D	Physical Education	1	1	1
	11 GHR			30 GPT

Therefore, the GPA in this case would be 2.7.

#### Scholastic Standing

**Honors**

- **Dean's List** Students who earn 12 or more credits and who achieve a grade point average of 3.25 or higher with no grade below a "C" will be eligible for Dean's List. Dean's List is awarded at the end of the Fall, Spring and Summer semesters for those students enrolled in 12 or more credits for that semester. Part-time students who earn 12 or more credits over the course of the year will be eligible for Dean's List at the end of the academic year.
- **Dean's Letter of Commendation** Students who earn 12 or more credit equivalents, or a combination of credit and credit equivalents, and who achieve a grade point average of 3.25 or higher with no grade below a "C" will be eligible for a Dean's Letter of Commendation. A Dean's Letter of Commendation will be awarded at the end of the Fall, Spring and Summer semesters for those students who earn 12 or more credits/credit equivalents for that semester, or at the end of the academic year for those who earn 12 or more credits/credit equivalents between September 1 of one year and August 31 of the following year but did not qualify for a Dean's Letter of Commendation in either the Fall or Spring semester. The grade of "I" (Incomplete) will disqualify students for an evaluation period. When the "I" grade is changed, students will be reevaluated for dean's honors.
- **Honors at Graduation** Students graduating with cumulative grade point averages of 3.25 or higher in course work completed at Middlesex County College are recognized at Commencement as honor students with the following designations:

3.70-4.00	Highest Honors
3.40-3.69	High Honors
3.25-3.39	Honors

**Early Warning**

As part of a continuing effort to improve student success, faculty are encouraged to participate in the Early Warning System. This system identifies to the advisors those students having academic difficulty or seem to be at high risk for failure. Faculty can enter the Web Advisor grading system and select from a group of codes that indicate what they see as the issue affecting student performance. The Registrar will use this code to trigger a message to the student via CampusCruiser and to the academic advisor for full-time students and a message to the department chairperson for part-time students.

**Standards of Progress**

Students should check their academic status on CampusCruiser/ WebAdvisor at the conclusion of each semester. Those students whose cumulative grade point average falls below 2.00 will receive a letter indicating their status at the conclusion of each semester.

**Credit Courses**

The consequences for students whose cumulative grade point averages (GPAs) fall below 2.00 are as follows:

- **If a student has attempted no more than 11 credits,**  
Below 2.00 = Academic Warning
- **If a student has attempted between 12 and 23 credits,**  
Below 2.00 = Academic Warning  
Below 1.60 = Academic Probation  
Below 1.00 = Academic Restriction
- **If a student has attempted between 24 and 39 credits,**  
Below 2.00 = Academic Warning  
Below 1.80 = Academic Probation  
Below 1.60 = Academic Suspension
- **If a student has attempted 40 or more credits,**  
Below 2.00 = Academic Warning  
Below 1.80 = Academic Suspension
- **If a student has been readmitted following suspension or previous dismissal,**  
Below 2.00 = Dismissal for two years

**Developmental Education Courses**

- A student whose schedule includes developmental courses is expected to earn at least a 2.0 semester average, and a "C" or better in all developmental courses. Failure to do so will result in Academic Probation. Failure to earn at least a 1.00 semester average will result in Academic Restriction.
- A student on Academic Restriction or Academic Probation who, in a subsequent semester while still enrolled in developmental courses, fails to earn a 2.00 semester average in all courses will be placed on Academic Suspension.
- A student who is on academic probation or restriction status cannot be downgraded to academic suspension or dismissal in any subsequent semester for which the term GPA is at or above 2.0. However, if a student is taking a developmental course in that semester, the student needs to achieve a grade of "C" or better in that semester for this allowance to apply.

**Basis for Academic Dismissal**

Academic Dismissal will occur when a student, who has been readmitted following Academic Suspension or previous Academic Dismissal, fails to maintain an overall GPA of 2.00 in the course work taken subsequent to readmission.

**Course Repeat Limitation and Academic Status**

Students may attempt a course three times. Permission from the Academic Advising Office is required to enroll beyond three attempts.

**Curriculum Suspension and Dismissal**

In addition to the College-wide standards outlined above, individual programs may have stricter standards regarding continued enrollment in those programs (see program requirements).

**Academic Statuses****Academic Warning**

Academic Warning is an advisory statement to students that their present level of performance is below College standards.

**Academic Probation**

Students who have been placed on Academic Probation will be limited to 14 credits and credit equivalents or four courses. Additional limitations may include non-admittance to certain courses and/or required enrollment in one of the student enrichment courses. No student on academic probation may register without signed approval from the following: the department chair, the dean of the student's division or an advisor in the Advising Center.

**Academic Restriction**

Students who have been placed on Academic Restriction will be limited to 8 credits and credit equivalents or two courses. Additional limitations may include non-admittance to certain courses and/or required enrollment in the student success course. No student on academic restriction may register without signed approval from the following: the department chair, the dean of the student's division or an advisor in the Advising Center.

**Academic Probation and Restriction**

A student on Academic Probation or Restriction who has voluntarily not enrolled for the next semester will be placed on Academic Probation for the next semester in which she/he enrolls, with the permission of the dean of his/her division, or of the department chair or the Academic Advising Center. If the student returns following the suspension period described below, he/she is placed on "Academic Probation."

**Academic Suspension**

Students who have been academically suspended are prohibited from enrolling at the College for a period that includes one fall or spring semester. A suspension at the conclusion of a fall semester includes both winter and spring semesters. A suspension at the conclusion of a spring semester includes both summer and fall.

**Academic Dismissal**

Students who have been academically dismissed are prohibited from enrolling at the College for a minimum period of two years. A student wishing to be reinstated following dismissal must submit a reinstatement appeal demonstrating his or her readiness to pursue college studies. An Academic Dismissal will occur when a student, who has been readmitted following Academic suspension or previous Academic Dismissal, fails to maintain an overall GPA of 2.0 in the coursework taken subsequent to readmission.

**Academic Amnesty Appeal**

A student who had exhibited poor academic performance prior to an extended period of absence from the College may, following a successful return to the College, appeal to have the previously earned grades disregarded in calculating the GPA. Appeals should be submitted to the Academic Advising Center. The following terms and conditions apply:

1. The GPA prior to the period of absence from the College must have been below 2.0.
2. A minimum of three years without Middlesex County College enrollment in credit and credit equivalent courses must have elapsed prior to re-enrollment.
3. A student must complete 18 credits following re-enrollment, with a minimum GPA of 2.0, prior to submitting the appeal.
4. No credits or grades earned prior to the period of absence will be counted in the calculation of the new GPA or credits toward graduation.
5. All courses and grades will continue to appear on the transcript.
6. An Academic Amnesty Appeal may be approved only once for any individual student and is irrevocable.

Note that a student receiving benefits from the Department of Veterans Affairs will not be reimbursed for repeating courses which had already been passed. Note also that a student transferring to another college will be bound by that college's terms and conditions for accepting transfer credits.

**Administrative Dismissal**

Students may be considered for dismissal from the College for the following cause s:

1. Neglect of financial obligations.
2. Failure to comply with College rules and regulations or official notices.
3. Violation of the Student Code of Conduct.

The College reserves the right to be the sole judge in all matters.

**Academic Appeals**

Questions about a course grade should be directed to the course instructor first or to the department chair. All approved grade changes must be submitted to the Office of the Registrar within one year of the original grade assignment. Students may file a written appeal for an exception to an academic policy. They must be able to demonstrate that there are circumstances that warrant an exception. They should submit academic appeals to the academic dean of the division that administers the degree or certificate program in which they are enrolled. The academic dean may meet with the student to discuss the appeal. The decision of the dean is final. Appeal forms are available in the dean's office and in the Office of the Registrar.

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**Amy Spagnolo**, Assistant Professor, Joint Psychosocial Rehabilitation and Treatment; B.S., University of Medicine and Dentistry of New Jersey/Kean University; M.S., University of Medicine and Dentistry of New Jersey

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## ACADEMIC PROGRAMS INDEX

It is important that students find the right college major to achieve their career and educational goals. Use this chart to determine which major fits each area of interest

**CHECK COURSE DESCRIPTIONS FOR A COMPLETE LIST OF PREREQUISITES OR COREQUISITES. STUDENTS SHOULD MEET WITH AN ACADEMIC ADVISOR TO PLAN THE BEST SEQUENCE IN WHICH TO TAKE COURSES.**

**Area of Interest****Degree and Certificate Programs (Degree unless specified)**

ACCOUNTING

ACC.AAS - Accounting - Credits 63-66  
 ACC.COA - Accounting Certificate of Achievement - Credits 20  
 FAFE.COA - Forensic Accounting and Fraud Examination Certificate of Achievement - Credits 18

ADDICTION STUDIES

AS.CER - Addiction Studies Certificate - Credits 33

ADVERTISING GRAPHICS

MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63

AFRICAN-AMERICAN STUDIES

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

ALLIED HEALTH PRE-PROFESSIONAL

AHP.PAS - Allied Health Pre-Professional - Credits 60-61

ART

AHP.PAS - Allied Health Pre-Professional Certificate - Credits 30-31

ART.AFA - Fine Arts - Art Option - Credits 66

AUTOCAD

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

CET.AAS - Civil Engineering Technology - Credits 65

CIT.CER - Civil Engineering Technology Certificate - Credits 30

AUTOMOTIVE

MECCD.COA - Computer Aided Drafting Certificate of Achievement - Credits 16

MEC.AAS - Mechanical Engineering Technology - Credits 63

AUTOMOTIVE TECHNOLOGY

AUT.AAS - Automotive Technology - Credits 65

AUT.AAS - Automotive Technology - Credits 65

BIOCHEMISTRY

BIO.AS - Biology - Science Transfer - Credits 62-65

BIOLOGY

BIOTC.AS - Biotechnology - Science Transfer - Credits 64-66

BIO.AS - Biology - Science Transfer - Credits 62-65

BIOTECHNOLOGY

BPPST.AS - Biology Pre-Professional - Science Transfer - Credits 62-65

BUSINESS

BIOTC.AS - Biotechnology - Science Transfer - Credits 64-66

BUS.AS - Business Administration - Credits 60-65

EPM.CER - Event Planning Management Certificate - Credits 34

LABUS.AA - Liberal Arts - Business - Credits 60-65

MGT.AAS - Management - Credits 60-63

MGTS.CER - Management Support Services Certificate - Credits 30

SBUS.AAS - Small Business Management - Credits 62-65

SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31

SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19

BUSINESS ADMINISTRATION

BUS.AS - Business Administration - Credits 60-65

CHEMICAL ENGINEERING

ES.AS - Engineering Science - Credits 67-68

CHEMICAL INSTRUMENTATION

PRT.AAS - Process Technology - Credits 63-67

CHEMISTRY

CHM.AS - Chemistry - Science Transfer - Credits 63-65

CINEMA

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

CIVIL ENGINEERING

CET.AAS - Civil Engineering Technology - Credits 65

CIT.CER - Civil Engineering Technology Certificate - Credits 30

CIVIL ENGINEERING TECHNOLOGY

ES.AS - Engineering Science - Credits 67-68

CET.AAS - Civil Engineering Technology - Credits 65

COMMERCIAL ART

CIT.CER - Civil Engineering Technology Certificate - Credits 30

MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63

MADPH.AAS - Media Arts and Design - Professional Commercial Photography - Credits 61-63

COMMUNICATION

LACOM.AA - Liberal Arts - Communication - Credits 61-66

COMPUTER SCIENCE

CSI.AAS - Computer and Information Systems - Credits 61-66

CSH.COA - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSC.CER - Computer Programming Certificate - Credits 33-36

CSS.COA - Information Systems Security Certificate of Achievement - Credits 19

CSNN.AAS - Network Administration and Support - Credits 61-66

CSNN.AAS - Network Administration and Support - Credits 61-66

COMPUTER SCIENCE - TRANSFER

CSC.AS - Computer Science - Transfer - Credits 61-63

COMPUTERS

CSI.AAS - Computer and Information Systems - Credits 61-66

CSH.COA - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSC.CER - Computer Programming Certificate - Credits 33-36

CSC.AS - Computer Science - Transfer - Credits 61-63

EET.AAS - Electrical Engineering Technology - Credits 63

ELT.CER - Electrical Engineering Technology Certificate - Credits 32

CSS.COA - Information Systems Security Certificate of Achievement - Credits 19

CSWEB.COA - Java and Web Programming Certificate of Achievement - Credits 18

CSJAVA.COA - Java Programming Certificate of Achievement - Credits 16

CSNN.AAS - Network Administration and Support - Credits 61-66

CSNN.CER - Network Administration Certificate - Credits 33-35

CSNT.COA - Windows/PC Support Certificate of Achievement - Credits 21-22

CONSTRUCTION

CET.AAS - Civil Engineering Technology - Credits 65

CIT.CER - Civil Engineering Technology Certificate - Credits 30

CORRECTIONS

CJC.AS - Correction Administration - Credits 62-65

COR.CER - Correction Administration Certificate - Credits 36

COUNSELING

AS.CER - Addiction Studies Certificate - Credits 33

CRIMINAL JUSTICE

CJC.AS - Correction Administration - Credits 62-65

COR.CER - Correction Administration Certificate - Credits 36

CJP.AS - Police Science - Credits 62-65

CULINARY

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

DANCE

LADAN.AA - Liberal Arts - Dance - Credits 61-66

DENTAL HYGIENE

DHY.AAS - Dental Hygiene - Credits 72-74

DIETETIC TECHNOLOGY

DIET.AAS - Dietetic Technology - Credits 65

DIETETICS

DIET.AAS - Dietetic Technology - Credits 65

DIET.AS - Dietetics - Transfer - Credits 64-66

DIETETICS - TRANSFER

DIET.AS - Dietetics - Transfer - Credits 64-66

EARLY CHILDHOOD

EDPR.AAS - Education Practitioner - Credits 63-66

EARTH SCIENCE	EASC.AS - Earth Science - Credits 61-65
EDUCATION	EDPR.AAS - Education Practitioner - Credits 63-66
	LAEDU.AA - Liberal Arts - Education - Credits 61-66
EDUCATION PRACTITIONER	EDPR.AAS - Education Practitioner - Credits 63-66
ELECTRICAL ENGINEERING TECHNOLOGY	EET.AAS - Electrical Engineering Technology - Credits 63
	ELT.CER - Electrical Engineering Technology Certificate - Credits 32
ELECTRONICS	-
ENGINEERING	CET.AAS - Civil Engineering Technology - Credits 65
	CIT.CER - Civil Engineering Technology Certificate - Credits 30
	EET.AAS - Electrical Engineering Technology - Credits 63
	ELT.CER - Electrical Engineering Technology Certificate - Credits 32
	ES.AS - Engineering Science - Credits 67-68
	MEC.AAS - Mechanical Engineering Technology - Credits 63
	SET.AAS - Surveying Engineering Technology - Credits 65-66
ENGINEERING SCIENCE	ES.AS - Engineering Science - Credits 67-68
ENGLISH	LAENG.AA - Liberal Arts - English - Credits 61-66
ENGLISH AS A SECOND LANGUAGE	ESL.UN - English as a Second Language - Credits 66
EVENT PLANNING	EPM.CER - Event Planning Management Certificate - Credits 34
EVENT PLANNING MANAGEMENT	EPM.CER - Event Planning Management Certificate - Credits 34
FASHION	FMR.AAS - Fashion Merchandising and Retail Management - Credits 61-64
FASHION MERCHANDISING AND RETAIL MANAGEMEN T	FMR.AAS - Fashion Merchandising and Retail Management - Credits 61-64
FINANCE	BUS.AS - Business Administration - Credits 60-65
	LABUS.AA - Liberal Arts - Business - Credits 60-65
FINE ARTS	ART.AFA - Fine Arts - Art Option - Credits 66
	LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66
FIRE FIGHTING	FIRE.AAS - Fire Science Technology - Credits 59-61
	FIRE.CER - Fire Science Certificate - Credits 31
FIRE SCIENCE TECHNOLOGY	FIRE.AAS - Fire Science Technology - Credits 59-61
	FIRE.CER - Fire Science Certificate - Credits 31
FOOD	BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18
	CULIN.CER - Culinary Arts Certificate - Credits 34
	HRIC.AAS - Culinary Arts Management - Credits 62-65
	DIET.AAS - Dietetic Technology - Credits 65
	DIET.AS - Dietetics - Transfer - Credits 64-66
	HRIR.AAS - Restaurant/Food Service Management - Credits 63-66
	HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18
FORENSIC ACCOUNTING	FAFE.COA - Forensic Accounting and Fraud Examination Certificate of Achievement - Credits 18
FRENCH	LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66
GENOCIDE AND HOLOCAUST	LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66
GERMAN	LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66
GRAPHIC ARTS	MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63
GRAPHIC DESIGN	MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63
HEALTH	AHPP.AS - Allied Health Pre-Professional - Credits 60-61
	AHPP.CER - Allied Health Pre-Professional Certificate - Credits 30-31
	HLTH.AAS - Health Science - Credits 65
HEALTH SCIENCE	HLTH.AAS - Health Science - Credits 65
HISTORY	LAHIS.AA - Liberal Arts - History - Credits 61-66
HOSPITALITY AND CULINARY ARTS	HRIC.AAS - Culinary Arts Management - Credits 62-65
	CULIN.CER - Culinary Arts Certificate - Credits 34
	HRIH.AAS - Hotel/Motel Management - Credits 63-66
	HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18
	HRIR.AAS - Restaurant/Food Service Management - Credits 63-66
	HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18
	BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18
	HRIH.AAS - Hotel/Motel Management - Credits 63-66
	HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18
HOTEL/MOTEL MANAGEMENT	ES.AS - Engineering Science - Credits 67-68
INDUSTRIAL ENGINEERING	MEC.AAS - Mechanical Engineering Technology - Credits 63
INTERNET	CSS.COA - Information Systems Security Certificate of Achievement - Credits 19
ITALIAN	LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66
JAVA AND WEB PROGRAMMING	CSWEB.COA - Java and Web Programming Certificate of Achievement - Credits 18
	CSJAVA.COA - Java Programming Certificate of Achievement - Credits 16
	CSS.COA - Information Systems Security Certificate of Achievement - Credits 19
	CSNT.COA - Windows/PC Support Certificate of Achievement - Credits 21-22
JOURNALISM	LAJOU.AA - Liberal Arts - Journalism - Credits 61-66
LABORATORY TECHNOLOGIES	MED.AAS - Medical Laboratory Technology - Credits 71
LEGAL ASSISTANT	PL.AAS - Paralegal Studies - Credits 63-66
	PLC.CER - Paralegal Studies Certificate - Credits 31
	PLT.COA - Paralegal Studies Certificate of Achievement - Credits 18
LIBERAL ARTS	LAGEN.AA - Liberal Arts - General - Credits 61-66
MANAGEMENT	BUS.AS - Business Administration - Credits 60-65
	EPM.CER - Event Planning Management Certificate - Credits 34
	LABUS.AA - Liberal Arts - Business - Credits 60-65
	MGT.AAS - Management - Credits 60-63
	MGTS.CER - Management Support Services Certificate - Credits 30
	SBUS.AAS - Small Business Management - Credits 62-65
	SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31
	SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19
MANUFACTURING	MEC.AAS - Mechanical Engineering Technology - Credits 63
MARKETING	MKT.AAS - Marketing - Credits 60-63
MATHEMATICS	MAT.AS - Mathematics - Science Transfer - Credits 62-65

MECHANICAL ENGINEERING	MECCD.COA - Computer Aided Drafting Certificate of Achievement - Credits 16 ES.AS - Engineering Science - Credits 67-68 MEC.AAS - Mechanical Engineering Technology - Credits 63
MECHANICAL ENGINEERING TECHNOLOGY	MECCD.COA - Computer Aided Drafting Certificate of Achievement - Credits 16 MEC.AAS - Mechanical Engineering Technology - Credits 63
MEDIA ARTS AND DESIGN	MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63 MADPH.AAS - Media Arts and Design - Professional Commercial Photography - Credits 61-63
MEDICAL LABORATORY MEDICAL LABORATORY TECHNOLOGY	- MED.AAS - Medical Laboratory Technology - Credits 71 HLTH.AAS - Health Science - Credits 65
MODERN LANGUAGES MUSIC	LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66 MUS.AFA - Fine Arts - Music Option - Credits 64-68 LAMUS.AA - Liberal Arts - Music - Credits 61-66
NETWORK ADMINISTRATION	CSNN.AAS - Network Administration and Support - Credits 61-66 CSNN.CER - Network Administration Certificate - Credits 33-35
NURSING NUTRITION	NRB.AS - Nursing - Credits 70-72 DIET.AAS - Dietetic Technology - Credits 65 DIET.AS - Dietetics - Transfer - Credits 64-66
PARALEGAL	PL.AAS - Paralegal Studies - Credits 63-66 PLC.CER - Paralegal Studies Certificate - Credits 31 PLT.COA - Paralegal Studies Certificate of Achievement - Credits 18
PARALEGAL STUDIES	PL.AAS - Paralegal Studies - Credits 63-66 PLC.CER - Paralegal Studies Certificate - Credits 31 PLT.COA - Paralegal Studies Certificate of Achievement - Credits 18
PHARMACY/PHARMACEUTICAL PHILOSOPHY PHOTOGRAPHY	CHM.AS - Chemistry - Science Transfer - Credits 63-65 LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66 MADPH.AAS - Media Arts and Design - Professional Commercial Photography - Credits 61-63
PHYSICAL EDUCATION PHYSICS POLICE SCIENCE POLITICAL SCIENCE PRE-MEDICAL PRE-PHARMACY PRE-PHYSICAL THERAPY PRE-VETERINARIAN PROCESS TECHNOLOGY PSYCHOLOGY	LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66 PHY.AS - Physics - Science Transfer - Credits 62-65 CJP.AS - Police Science - Credits 62-65 LAPOS.AA - Liberal Arts - Political Science - Credits 61-66 BIO.AS - Biology - Science Transfer - Credits 62-65 CHM.AS - Chemistry - Science Transfer - Credits 63-65 BPPST.AS - Biology Pre-Professional - Science Transfer - Credits 62-65 BIO.AS - Biology - Science Transfer - Credits 62-65 PRT.AAS - Process Technology - Credits 63-67 LAPSY.AA - Liberal Arts - Psychology - Credits 61-66 AS.CER - Addiction Studies Certificate - Credits 33
PSYCHOSOCIAL REHABILITATION AND TREATMENT	PSR.AS - Psychosocial Rehabilitation and Treatment - Joint Program with UMDNJ - Credits 62-64
RADIOGRAPHY RADIOGRAPHY EDUCATION	RADC.AAS - Radiography Education - Career Track - Credits 71-73 RADT.AAS - Radiography Education - Transfer Track - Credits 72-74 RADC.AAS - Radiography Education - Career Track - Credits 71-73 RADT.AAS - Radiography Education - Transfer Track - Credits 72-74
RECREATION RESPIRATORY CARE RESTAURANT MANAGEMENT	LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66 RST.AS - Respiratory Care - Joint Program with UMDNJ - Credits 74-76 HRIR.AAS - Restaurant/Food Service Management - Credits 63-66 HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18
RETAIL SECURITY	FMR.AAS - Fashion Merchandising and Retail Management - Credits 61-64 CJC.AS - Correction Administration - Credits 62-65 COR.CER - Correction Administration Certificate - Credits 36 FAFE.COA - Forensic Accounting and Fraud Examination Certificate of Achievement - Credits 18 CSS.COA - Information Systems Security Certificate of Achievement - Credits 19 CJP.AS - Police Science - Credits 62-65
SMALL BUSINESS MANAGEMENT	SBUS.AAS - Small Business Management - Credits 62-65 SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31 SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19
SMALL BUSINESS MANAGEMENT/ENTREPRENEURIAL STUDIES	SBUS.AAS - Small Business Management - Credits 62-65 SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31 SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19
SOCIAL AND REHABILITATION SERVICES SOCIAL SCIENCES	LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66 LASS.AA - Liberal Arts - Social Sciences - Credits 61-66 LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66 LASOC.AA - Liberal Arts - Sociology - Credits 61-66
SOCIOLOGY SPANISH SPECIAL EDUCATION	LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66 EDPR.AAS - Education Practitioner - Credits 63-66 LAEDU.AA - Liberal Arts - Education - Credits 61-66
STRUCTURAL DESIGN	CET.AAS - Civil Engineering Technology - Credits 65 CIT.CER - Civil Engineering Technology Certificate - Credits 30
SURVEYING SURVEYING ENGINEERING TECHNOLOGY TEACHER (PRE-K)	SET.AAS - Surveying Engineering Technology - Credits 65-66 SET.AAS - Surveying Engineering Technology - Credits 65-66 EDPR.AAS - Education Practitioner - Credits 63-66 LAEDU.AA - Liberal Arts - Education - Credits 61-66
TEACHER (K-12)	EDPR.AAS - Education Practitioner - Credits 63-66 LAEDU.AA - Liberal Arts - Education - Credits 61-66
TEACHER (PRACTITIONER) TEACHER ASSISTANT TECHNICAL STUDIES THEATRE	EDPR.AAS - Education Practitioner - Credits 63-66 EDPR.AAS - Education Practitioner - Credits 63-66 TECH.AAS - Technical Studies - Credits 63 THE.AFA - Fine Arts - Theatre Option - Credits 61-65

## VISUAL ARTS

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

ART.AFA - Fine Arts - Art Option - Credits 66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

## WRITING

## X-RAY TECHNOLOGY

RADC.AAS - Radiography Education - Career Track - Credits 71-73

RADT.AAS - Radiography Education - Transfer Track - Credits 72-74

**Accounting****Accounting - ACC.AAS (Associate in Applied Science)**

Credits: 63-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ACC-101 Financial Accounting	4	
BUS-101 Business Organization and Management	3	
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
BUS-115 Mathematics of Finance	3	Passing score on the College placement test or successful completion of MAT 013
BUS 115 Mathematics of Finance will satisfy the math requirement. Students considering transfer to a baccalaureate program should consult an academic advisor as to the other math choices.		
<b>Semester II</b>		
ACC-102 Managerial Accounting	4	ACC 101
BUS-201 Business Law I	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester III</b>		
ACC-202 Cost Accounting	4	ACC 102
ACC-211 Intermediate Accounting I	4	ACC 102
BUS-202 Business Law II	3	BUS 201
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester IV</b>		
Choose one of the following two courses (3 credits each):		
ACC-206 Tax Accounting	3	ACC 102
OR		
ACC-208 Accounting Field Experience	3	ACC 102 and written permission of the department chair and the director of Cooperative Education and Internships
____ GE Science Elective	3	
Students must select a course with the <a href="#">GE MST</a> designation from the following sciences: BIO, CHM, PHY, SCI.		
ACC-212 Intermediate Accounting II	4	ACC 211
ECO-202 Principles of Economics II	3	ECO 201 or written permission of the department chairperson
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		



**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****ACCOUNTING****ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

Accounting is one of the most rapidly expanding fields in today's economy. Since it is service oriented, it involves working with people almost as much as with financial records. Accountants not only collect and report financial data, but they also serve as the link between the data and the people who use it.

**Related Programs - You may also be interested in one of the following programs:**

ACC.COA - Accounting Certificate of Achievement - Credits 20

FAFE.COA - Forensic Accounting and Fraud Examination Certificate of Achievement - Credits 18

**What will students learn studying Accounting?**

They acquire an extensive background in accounting and a strong fundamental knowledge of the major functions of business and industry. They study business law, business organization and management, mathematics and economics.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completing the appropriate class.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Accounting Certificate of Achievement****Accounting Certificate of Achievement - ACC.COA (Certificate of Achievement)**

Credits: 20 Credits Required

Description: The Accounting Certificate of Achievement is designed for individuals with an associate degree or higher who have satisfied basic skills, general education and mathematics requirements. Permission of the department chairperson may also be required.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
ACC-101 Financial Accounting	4	
ACC-102 Managerial Accounting	4	ACC 101
ACC-202 Cost Accounting	4	ACC 102
ACC-211 Intermediate Accounting I	4	ACC 102
ACC-212 (recommended elective) Intermediate Accounting II	4	ACC 211

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****ACCOUNTING****ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

Accounting is one of the most rapidly expanding fields in today's economy. Since it is service oriented, it involves working with people almost as much as with financial records. Accountants not only collect and report financial data, but they also serve as the link between the data and the people who use it.

**Related Programs - You may also be interested in one of the following programs:**

ACC.AAS - Accounting - Credits 63-66

FAFE.COA - Forensic Accounting and Fraud Examination Certificate of Achievement - Credits 18

**What will students learn studying Accounting?**

They acquire an extensive background in accounting and a strong fundamental knowledge of the major functions of business and industry. They study business law, business organization and management, mathematics and economics.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completing the appropriate class.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594  
 Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)  
 Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>  
<https://applyto.middlesexcc.edu/application/login.php>

## Allied Health Pre-Professional

### Allied Health Pre-Professional - AHPP.AS (Associate in Applied Science)

Credits: 60-61 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

OR Jeffrey Herron, Assistant Dean, Division of Professional Studies

Contact Phone: 732.906.2502

Contact Email: [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu) OR [JHerron@middlesexcc.edu](mailto:JHerron@middlesexcc.edu)

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
PSY-123 Introduction to Psychology	3	
BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
OR		
BIO-117 Biology I	4	Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
CSC-105 Computer Applications and Systems	3	
Note: Student should check with potential transfer institutions for the appropriate course in this area.		
HED-150 Contemporary Health Issues	3	
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
___ GE Mathematics Elective	3	
Choose mathematics courses designated in the course ( <a href="#">GE MST</a> ) descriptions as General Education Mathematics, Science, Technology ( <a href="#">GE MST</a> ).		
BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
OR		
BIO-118 Biology II	4	BIO 117
___ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
SOC-121 Introduction to Sociology	3	
<b>Semester III</b>		
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
OR		
CHM-117 Chemistry I	4	MAT 013 or appropriate score on the College placement test and one year of high school laboratory science or departmental approval
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
___ Science/Mathematics Program Elective	4	
Select courses from the list below. Select a 4-credit science or mathematics course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
___ GE Program Elective	3	
Select courses from the list below. Select a 3-credit course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
___ GE Program Elective	3	
Select courses from the list below. Select a 3-credit course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		

**Semester IV**

CHM-107 Principles of General, Organic and Biochemistry	4	One year of high school laboratory chemistry or CHM 010
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OR

CHM-118 Chemistry II	4	CHM 117
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____ Science/Mathematics Program Elective	4	
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Select courses from the list below. Select a 4-credit science or mathematics course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.

____ GE Program Elective	3	
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Select courses from the list below. Select a 3-credit course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.

____ GE Program Elective	3	
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Select courses from the list below. Select a 3-credit course that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.

**PROGRAM ELECTIVES****SCIENCE/MATHEMATICS PROGRAM ELECTIVES****Course** **Notes(See Below)**[BIO-111](#) D.N,RADT,RC[BIO-112](#) D.N,RADT,RC[BIO-117](#) M[BIO-118](#) M[BIO-131](#) RADC[BIO-211](#) D,N,M,RC[CHM-107](#) D,RC[CHM-117](#) M[CHM-118](#) M[CHM-201](#) M[CHM-202](#) M[MAT-123](#)[MAT-124](#)[MAT-129](#)[MAT-131](#)[PHY-123](#) AND [PHY-125](#)**GENERAL EDUCATION PROGRAM ELECTIVES**

Students may select **one** course from the following Art History/Fine Arts/Music History/Theater History Coursework

[ART-104](#), [ART-105](#), [ART-115](#), [ART-120](#), [ART-123](#), [ART-124](#), [ART-125](#), [MUS-107](#), [MUS-123](#), [MUS-124](#), [THE-105](#), [THE-123](#), [THE-124](#)

[COM-115](#)[CSC-106](#)[ECO-201](#)[ENG-225](#)

History Coursework - Select **one** course from [HIS-121](#), [HIS-122](#), [HIS-221](#), [HIS-222](#), [HIS-256](#) or [HIS-258](#)

Philosophy Coursework - Select **one** course from [PHI-121](#), [PHI-122](#) or [PHI-123](#)

Psychology Coursework - Select **one** course from [PSY-163](#), [PSY-217](#), [PSY-223](#), [PSY-227](#), [PSY-255](#) or [PSY-270](#)

[PSY-232](#)[SOC-224](#)[SPA-121](#)[SPA-122](#)[SPE-121](#)

Notes:

D - Course required for Dental Hygiene Associate of Applied Science Degree Program

M - Course required for Medical Laboratory Technology Associate of Applied Science Degree Program

N - Course required for Nursing Associate of Science Degree Program

RADC - Course required for Radiography Education - Career Track Associate of Applied Science Degree Program  
 RADT - Course required for Radiography Education - Transfer Track Associate of Applied Science Degree Program  
 RC - Course required for Respiratory Care Associate of Science Degree Program

\*\* Two General Education Social Science (GE SS) courses in addition to [PSY-123](#) are required for Respiratory Care.

## Allied Health Pre-Professional Certificate

### Allied Health Pre-Professional Certificate - AHPP.CER (Certificate)

Credits: 30-31 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

OR Jeffrey Herron, Assistant Dean, Division of Professional Studies

Contact Phone: 732.906.2502

Contact Email: [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu) OR [JHerron@middlesexcc.edu](mailto:JHerron@middlesexcc.edu)

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
OR		
BIO-117 Biology I	4	Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010
Note: Students selecting courses that are represented on the 'Program Electives' list may not use the course as a program requirement and also as a course elective.		
PSY-123 Introduction to Psychology	3	
____ Science/Mathematics Program Elective	4	
Select a 4-credit science or mathematics course from the list below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
____ GE Program Elective	3	
Select a 3-credit course listed below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
<b>Semester II</b>		
BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
OR		
BIO-118 Biology II	4	BIO 117
____ Science/Mathematics Program Elective	4	
Select a 4-credit science or mathematics course from the list below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
OR		
____ GE Program Elective	3	
Select a 3-credit course listed below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
____ GE Program Elective	3	
Select a 3-credit course listed below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
____ GE Program Elective	3	
Select a 3-credit course listed below that has not already been completed successfully. Please review catalog for prerequisites. Program electives should be selected after consultation with academic advisement to discuss career and transfer applicability of the courses.		
<b>PROGRAM ELECTIVES</b>		
<b>SCIENCE/MATHEMATICS PROGRAM ELECTIVES</b>		
<b>Course</b>	<b>Notes(See Below)</b>	

[BIO-111](#) D.N,RADT,RC  
[BIO-112](#) D.N,RADT,RC  
[BIO-117](#) M  
[BIO-118](#) M  
[BIO-131](#) RADC  
[BIO-211](#) D.N,M,RC  
[CHM-107](#) D,RC  
[CHM-117](#) M  
[CHM-118](#) M  
[CHM-201](#) M  
[CHM-202](#) M  
[MAT-123](#)  
[MAT-124](#)  
[MAT-129](#)  
[MAT-131](#)  
[PHY-123](#) AND [PHY-125](#)

#### **GENERAL EDUCATION PROGRAM ELECTIVES**

Students may select **one** course from the following Art History/Fine Arts/Music History/Theater History Coursework

[ART-104](#), [ART-105](#), [ART-115](#), [ART-120](#), [ART-123](#), [ART-124](#), [ART-125](#), [MUS-107](#), [MUS-123](#), [MUS-124](#), [THE-105](#), [THE-123](#), [THE-124](#)

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[COM-115](#)

[CSC-106](#)

[ECO-201](#)

[ENG-225](#)

History Coursework - Select **one** course from [HIS-121](#), [HIS-122](#), [HIS-221](#), [HIS-222](#), [HIS-256](#) or [HIS-258](#)

Philosophy Coursework - Select **one** course from [PHI-121](#), [PHI-122](#) or [PHI-123](#)

Psychology Coursework - Select **one** course from [PSY-163](#), [PSY-217](#), [PSY-223](#), [PSY-227](#), [PSY-255](#) or [PSY-270](#)

[PSY-232](#)

[SOC-224](#)

[SPA-121](#)

[SPA-122](#)

[SPE-121](#)

#### Notes:

D - Course required for Dental Hygiene Associate of Applied Science Degree Program

M - Course required for Medical Laboratory Technology Associate of Applied Science Degree Program

N - Course required for Nursing Associate of Science Degree Program

RADC - Course required for Radiography Education - Career Track Associate of Applied Science Degree Program

RADT - Course required for Radiography Education - Transfer Track Associate of Applied Science Degree Program

RC - Course required for Respiratory Care Associate of Science Degree Program

\*\* Two General Education Social Science (GE SS) courses in addition to [PSY-123](#) are required for Respiratory Care.

#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

#### **ALLIED HEALTH PRE-PROFESSIONAL DIVISION OF PROFESSIONAL STUDIES**

The need for allied health programs has increased in the last several years. This program was designed for students contemplating a career in nursing, radiography, dental hygiene, medical laboratory technology, and respiratory care as well as other allied health careers. Students who plan on taking this program will be able to apply to one of the selective health technology programs at MCC or will be able to transfer to a program at a four year college or university after completion of the associate's degree.

**Related Programs - You may also be interested in one of the following programs:**

AHPP.AS - Allied Health Pre-Professional - Credits 60-61

#### **What will students learn if they study Allied Health Pre-Professional?**

Students will have a strong core of sciences and general education electives to meet the requirements for a degree and/or a certificate. Students will be able to select courses with the assistance of an advisor in their area of interest.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra 1 is a prerequisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students considering nursing must have a "B" or better in high school biology and chemistry both with a lab. Students considering all

other allied health fields must have a "C" or better in high school biology and chemistry both with a lab. There may be additional requirements that are required depending on the major chosen.

### Can students who major in Allied Health Pre-professional transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Questions?

Contact Name: Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

OR Jeffrey Herron, Assistant Dean, Division of Professional Studies

Contact Phone: 732.906.3502

Contact Email: [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu) OR [JHerron@middlesexcc.edu](mailto:JHerron@middlesexcc.edu)

<https://applyto.middlesexcc.edu/application/login.php>

## Fine Arts - Art Option

### Fine Arts - Art Option - ART.AFA (Associate in Fine Arts Degree)

Credits: 66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisites and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>Communications (9 credits)</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
___ GE Social Science Elective	3	
Choose three credits from courses designated in the course descriptions as <a href="#">GE SS</a> from the following: African-American Studies, Anthropology, Economics, Political Science, Psychology and Sociology.		
___ GE Humanities Elective	6	
Choose six credits in sequence of the same modern language from FRE, GER, ITA, SPA. If students completed at least two years of high school study in one modern language, the level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
Choose three credits in humanities from courses designated as <a href="#">GE HUM</a> from the following: African-American Studies, Art, Dance, English, History, Modern Language, Music, Philosophy, Speech, and Theatre.		
___ GE Mathematics or Science Elective	6-8	
Choose any math and/or science courses with the <a href="#">GE MST</a> designation numbered 101 or above that when combined will total 6-8 credits.		
___ GE Diversity Elective	3	
Choose a minimum of three credits from courses designated as <a href="#">GE DIV</a> . If the course is also designated as <a href="#">GE HUM</a> , <a href="#">GE SS</a> , or <a href="#">GE MST</a> , it may also be used to satisfy an additional graduation requirement.		
CSC-105 Computer Applications and Systems	3	
___ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
___ Elective	3	
ART-109 Drawing	3	
OR		
ART-110 Figure Drawing	3	
ART-123 Art History: Ancient to Renaissance	3	
ART-124 Art History: Renaissance to Modern	3	
ART-145 Art Fundamentals: Two Dimensions	3	
ART-146 Art Fundamentals: Three Dimensions	3	
ART-148 Art Portfolio Workshop	1	One or more three-credit studio art courses or written permission of the department chairperson
One or more 3-credit studio art courses selected from the following: ART 105, ART 109, ART 110, ART 145, ART 146, ART 150, ART 201, ART 219, ART 220, ART 221, ART 222, ART 223, ART 224 or permission of department.		
ART-149 Art Studio Seminar	1	One or more three-credit studio art courses or written permission of the department chairperson

and Counseling and Career Services Office

One or more 3-credit studio art courses selected from the following: ART 105, ART 109, ART 110 , ART 145, ART 146, ART 150, ART 201, ART 219, ART 220, ART 221, ART 222, ART 223, ART 224 or permission of department.

Plus one of the following (3 credits each):

ART 221 Painting: Traditional

ART 222 Painting: Contemporary

ART 223 Sculpture Traditional

ART 224 Sculpture Contemporary

_____ Art Elective	3	
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**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## FINE ARTS VISUAL, PERFORMING, AND MEDIA ARTS DEPARTMENT

The Associate in Fine Arts (A.F.A.) offers the first two years of concentrated study in studio courses for students planning to transfer to a visual arts, theatre, or music baccalaureate program. As a fine arts major, the student may choose to concentrate in either theater, art or music.

**Related Programs - You may also be interested in one of the following programs:**

MUS.AFA - Fine Arts - Music Option - Credits 64-68

THE.AFA - Fine Arts - Theatre Option - Credits 61-65

### What will students learn if they study Fine Arts?

Fine arts will provide a strong foundation in the creative field of choice as well as a well-rounded education with a generous range of liberal arts courses required by baccalaureate fine arts programs. Students create a body of work or enhance skills in a chosen field in ways that will assist them in being accepted into a competitive fine arts program at a four-year institution.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Questions?

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Addiction Studies Certificate

### Addiction Studies Certificate - AS.CER (Certificate)

Credits: 33 Credits Required

Description: The Addictions Studies Certificate provides the educational and practical training hours required by NJ State Law for certification as an Alcohol and Drug Counselor (CADC). Students in the program complete: 270 hours of approved alcohol and drug education in certain domain areas 300 hours of supervised practical training in alcohol and drug counseling 30 Alcohol and drug abuse self-help group meetings Students who earn the certificate are in an excellent position to complete the two year work experience requirement. They also have the educational preparation to perform well on the NJ state written and oral examinations. This certificate offers students an opportunity to enter the field of addiction studies upon graduation and, after completing their supervised work experience, to apply for CADC certification.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
<b>General Education Social Science</b>		
PSY-123 Introduction to Psychology	3	
<b>General Education Diversity</b>		
COM-115 Intercultural Communication	3	
OR		
SOC-205 Diversity and Multiculturalism in U.S. Society	3	
<b>Additional Courses</b>		
PSY-151 Introduction to Addiction Studies	3	PSY 123

PSY-251 Substance Abuse: Pharmacology	3	PSY 151
PSY-235 Abnormal Psychology	3	PSY 123 or permission of department chair
PSY-264 Addiction Counseling	3	PSY 151, PSY 257
PSY-252 Community and Agency Counseling	3	PSY 151
PSY-257 Counseling Theories and Techniques	3	PSY 123
PSY-265 Addiction Studies Practicum	3	PSY 264, PSY 257
____ Free Elective	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**ADDICTION STUDIES  
HISTORY AND SOCIAL SCIENCE DEPARTMENT**

The Addictions Studies Certificate provides the educational and practical training hours required by NJ State Law for certification as an Alcohol and Drug Counselor (CADC). Students in the program complete:

- 270 hours of approved alcohol and drug education in certain domain areas
- 300 hours of supervised practical training in alcohol and drug counseling
- 30 Alcohol and drug abuse self-help group meetings

Students who earn the certificate are in an excellent position to complete the two year work experience requirement. They also have the educational preparation to perform well on the NJ state written and oral examinations.

This certificate offers students an opportunity to enter the field of addiction studies upon graduation and, after completing their supervised work experience, to apply for CADC certification.

**Questions?**

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Automotive Technology

### Automotive Technology - AUT.AAS (Associate in Applied Science)

Credits: 65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [TSabol@middlesexcc.edu](mailto:TSabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
AUT-111 Minor Automotive Services	3	
AUT-115 Automotive Brake Systems	2	
AUT-117 Automotive Electrical Systems	3	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
Appropriate score on the College's placement test, MAT 013, MAT 013A/MAT 013B, or departmental approval. Higher level mathematics course can be substituted with departmental approval.		
____ Physical Education Elective	1	
Students have the option of substituting Health Education Electives in place of the Physical Education Elective.		
<b>Semester II</b>		
AUT-122 Analysis and Tune-Up	3	AUT 111
AUT-124 Automotive HVAC Systems	3	AUT 111
AUT-126 Alignment, Suspension and Steering Systems	2	AUT 111
CSC-105 Computer Applications and Systems	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
<b>Summer I</b>		
AUT-108 Automotive Technology Work Experience I	3	AUT 122, AUT 124 and AUT 126 and written permission of the department chairperson and Counseling and Career Services Office
(A 15-week cooperative education course)		
<b>Semester III</b>		
AUT-211 Standard Transmission and Drive Train	3	AUT 108
AUT-213 Automatic Transmission I	3	AUT 208
AUT-216 Fuel and Emission Systems	3	AUT 108
AUT-217 Engine Diagnostics and Repair I	3	AUT 108
____ GE Humanities Elective	3	



Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

**Semester IV**

AUT-208 Automotive Technology Work Experience II	3	AUT 211, AUT 213, AUT 216 and AUT 217
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A 15-week cooperative education course

PHY-101 Principles of Physics	4	MAT 107 or equivalent
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MAT 107 or equivalent. Higher level Physics course can be substituted with departmental approval.

**Summer II**

AUT-226 Automatic Transmission II	2	AUT 208 and AUT 213
AUT-228 Engine Diagnostics and Repair II	3	AUT 208 and AUT 217
AUT-229 Automotive Electricity and Electronics	3	AUT 208
_____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**AUTOMOTIVE TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT**

Students acquire the technical skills for career opportunities as an automotive service technician in dealerships and independent businesses.

This program is offered in cooperation with Middlesex County Vocational and Technical Schools. It combines classroom and laboratory experience with paid on-the-job training. This program is certified by the National Automotive Technician Education Foundation (NATEF).

**Do students who major in Automotive Technology earn additional certification?**

Students are eligible for the Maintenance and Light Repair (MLR) Certificate from the Ford Motor Company, after successful completion of the first year of automotive courses.

**Are there any requirements students must satisfy before taking courses in their major?**

Algebra I is a prerequisite for all majors. Algebra I competency must be verified with a passing score on the College's placement test or by completing the appropriate class. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before the student will be considered for admission to the program.

**How long will it take to complete this degree?**

Automotive Technology is an intensive full-time program. It includes 60 weeks spent in college classes and 30 weeks spent acquiring workplace experience. This cooperative education program takes approximately two years to complete. This program begins every other fall semester in the even numbered years.

**Questions?**

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [TSabol@middlesexcc.edu](mailto:TSabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Biology - Science Transfer**

**Biology - Science Transfer - BIO.AS (Associate in Science Degree)**

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-123 General Biology I	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
Appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, MAT 014 with a minimum grade of "B" or departmental approval. Students may substitute MAT 014A plus MAT 014B. MAT 131 - MAT 132 recommended.		
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		

Semester II		
BIO-124 General Biology II	4	BIO 123
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval

Semester III		
BIO-221 Microbiology	4	BIO 118, BIO 120 or BIO 124, CHM 118 or CHM 122 and CHM 126
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
___ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
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Semester IV		
___ Biology Elective	4	

Students may choose BIO 228 or BIO 224 (offered only in the spring semester) or BIO 229 (offered only in the fall semester) or BIO 240.

PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125

___ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

OR		
___ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ Science/Mathematics Program Elective	3-4	
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Students may select from BIO 221, BIO 228 (offered only in the fall semester), BIO 229 (offered only in the fall semester), BIO 240, CHM 221 with CHM 227, or MAT 132 or a course with permission of the department chairperson.

#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### **BIOLOGY**

#### **DEPARTMENT OF NATURAL SCIENCES**

Students choose from one of three biology curricula: traditional biology major, pre-professional and biotechnology. These curricula parallel the first two years of a baccalaureate degree in biology. The traditional Biology option prepares students, upon graduation, for transfer to a four-year college or university to pursue a career in biology-related fields such as molecular biology, cell biology, physiology, microbiology, biochemistry, ecology, biology education, medicine, dentistry and veterinary medicine.

Students interested in pre-chiropractic, physical therapy, occupational therapy or physician's assistant may major in the Biology Pre-Professional option. The students choosing the Biotechnology option acquire knowledge in inorganic and organic chemistry, genetics, microbiology, cell biology and molecular biology as well as achieving competence in laboratory techniques and instrumentation that are relevant to the biotechnology industry.

**Related Programs - You may also be interested in one of the following programs:**

BPPST.AS - Biology Pre-Professional - Science Transfer - Credits 62-65

#### **What will students learn if they study Biology Transfer, Biology Pre-Professional, or Biotechnology Degree Options?**

They concentrate on the theoretical and applied sciences, and mathematics. Their studies prepare them to meet the challenges of advanced study in professional careers.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

A passing score on the College's mathematics placement test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for all biology majors. In addition, a high school laboratory biology course with a minimum grade of "C" or BIO 010 and a high school laboratory chemistry or CHM 010 with a minimum grade of "C" are also required.

#### **Can Biology majors transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### **Questions?**

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Biotechnology - Science Transfer

### Biotechnology - Science Transfer - BIOTC.AS (Associate in Science Degree)

Credits: 64-66 Credits Required

Description: Below is required courses and recommended course groupings and sequences for program completion. Courses may have prerequisites and corequisites requirements.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-123 General Biology I	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
____ Physical/Health Education Elective	1 - 3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
BIO-124 General Biology II	4	BIO 123
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
BIO-132 Introduction to Biotechnology: Concepts and Issues	1	BIO 123
<b>Semester III</b>		
BIO-228 Genetics	4	BIO 124, CHM 122 and CHM 126 or written permission of the department chairperson
BIO-229 Cell Biology	4	BIO 124, CHM 121 and CHM 125
OR		
BIO-221 Microbiology	4	BIO 118, BIO 120 or BIO 124, CHM 118 or CHM 122 and CHM 126
CHM-221 Organic Chemistry I - Lecture	3	CHM 122 with a grade of "C" or better
CHM-227 Organic Chemistry I - Lab	1	CHM 122, CHM 126 with a grade of "C" or better
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE.SS</a> ).		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE.HUM</a> ).		
<b>Semester IV</b>		
CHM-222 Organic Chemistry II - Lecture	3	CHM 221 Lecture with a grade of "C" or better, CHM 227 Lab
CHM-228 Organic Chemistry II - Lab	1	CHM 221, CHM 227 with a grade of "C" or better
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE.SS</a> ).		
OR		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE.HUM</a> ).		
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
BIO-251 Introduction to Biomolecules and Molecular Biology - Lecture	3	CHM 221, CHM 227, BIO 123 and BIO 124
BIO-252 Introduction to Biomolecules and Molecular Biology - Lab	1	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****BIOTECHNOLOGY  
DEPARTMENT OF NATURAL SCIENCES**

Biotechnology is a branch of science in which we use living organisms to make useful products, and is a rapidly-growing career path for the future. The program is designed to provide hands-on skills training in biotechnology, as well as an AS transfer option for students with interests in the biological sciences.

**Why major in Biotechnology?**

Biotechnology offers multiple opportunities for work and research. Employment opportunities include: environmental, medical/ pharmaceutical companies; diagnostic and research products; food products; US government laboratories; police and forensic science departments; US Customs; patent law; and, science writing.

**What will students learn if they study Biotechnology?**

Students in this program acquire knowledge in biology, chemistry, organic chemistry, genetics, cell biology, microbiology, molecular biology and biochemistry. Students will demonstrate proficiency in chemical, biological, cellular, immunological and molecular techniques and lab instrumentation.

**Are there any requirements that must be satisfied before taking courses in the major?**

A passing score on the College's mathematics placement test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for biotechnology majors. In addition, a high school laboratory biology course with a minimum grade of "C" or BIO 010 and a high school laboratory chemistry or CHM 020 with a minimum grade of "C" are also required.

**Can Biotechnology majors transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree, and will have completed all lower division general education requirements. In addition, articulation agreements with a number of public and private institutions provide guaranteed transfer into several Biotechnology programs, provided students meet specific GPA requirements. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the A.S. degree can be completed in two years of full-time study. Students may shorten the amount of time by taking courses in the summer sessions at the College.

**Questions?**

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.25921

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Baking and Pastry Arts Certificate of Achievement****Baking and Pastry Arts Certificate of Achievement - BPA.COA (Certificate of Achievement)**

Credits: 18 Credits Required

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
HRI-107 Baking Fundamentals	3	
HRI-208 Foodservice Sanitation	3	
HRI-116 Professional Pastry Techniques	3	HRI 107
HRI-118 Cakes, Decorating and Specialty Techniques	3	HRI 107
_____ HRI Elective	3	
HRI 115, HRI 202, or HRI 206 is recommended.		
HRI-120 Baking and Pastry Arts Externship	3	HRI 116, HRI 118

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****HOSPITALITY AND CULINARY ARTS  
HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

**Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

#### Can students who major in Hospitality and Culinary Arts transfer to a four-year college?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### What do students learn if they study Hospitality and Culinary Arts?

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### Can students take more than one option in Hospitality and Culinary Arts?

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### How long will it take to complete these programs?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

#### Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

#### Why should students apply for a Certificate?

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

#### Questions?

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Biology Pre-Professional - Science Transfer

### Biology Pre-Professional - Science Transfer - BPPST.AS (Associate in Science Degree)

Credits: 62-65 Credits Required

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-123 General Biology I	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
BIO-124 General Biology II	4	BIO 123
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
<b>Semester III</b>		

BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
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#### Semester IV

BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125

____ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

OR

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ Science/Mathematics Program Elective	4	
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Students may select from BIO 221, BIO 228 (offered only in the fall semester), BIO 229 (offered only in the fall semester), BIO 240, CHM 221 with CHM 227, or MAT 132 or a course with permission of the department chairperson.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### BIOLOGY

#### DEPARTMENT OF NATURAL SCIENCES

Students choose from one of three biology curricula: traditional biology major, pre-professional and biotechnology. These curricula parallel the first two years of a baccalaureate degree in biology. The traditional Biology option prepares students, upon graduation, for transfer to a four-year college or university to pursue a career in biology-related fields such as molecular biology, cell biology, physiology, microbiology, biochemistry, ecology, biology education, medicine, dentistry and veterinary medicine.

Students interested in pre-chiropractic, physical therapy, occupational therapy or physician's assistant may major in the Biology Pre-Professional option. The students choosing the Biotechnology option acquire knowledge in inorganic and organic chemistry, genetics, microbiology, cell biology and molecular biology as well as achieving competence in laboratory techniques and instrumentation that are relevant to the biotechnology industry.

**Related Programs - You may also be interested in one of the following programs:**

BIO.AS - Biology - Science Transfer - Credits 62-65

#### What will students learn if they study Biology Transfer, Biology Pre-Professional, or Biotechnology Degree Options?

They concentrate on the theoretical and applied sciences, and mathematics. Their studies prepare them to meet the challenges of advanced study in professional careers.

#### Are there any requirements that must be satisfied before taking courses in the major?

A passing score on the College's mathematics placement test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for all biology majors. In addition, a high school laboratory biology course with a minimum grade of "C" or BIO 010 and a high school laboratory chemistry or CHM 010 with a minimum grade of "C" are also required.

#### Can Biology majors transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

#### Business Administration

#### Business Administration - BUS.AS (Associate in Science Degree)

Credits: 60-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and

corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
____ Mathematics Requirement	3-4-4	
Students must complete a minimum of 6 credits in mathematics in one of the following sequences:		
MAT-123 Statistics I	3	MAT 014, MAT 014A/MAT 014B, or appropriate score on the College placement test
AND		
MAT-124 Statistics II	3	MAT 123
OR		
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
(or MAT 129A and MAT 129B)		
AND		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
(or MAT 131A and MAT 131B)		
OR		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
(or MAT 131A and MAT 131B)		
AND		
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
OR		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
(or MAT 131A and MAT 131B)		
AND		
MAT-285 Basic Statistics for Business	4	MAT 131 or equivalent calculus course
ACC-101 Financial Accounting	4	
BUS-101 Business Organization and Management	3	
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
____ Mathematics Requirement	3-4-4	
Second course in mathematics sequence (see mathematics requirement in Semester I above)		
ACC-102 Managerial Accounting	4	ACC 101
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
SPE-121 Fundamentals of Public Speaking	3	
<b>Semester III</b>		
ECO-202 Principles of Economics II	3	ECO 201 or written permission of the department chairperson
BUS-201 Business Law I	3	
CSC-105 Computer Applications and Systems	3	
____ Business Elective	3	
Recommended business electives are as follows (3 credits each):		
BUS 202 Business Law II		
MAT 285 Basic Statistics for Business		
MGT 210 Concepts of Business Management		
MKT 201 Marketing I		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester IV</b>		
____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

_____ GE Science Elective	3-4	
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Students must select courses with the [GE MST](#) designation and with the BIO, CHM, PHY and SCI course codes.

_____ Elective	3	
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_____ Business Elective	3	
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Recommended business electives are as follows (3 credits each):

BUS 202 Business Law II  
 MAT 285 Basic Statistics for Business  
 MGT 210 Concepts of Business Management  
 MKT 201 Marketing I

_____ Business Elective	3	
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Recommended business electives are as follows (3 credits each):

BUS 202 Business Law II  
 MAT 285 Basic Statistics for Business  
 MGT 210 Concepts of Business Management  
 MKT 201 Marketing I

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### BUSINESS ADMINISTRATION ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

This program parallels the first two years of the bachelor's degree program at a four-year college or university. It is designed to transfer.

#### Why major in Business Administration?

Students prepare to transfer to a four-year college or university in any field of business after earning their associate degree.

#### What will students learn if they study Business Administration?

The program is an intensive one that includes challenging mathematics and business courses, as well as sciences and general education.

#### Can students transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completing the appropriate class. Students also need a grade of "C" or higher in high school algebra II, geometry and in one year of laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Civil Engineering Technology

### Civil Engineering Technology - CET.AAS (Associate in Applied Science)

Credits: 65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CIT-125 Construction Estimating	2	
MEC-123 Technical Graphics/CAD I	3	
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		



OR

___ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

**Semester II**

MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
CIT-105 Statics for Technicians	3	MCT 101, MAT 129 or MAT 129A
CIT-126 Advanced Civil Drawing/CAD-II	3	MEC 123
CIT-104 Construction Surveying I	3	MAT 129 or MAT 129A
___ Physical/Health Education Elective	1	

Students may satisfy this requirement with any HED or PED course.

**Semester III**

MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
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MAT 129 or MAT 129B or appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination or departmental approval MAT 131 may be substituted for MAT 131A & MAT 131B.

PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
CIT-203 Strength of Materials	4	CIT 105
CIT-205 Construction Surveying II	3	CIT 104
CIT-216 Soil Mechanics	4	CIT 105

**Semester IV**

MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
CIT-212 Water Resources Technology	4	CIT 105 and MAT 129B or MAT 129
CIT-218 Steel Design	3	CIT 203
CIT-219 Reinforced Concrete Design	3	CIT 203
CIT-260 Civil/Construction Design Project	2	CIT 125, CIT 203 and CIT 205

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### **CIVIL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT**

Civil Engineering Technology graduates find employment opportunities in the design, construction and inspection of airports, bridges, water treatment systems, dams, railroads and highway planning and maintenance. Specific job responsibilities include computer-aided design/drafting, material testing, site surveying and cost estimating. Students have several choices with this major. Students can earn the A.A.S. Degree in Civil Engineering Technology. The emphasis in this program is on practical applications that provide students with skills that can be used on the job as civil engineering technicians.

**Related Programs - You may also be interested in one of the following programs:**

CIT.CER - Civil Engineering Technology Certificate - Credits 30

#### **Can students transfer to a four-year college or university?**

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Many other four-year colleges and universities will apply some or all of the courses taken toward a bachelor's degree.

#### **What will students learn if they study Civil Engineering Technology?**

Students acquire a foundation in communications, calculations, and engineering principles along with the specifics of civil engineering. All technical courses provide a balance between theory and practice.

#### **Are there any requirements students must satisfy before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate. Students must also have a grade of "C" or better in high school algebra II and geometry.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the Certificate in three semesters.

#### **Questions?**

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## **Chemistry - Science Transfer**

### **Chemistry - Science Transfer - CHM.AS (Associate in Science Degree)**

Credits: 63-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
Can be taken in two semesters - MAT 129A/MAT 129B.		
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
____ Physical/Health Education Elective	1-3	
Students may take a health elective (3 credits) in place of Physical Education. However, if the total credits exceed 66 upon graduation, they may not transfer.		
<b>Semester II</b>		
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester III</b>		
CHM-221 Organic Chemistry I - Lecture	3	CHM 122 with a grade of "C" or better
CHM-227 Organic Chemistry I - Lab	1	CHM 122, CHM 126 with a grade of "C" or better
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
CHM-230 Analytical Chemistry	4	CHM 122, CHM 126 with a grade of "C" or better
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester IV</b>		
CHM-222 Organic Chemistry II - Lecture	3	CHM 221 Lecture with a grade of "C" or better, CHM 227 Lab
CHM-228 Organic Chemistry II - Lab	1	CHM 221, CHM 227 with a grade of "C" or better
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
CHM-240 Research in Chemistry	4	BIO 124, CHM 122, CHM 126 and ENG 121
____ Technical Elective	4	
Electives: BIO 123, BIO 124, CHM 202		
<b>Program Note</b>		
For students majoring in Pharmacy or Pre-Professional (medical, dental, etc.), biology may be required.		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****CHEMISTRY  
DEPARTMENT OF NATURAL SCIENCES**

The Chemistry Transfer program parallels the first two years of a baccalaureate degree program at four-year colleges and universities. The Chemistry Transfer degree prepares students to transfer to a four-year college or university to pursue professional careers in chemistry

**What will students learn if they study Chemistry Pre-Professional?**

They will learn the basics of general chemistry and organic chemistry that will prepare them to meet the challenges of preprofessional courses at the upper division colleges and universities.

**Are there any requirements students must satisfy before taking courses in the major?**

A passing score on the College's mathematics placement test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for all Chemistry

majors. In addition, a high school laboratory chemistry course with a minimum grade of "C" or CHM 010 and a high school laboratory biology course or BIO 010 with a minimum grade of "C" are also required.

#### Can Chemistry students transfer to four-year colleges and universities?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Civil Engineering Technology Certificate

### Civil Engineering Technology Certificate - CIT.CER (Certificate)

Credits: 30 Credits Required

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MEC-123 Technical Graphics/CAD I	3	
CIT-126 Advanced Civil Drawing/CAD-II	3	MEC 123
CIT-125 Construction Estimating	2	
CIT-104 Construction Surveying I	3	MAT 129 or MAT 129A
CIT-205 Construction Surveying II	3	CIT 104
CIT-105 Statics for Technicians	3	MCT 101, MAT 129 or MAT 129A
CIT-203 Strength of Materials	4	CIT 105
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### CIVIL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT

Civil Engineering Technology graduates find employment opportunities in the design, construction and inspection of airports, bridges, water treatment systems, dams, railroads and highway planning and maintenance. Specific job responsibilities include computer-aided design/drafting, material testing, site surveying and cost estimating. Students have several choices with this major. Students can earn the A.A.S. Degree in Civil Engineering Technology. The emphasis in this program is on practical applications that provide students with skills that can be used on the job as civil engineering technicians.

**Related Programs - You may also be interested in one of the following programs:**

CET.AAS - Civil Engineering Technology - Credits 65

#### Can students transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Many other four-year colleges and universities will apply some or all of the courses taken toward a bachelor's degree.

#### What will students learn if they study Civil Engineering Technology?

Students acquire a foundation in communications, calculations, and engineering principles along with the specifics of civil engineering. All technical courses provide a balance between theory and practice.

#### Are there any requirements students must satisfy before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate. Students must also have a grade of "C" or better in high school algebra II and geometry.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the Certificate in three semesters.

#### Questions?

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Correction Administration

### Correction Administration - CJC.AS (Associate in Science Degree)

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
<b>General Education Humanities</b>		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>General Education Mathematics, Science and Technology</b>		
____ GE Technology Elective	3	
Choose either CSC 105 or CSC 106.		
____ GE Mathematics Elective	3-4	
Choose one math course designated in the course descriptions as General Education ( <a href="#">GE MST</a> ).		
____ GE Science Elective	4	
Choose one lab science course designated in the course descriptions as General Education ( <a href="#">GE MST</a> ).		
<b>General Education Social Science</b>		
PSY-123 Introduction to Psychology	3	
SOC-121 Introduction to Sociology	3	
POS-201 United States State and Local Government	3	
POS-220 United States National Government	3	
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course except PED 270.		
<b>Additional Courses</b>		
CJU-123 Criminal Justice I	3	
CJU-124 Criminal Justice II	3	CJU 123
COR-201 Introduction to Correction Administration	3	CJU 123
COR-207 Correctional Institutions	3	CJU 123
COR-280 Corrections Externship	3	COR 201 or COR 207
OR		
POL-204 Law Enforcement and the Community	3	CJU 123
OR		
POS-231 Constitutional Law	3	POS 121 or POS 201 or POS 220
SOC-140 Introduction to Criminology	3	
SOC-225 Juvenile Delinquency	3	
PSY-222 Social Psychology	3	PSY 123 or SOC 121
OR		
SOC-131 Contemporary Social Problems	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

#### CRIMINAL JUSTICE HISTORY AND SOCIAL SCIENCE DEPARTMENT

This program includes general and specialized education courses designed to prepare students for a bachelor's degree program or a job in criminal justice. The certificate prepares the student to secure employment in the fields of probation, parole and corrections.

**Related Programs - You may also be interested in one of the following programs:**

COR.CER - Correction Administration Certificate - Credits 36

CJP.AS - Police Science - Credits 62-65

**What will students learn if they study Criminal Justice?**

Students examine both the substantive and procedural aspects of criminal law. Particular attention will be given to the functions of the courts and special emphasis will be placed on major U.S. Supreme Court decisions. Students who choose the Correction Administration degree option or certificate will learn about relevant trends with regard to correctional institutions, as well as sentencing, judicial treatment and correctional management philosophies. With the Police Science degree option, students will learn police procedures, constitutional law and community policing.

**Are there any requirements that must be satisfied taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students also need a grade of "C" or better in one year of high school laboratory science or in BIO 010 or CHM 010.

**Can students transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: History and Social Science Department **OR** Academic Advising

Contact Phone: 732.906.2590 **OR** 732.906.2596

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Police Science****Police Science - CJP.AS (Associate in Science Degree)**

Credits: 62-65 Credits Required

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
<b>General Education Humanities</b>		
Choose two courses designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
___ GE Humanities Elective	3	
___ GE Humanities Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
___ GE Technology Elective	3	
Choose either CSC 105 or CSC 106.		
___ GE Mathematics Elective	3-4	
Choose one math course designated in the course descriptions as General Education ( <a href="#">GE MST</a> ).		
___ GE Science Elective	4	
Choose one lab science course designated in the course descriptions as General Education ( <a href="#">GE MST</a> ).		
<b>General Education Social Science</b>		
PSY-123 Introduction to Psychology	3	
SOC-121 Introduction to Sociology	3	
POS-201 United States State and Local Government	3	
POS-220 United States National Government	3	
<b>Physical Education / Health</b>		
___ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course except PED 270.		
<b>Additional Courses</b>		
CJU-123 Criminal Justice I	3	
CJU-124 Criminal Justice II	3	CJU 123
POL-201 Police Administration	3	CJU 123
POL-202 Police Operations	3	CJU 123
POL-204 Law Enforcement and the Community	3	CJU 123
POS-231 Constitutional Law	3	POS 121 or POS 201 or POS 220
SOC-140 Introduction to Criminology	3	

SOC-225 Juvenile Delinquency	3	
PSY-222 Social Psychology	3	PSY 123 or SOC 121
OR		
SOC-131 Contemporary Social Problems	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****CRIMINAL JUSTICE  
HISTORY AND SOCIAL SCIENCE DEPARTMENT**

This program includes general and specialized education courses designed to prepare students for a bachelor's degree program or a job in criminal justice. The certificate prepares the student to secure employment in the fields of probation, parole and corrections.

**Related Programs - You may also be interested in one of the following programs:**

CJC.AS - Correction Administration - Credits 62-65

COR.CER - Correction Administration Certificate - Credits 36

**What will students learn if they study Criminal Justice?**

Students examine both the substantive and procedural aspects of criminal law. Particular attention will be given to the functions of the courts and special emphasis will be placed on major U.S. Supreme Court decisions. Students who choose the Correction Administration degree option or certificate will learn about relevant trends with regard to correctional institutions, as well as sentencing, judicial treatment and correctional management philosophies. With the Police Science degree option, students will learn police procedures, constitutional law and community policing.

**Are there any requirements that must be satisfied taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students also need a grade of "C" or better in one year of high school laboratory science or in BIO 010 or CHM 010.

**Can students transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: History and Social Science Department **OR** Academic Advising

Contact Phone: 732.906.2590 **OR** 732.906.2596

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Correction Administration Certificate****Correction Administration Certificate - COR.CER (Certificate)**

Credits: 36 Credits Required

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
CJU-123 Criminal Justice I	3	
CJU-124 Criminal Justice II	3	CJU 123
COR-201 Introduction to Correction Administration	3	CJU 123
COR-207 Correctional Institutions	3	CJU 123
COR-280 Corrections Externship	3	COR 201 or COR 207
OR		
POL-204 Law Enforcement and the Community	3	CJU 123
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
POS-201 United States State and Local Government	3	
POS-220 United States National Government	3	
PSY-123 Introduction to Psychology	3	
SOC-121 Introduction to Sociology	3	
SOC-140 Introduction to Criminology	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****CRIMINAL JUSTICE  
HISTORY AND SOCIAL SCIENCE DEPARTMENT**

This program includes general and specialized education courses designed to prepare students for a bachelor's degree program or a job in criminal justice. The certificate prepares the student to secure employment in the fields of probation, parole and corrections.

**Related Programs - You may also be interested in one of the following programs:**

CJC.AS - Correction Administration - Credits 62-65

CJP.AS - Police Science - Credits 62-65

**What will students learn if they study Criminal Justice?**

Students examine both the substantive and procedural aspects of criminal law. Particular attention will be given to the functions of the courts and special emphasis will be placed on major U.S. Supreme Court decisions. Students who choose the Correction Administration degree option or certificate will learn about relevant trends with regard to correctional institutions, as well as sentencing, judicial treatment and correctional management philosophies. With the Police Science degree option, students will learn police procedures, constitutional law and community policing.

**Are there any requirements that must be satisfied taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students also need a grade of "C" or better in one year of high school laboratory science or in BIO 010 or CHM 010.

**Can students transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: History and Social Science Department **OR** Academic Advising

Contact Phone: 732.906.2590 **OR** 732.906.2596

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Computer Science - Transfer****Computer Science - Transfer - CSC.AS (Associate in Science Degree)**

Credits: 61-63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-161 Introduction to Computer Science Using Java	4	MAT 014 or appropriate score on the College placement test
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
OR		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
AND		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
___ ___ GE Science Elective	4	
Students should take science courses designated as General Education ( <a href="#">GE MST</a> ) that are numbered 117 or higher and should take a two-course sequence in the same science.		
___ ___ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
CSC-162 Object-Oriented Programming Using Java	4	CSC 161 and MAT 129 or MAT 129A

ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
____ GE Science Elective	4	

Students should take science courses designated as General Education ([GE MST](#)) that are numbered 117 or higher and should take a two-course sequence in the same science.

____ Technical Elective	3	
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CSC 116 or 200 level Computer Science or Science Elective

#### Semester III

CSC-263 Computer Organization and Architecture I	3	CSC 161
CSC-236 Data Structures in Java	4	CSC 162 and MAT 129 or MAT 129B or written permission of the department chairperson
MAT-206 Introduction to Discrete Mathematics	4	MAT 132 or written permission of the department chairperson
____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

#### Semester IV

CSC-264 Computer Organization and Architecture II	3	CSC 263
MAT-210 Linear Algebra	4	MAT 132
____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

#### OR

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

Note: Before choosing a Math, Science, or Computer Science elective, all students should consult a Computer Science advisor.

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### COMPUTER SCIENCE - TRANSFER COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT

The Computer Science Transfer program leads to the Associate of Science degree and prepares students to transfer to public and private four-year colleges and universities in computer science. Students study topics in computer science such as problemsolving, object-oriented programming using Java, and computer architecture. Calculus, natural science, social science, and humanities are also studied. In the past, many of our students have successfully transferred to the New Jersey Institute of Technology, Rutgers University and other public and private colleges and universities.

#### What will students learn if they study Science Transfer?

They concentrate on the theoretical and applied sciences, and mathematics. These studies prepare students to meet the challenges of advanced study in professional careers.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra II competency may be verified with a passing score on the College's placement test. Students must also have a grade of "C" or better in high school algebra II, geometry, laboratory chemistry and one additional year of laboratory science.

#### Can Computer Science majors transfer to four-year colleges and universities?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

### Computer Programming Certificate

#### Computer Programming Certificate - CSC.CER (Associate in Arts Degree)

Credits: 33-36 Credits Required

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526



Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106
CSC-133 Introduction to Computer Science Using C++	4	MAT 014 or appropriate score on the College placement test
CSC-134 Object-Oriented Programming Using C++	4	CSC 133 and MAT 116 or MAT 129 or MAT 129A
CSC-235 Data Structures	4	CSC 134 and MAT 116 or MAT 129 or MAT 129B
_____ Computer Science Elective	3 - 4	

Recommended Computer Science Electives:

All students should consult a computer science advisor.

CSC 116 Introduction to Information Systems Security (credits 3)

CSC 211 Programming in JAVA (credits 4)

CSC 241 Web Programming (credits 4)

CSC 261 Information Technology Management (credits 3)

The following courses cannot be taken as electives: CSC 105, CSC 107, CSC 108, CSC 109, CSC 115, CSC 117, CSC 165

ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-116 College Algebra	3	MAT 014, MAT 014A/MAT 014B, or equivalent
OR		
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
OR		
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
AND		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
OR		
MAT-123 Statistics I	3	MAT 014, MAT 014A/MAT 014B, or appropriate score on the College placement test
OR		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
OR		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
AND		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## COMPUTER SCIENCE COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT

The Computer & Information Systems option leads to the Associate in Applied Science Degree in Computer Science. Students learn object oriented programming in C++ or Java and event driven programming in Visual Basic, client/server architecture, analysis & design of database systems, networking technologies, Windows and LINUX System Administration. Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Related Programs - You may also be interested in one of the following programs:**

CSI.AAS - Computer and Information Systems - Credits 61-66

CSH.CO.A - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSNN.AAS - Network Administration and Support - Credits 61-66

CSNN.CER - Network Administration Certificate - Credits 33-35

### What will students learn if they study Computer Science?

Students learn on PC's running the DOS, Windows, and LINUX operating systems. They learn several programming languages and administration of both LINUX and Windows systems. Students develop problem-solving and communication skills using modern information processing techniques.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra II is a prerequisite for all Computer Science majors. Algebra II competency may be verified with a passing score on the College's placement test or by completing the appropriate course. Students must also have a grade of "C" or better in algebra II and geometry.

**Why major in Computer & Information Systems - Network Administration & Support Option?**

Network Administration and Support Option of the CIS program leads to the Associate in Applied Science Degree in Computer Science. Students learn network administration of Windows and LINUX operating systems. Problem solving skills are taught through the use of the object oriented programming language C++ or Java and the event driven programming Visual Basic. This program prepares students to take the certification tests for a PC Hardware operating systems technology, networking and security and Microsoft Windows MCP (Microsoft Certified Professional). Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Can students transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in one year.

**Questions?**

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Computer Help Desk Administration Certificate of Achievement****Computer Help Desk Administration Certificate of Achievement - CSH.COA (Certificate of Achievement)**

Credits: 20 Credits Required

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-108 Introduction to Internet Applications	2	CSC 105 or CSC 106 or CSC 107
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106
CSC-116 Introduction to Information Systems Security	3	CSC 105 or CSC 106
CSC-200 Networking Technologies	3	CSC 110
CSC-126 Help Desk Customer Service	3	ENG 121 and CSC 105 or CSC 106
CSC-127 Help Desk Operation	3	CSC 126
SPE-121 Fundamentals of Public Speaking	3	

**Certificate Prerequisites**

CSC 105 - Computer Applications and Systems or CSC 106 - Intermediate PC Applications with Programming ENG 121 - English Composition I

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****COMPUTER SCIENCE****COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

The Computer & Information Systems option leads to the Associate in Applied Science Degree in Computer Science. Students learn object oriented programming in C++ or Java and event driven programming in Visual Basic, client/server architecture, analysis & design of database systems, networking technologies, Windows and LINUX System Administration. Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Related Programs - You may also be interested in one of the following programs:**

CSIA.AS - Computer and Information Systems - Credits 61-66

CSC.CER - Computer Programming Certificate - Credits 33-36

CSNN.AAS - Network Administration and Support - Credits 61-66

CSNN.CER - Network Administration Certificate - Credits 33-35

**What will students learn if they study Computer Science?**

Students learn on PC's running the DOS, Windows, and LINUX operating systems. They learn several programming languages and administration of both LINUX and Windows systems. Students develop problem-solving and communication skills using modern information processing techniques.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra II is a prerequisite for all Computer Science majors. Algebra II competency may be verified with a passing score on the College's placement test or by completing the appropriate course. Students must also have a grade of "C" or better in algebra II and geometry.

**Why major in Computer & Information Systems - Network Administration & Support Option?**

Network Administration and Support Option of the CIS program leads to the Associate in Applied Science Degree in Computer Science. Students learn

network administration of Windows and LINUX operating systems. Problem solving skills are taught through the use of the object oriented programming language C++ or Java and the event driven programming Visual Basic. This program prepares students to take the certification tests for a PC Hardware operating systems technology, networking and security and Microsoft Windows MCP (Microsoft Certified Professional). Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

#### Can students transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in one year.

#### Questions?

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Computer and Information Systems

### Computer and Information Systems - CSI.AAS (Associate in Applied Science)

Credits: 61-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

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Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-105 Computer Applications and Systems	3	
OR		
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
CSC-161 Introduction to Computer Science Using Java	4	MAT 014 or appropriate score on the College placement test
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-116 College Algebra	3	MAT 014, MAT 014A/MAT 014B, or equivalent
OR		
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
OR		
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
AND		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
___ ___ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GESS</a> ).		
<b>Semester II</b>		
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106
CSC-162 Object-Oriented Programming Using Java	4	CSC 161 and MAT 129 or MAT 129A
CSC-208 Visual BASIC Programming	4	CSC 106 or CSC 133 or CSC 161
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-123 Statistics I	3	MAT 014, MAT 014A/MAT 014B, or appropriate score on the College placement test
OR		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
OR		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
AND		
MAT-131B Analytic Geometry and Calculus I	2	MAT 131A or equivalent

(Part B)

**Semester III**

CSC-200 Networking Technologies	3	CSC 110
CSC-236 Data Structures in Java	4	CSC 162 and MAT 129 or MAT 129B or written permission of the department chairperson
CSC-245 UNIX and Shell Programming	4	CSC 133 or CSC 161
____ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course.

**Semester IV**

CSC-239 Database Concepts	3	CSC 133 or CSC 161
CSC-241 Web Programming	4	CSC 134 or CSC 162
CSC-246 UNIX and Web Server Administration	3	CSC 245
____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ Technical Elective	3	
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Choose from the list below:

CSC-116 Introduction to Information Systems Security

CSC-126 Help Desk Customer Service

CSC-127 Help Desk Operation

CSC-205 Computer Science Work Experience I

CSC-206 Computer Science Work Experience II

CSC-248 PC Service and Support

CSC-251 Windows Workstation Administration

CSC-252 Windows Server Administration

CSC-261 Information Technology Management

**Other Electives**

CSC-211 Programming in JAVA	4	CSC 134 or CSC 162
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
____ Science Elective	4	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****COMPUTER SCIENCE  
COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

The Computer & Information Systems option leads to the Associate in Applied Science Degree in Computer Science. Students learn object oriented programming in C++ or Java and event driven programming in Visual Basic, client/server architecture, analysis & design of database systems, networking technologies, Windows and LINUX System Administration. Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Related Programs - You may also be interested in one of the following programs:**

CSH.COA - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSC.CER - Computer Programming Certificate - Credits 33-36

CSNN.AAS - Network Administration and Support - Credits 61-66

CSNN.CER - Network Administration Certificate - Credits 33-35

**What will students learn if they study Computer Science?**

Students learn on PC's running the DOS, Windows, and LINUX operating systems. They learn several programming languages and administration of both LINUX and Windows systems. Students develop problem-solving and communication skills using modern information processing techniques.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra II is a prerequisite for all Computer Science majors. Algebra II competency may be verified with a passing score on the College's placement test or by completing the appropriate course. Students must also have a grade of "C" or better in algebra II and geometry.

**Why major in Computer & Information Systems - Network Administration & Support Option?**

Network Administration and Support Option of the CIS program leads to the Associate in Applied Science Degree in Computer Science. Students learn network administration of Windows and LINUX operating systems. Problem solving skills are taught through the use of the object oriented programming language C++ or Java and the event driven programming Visual Basic. This program prepares students to take the certification tests for a PC Hardware operating systems technology, networking and security and Microsoft Windows MCP (Microsoft Certified Professional). Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Can students transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in one year.

**Questions?**

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

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**Java Programming Certificate of Achievement****Java Programming Certificate of Achievement - CSJAVA.COA (Certificate of Achievement)**

Credits: 16 Credits Required

Description: This Certificate of Achievement is designed for those students with at least two years of college education and who have completed courses equivalent to ENG 121 and MAT 129. Successful completion of this certificate prepares students to take entry level jobs as Java programmers.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-161 Introduction to Computer Science Using Java	4	MAT 014 or appropriate score on the College placement test
CSC-162 Object-Oriented Programming Using Java	4	CSC 161 and MAT 129 or MAT 129A
CSC-245 UNIX and Shell Programming	4	CSC 133 or CSC 161
____ 200-Level Programming Elective	4	

Approved Programming Elective List (4 credits each):

CSC 211 Programming in Java

CSC 236 Data Structures in Java

CSC 241 Web Programming

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****JAVA AND WEB PROGRAMMING  
COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

**Related Programs - You may also be interested in one of the following programs:**

CSWEB.COA - Java and Web Programming Certificate of Achievement - Credits 18

CSS.COA - Information Systems Security Certificate of Achievement - Credits 19

CSNT.COA - Windows/PC Support Certificate of Achievement - Credits 21-22

**Why complete the certificate of achievement in Java & Web Programming?**

This certificate of achievement provides students with an awareness of the internet and the world wide web. Publishing text, pictures, sound, and even video over the internet is becoming easier every day. Individuals who run small businesses with services to sell and people with stories to share will acquire the necessary skills to publish useful, attractive, and quality webpages. Upon completion of this certificate program, students will be able to create web sites and useful web pages.

**Are there any requirements that must be satisfied before students can take courses in the major?**

The certificate of achievement is designed for those students with at least two years of college level education, including ENG 121 English Composition I. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must have completed or CSC 105 or CSC 107 or MCT 101 or demonstrated equivalent proficiency before beginning this certificate.

**How long will it take to complete this certificate?**

Once students complete developmental coursework (if needed), the certificate may be completed in 1-2 semesters. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Why take the certificate of achievement in Information Systems Security?**

This certificate of achievement develops technical competence in Information Systems Security, an area that is critical to homeland security with rapidly expanding employment opportunities.

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

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Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Network Administration and Support****Network Administration and Support - CSNN.AAS (Associate in Applied Science)**

Credits: 61-66 Credits Required

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-105 Computer Applications and Systems	3	
OR		
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
CSC-133 Introduction to Computer Science Using C++	4	MAT 014 or appropriate score on the College placement test
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-116 College Algebra	3	MAT 014, MAT 014A/MAT 014B, or equivalent
OR		
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
OR		
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
AND		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
GE SS GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester II</b>		
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106
CSC-208 Visual BASIC Programming	4	CSC 106 or CSC 133 or CSC 161
CSC-116 Introduction to Information Systems Security	3	CSC 105 or CSC 106
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-123 Statistics I	3	MAT 014, MAT 014A/MAT 014B, or appropriate score on the College placement test
OR		
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
OR		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
AND		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
<b>Semester III</b>		
CSC-200 Networking Technologies	3	CSC 110
CSC-245 UNIX and Shell Programming	4	CSC 133 or CSC 161
CSC-251 Windows Workstation Administration	3	CSC 200
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
_____ Technical Elective	3	
All students should consult a computer science advisor.		
Choose from these Technical Electives:		
CSC 126 Help Desk Customer Service		
CSC 127 Help Desk Operation		
CSC 205 and CSC 206 Computer Science Work Experience I & II		
CSC 258 Computer Forensics		
CSC 261 Information Technology Management		
<b>Other Electives</b>		
CSC-134 Object-Oriented Programming Using C++	4	CSC 133 and MAT 116 or MAT 129 or MAT 129A
CSC-211 Programming in JAVA	4	CSC 134 or CSC 162

CSC-230 Multimedia Production and Authoring Tools	4-4	
CSC-235 Data Structures	4	CSC 134 and MAT 116 or MAT 129 or MAT 129B
CSC-241 Web Programming	4	CSC 134 or CSC 162
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
<b>Semester IV</b>		
CSC-239 Database Concepts	3	CSC 133 or CSC 161
CSC-246 UNIX and Web Server Administration	3	CSC 245
CSC-248 PC Service and Support	3	CSC 110 and CSC 200
CSC-252 Windows Server Administration	3	CSC 251
_____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**COMPUTER SCIENCE  
COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

The Computer & Information Systems option leads to the Associate in Applied Science Degree in Computer Science. Students learn object oriented programming in C++ or Java and event driven programming in Visual Basic, client/server architecture, analysis & design of database systems, networking technologies, Windows and LINUX System Administration. Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Related Programs - You may also be interested in one of the following programs:**

CSI.AAS - Computer and Information Systems - Credits 61-66

CSH.COA - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSC.CER - Computer Programming Certificate - Credits 33-36

CSNN.CER - Network Administration Certificate - Credits 33-35

**What will students learn if they study Computer Science?**

Students learn on PC's running the DOS, Windows, and LINUX operating systems. They learn several programming languages and administration of both LINUX and Windows systems. Students develop problem-solving and communication skills using modern information processing techniques.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra II is a prerequisite for all Computer Science majors. Algebra II competency may be verified with a passing score on the College's placement test or by completing the appropriate course. Students must also have a grade of "C" or better in algebra II and geometry.

**Why major in Computer & Information Systems - Network Administration & Support Option?**

Network Administration and Support Option of the CIS program leads to the Associate in Applied Science Degree in Computer Science. Students learn network administration of Windows and LINUX operating systems. Problem solving skills are taught through the use of the object oriented programming language C++ or Java and the event driven programming Visual Basic. This program prepares students to take the certification tests for a PC Hardware operating systems technology, networking and security and Microsoft Windows MCP (Microsoft Certified Professional). Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Can students transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in one year.

**Questions?**

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<https://applyto.middlesexcc.edu/application/login.php>

**Network Administration Certificate**

**Network Administration Certificate - CSNN.CER (Certificate)**

Credits: 33-35 Credits Required

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106

CSC-116 Introduction to Information Systems Security	3	CSC 105 or CSC 106
CSC-126 Help Desk Customer Service	3	ENG 121 and CSC 105 or CSC 106
CSC-200 Networking Technologies	3	CSC 110
CSC-251 Windows Workstation Administration	3	CSC 200
CSC-252 Windows Server Administration	3	CSC 251
_____ Technical Elective	3-4	
_____ Computer Science Elective	3-4	

All students should consult a computer science advisor.

**Recommended:**

CSC 125 Web Markup Languages

CSC 127 Help Desk Operation

CSC 133 Introduction to Computer Science Using C++

CSC 161 Introduction to Computer Science Using JAVA

CSC 208 Visual BASIC Programming

The following courses cannot be taken as electives: CSC 105, CSC 107, CSC 108, CSC 109, CSC 165

ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121

MAT-116 College Algebra	3	MAT 014, MAT 014A/MAT 014B, or equivalent
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OR

MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
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OR

MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
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AND

MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
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**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**COMPUTER SCIENCE**

**COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

The Computer & Information Systems option leads to the Associate in Applied Science Degree in Computer Science. Students learn object oriented programming in C++ or Java and event driven programming in Visual Basic, client/server architecture, analysis & design of database systems, networking technologies, Windows and LINUX System Administration. Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Related Programs - You may also be interested in one of the following programs:**

CSI.AAS - Computer and Information Systems - Credits 61-66

CSH.CO.A - Computer Help Desk Administration Certificate of Achievement - Credits 20

CSC.CER - Computer Programming Certificate - Credits 33-36

CSNN.AAS - Network Administration and Support - Credits 61-66

**What will students learn if they study Computer Science?**

Students learn on PC's running the DOS, Windows, and LINUX operating systems. They learn several programming languages and administration of both LINUX and Windows systems. Students develop problem-solving and communication skills using modern information processing techniques.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra II is a prerequisite for all Computer Science majors. Algebra II competency may be verified with a passing score on the College's placement test or by completing the appropriate course. Students must also have a grade of "C" or better in algebra II and geometry.

**Why major in Computer & Information Systems - Network Administration & Support Option?**

Network Administration and Support Option of the CIS program leads to the Associate in Applied Science Degree in Computer Science. Students learn network administration of Windows and LINUX operating systems. Problem solving skills are taught through the use of the object oriented programming language C++ or Java and the event driven programming Visual Basic. This program prepares students to take the certification tests for a PC Hardware operating systems technology, networking and security and Microsoft Windows MCP (Microsoft Certified Professional). Through a cooperative education program, students can gain work experience and earn college credits during their studies at Middlesex County College.

**Can students transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of



time by taking courses in the summer and winter sessions. They can complete the certificate in one year.

#### Questions?

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## Windows/PC Support Certificate of Achievement

### Windows/PC Support Certificate of Achievement - CSNT.COA (Certificate of Achievement)

Credits: 21-22 Credits Required

Description: This Windows/PC Support Certificate of Achievement is designed for students who have completed courses equivalent to ENG 121 and MAT 014. Students must complete CSC 105 or demonstrate the equivalent proficiency prior to beginning this certificate program. Successful completion of this certificate helps prepare students to take the certification tests for Microsoft Windows (MCP) and A+ Certification.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

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Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-110 Microcomputer Operating Systems and Architecture	3	CSC 105 or CSC 106
CSC-116 Introduction to Information Systems Security	3	CSC 105 or CSC 106
CSC-200 Networking Technologies	3	CSC 110
CSC-251 Windows Workstation Administration	3	CSC 200
CSC-252 Windows Server Administration	3	CSC 251
CSC-248 PC Service and Support	3	CSC 110 and CSC 200
_____ Elective	3-4	

Recommended Electives:

CSC-160 Introduction to UNIX for Web Development

CSC-245 UNIX and Shell Programming

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

### JAVA AND WEB PROGRAMMING COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT

Related Programs - You may also be interested in one of the following programs:

CSWEB.COA - Java and Web Programming Certificate of Achievement - Credits 18

CSJAVA.COA - Java Programming Certificate of Achievement - Credits 16

CSS.COA - Information Systems Security Certificate of Achievement - Credits 19

#### Why complete the certificate of achievement in Java & Web Programming?

This certificate of achievement provides students with an awareness of the internet and the world wide web. Publishing text, pictures, sound, and even video over the internet is becoming easier every day. Individuals who run small businesses with services to sell and people with stories to share will acquire the necessary skills to publish useful, attractive, and quality webpages. Upon completion of this certificate program, students will be able to create web sites and useful web pages.

#### Are there any requirements that must be satisfied before students can take courses in the major?

The certificate of achievement is designed for those students with at least two years of college level education, including ENG 121 English Composition I. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must have completed or CSC 105 or CSC 107 or MCT 101 or demonstrated equivalent proficiency before beginning this certificate.

#### How long will it take to complete this certificate?

Once students complete developmental coursework (if needed), the certificate may be completed in 1-2 semesters. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Why take the certificate of achievement in Information Systems Security?

This certificate of achievement develops technical competence in Information Systems Security, an area that is critical to homeland security with rapidly expanding employment opportunities.

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Information Systems Security Certificate of Achievement

### Information Systems Security Certificate of Achievement - CSS.COA (Certificate of Achievement)

Credits: 19 Credits Required

Description: The Information Systems Security Certificate of Achievement is designed for those students with at least two years of college level education who have completed courses equivalent to ENG 121 and MAT 014. Students must complete CSC 105, CSC 134 or CSC 162, and CSC 200 or demonstrate equivalent knowledge prior to beginning the program. Successful completion of this certificate helps prepare students to take the certification test for Information Systems Security.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-116 Introduction to Information Systems Security	3	CSC 105 or CSC 106
CSC-239 Database Concepts	3	CSC 133 or CSC 161
CSC-245 UNIX and Shell Programming	4	CSC 133 or CSC 161
CSC-258 Computer Forensics	3	CSC 116 and CSC 245 or written permission of the department chairperson
CSC-261 Information Technology Management	3	CSC 133 or CSC 161 and CSC 200 and ENG 121
____ System Administration Technical Elective	3	

All students should consult a Computer Science Advisor. Select one (3 credits each):

CSC-246 UNIX and Web Server Administration

CSC-251 Windows Workstation Administration

CSC-252 Windows Server Administration

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### JAVA AND WEB PROGRAMMING COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT

**Related Programs - You may also be interested in one of the following programs:**

CSWEB.COA - Java and Web Programming Certificate of Achievement - Credits 18

CSJAVA.COA - Java Programming Certificate of Achievement - Credits 16

CSNT.COA - Windows/PC Support Certificate of Achievement - Credits 21-22

#### Why complete the certificate of achievement in Java & Web Programming?

This certificate of achievement provides students with an awareness of the internet and the world wide web. Publishing text, pictures, sound, and even video over the internet is becoming easier every day. Individuals who run small businesses with services to sell and people with stories to share will acquire the necessary skills to publish useful, attractive, and quality webpages. Upon completion of this certificate program, students will be able to create web sites and useful web pages.

#### Are there any requirements that must be satisfied before students can take courses in the major?

The certificate of achievement is designed for those students with at least two years of college level education, including ENG 121 English Composition I. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must have completed or CSC 105 or CSC 107 or MCT 101 or demonstrated equivalent proficiency before beginning this certificate.

#### How long will it take to complete this certificate?

Once students complete developmental coursework (if needed), the certificate may be completed in 1-2 semesters. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Why take the certificate of achievement in Information Systems Security?

This certificate of achievement develops technical competence in Information Systems Security, an area that is critical to homeland security with rapidly expanding employment opportunities.

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Java and Web Programming Certificate of Achievement

### Java and Web Programming Certificate of Achievement - CSWEB.COA (Certificate of Achievement)

Credits: 18-0 Credits Required

Description: This Java and Web Programming Certificate of Achievement is designed for those students with at least two years of college education and knowledge of CSC 161 Introduction to Computer Science Using Java and CSC 200 Networking Technologies or permissions of the chairperson.

Department:

Contact Name: Assistant Professor Dr. Peter Farrett, department chair

Contact Phone: 732.906.2526

Contact Email: [PFarrett@middlesexcc.edu](mailto:PFarrett@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/computer-science.html>

Courses	Credits	Requisites / Comments
CSC-125 Web Markup Languages	3	CSC 106 and MAT 014
CSC-239 Database Concepts	3	CSC 133 or CSC 161
CSC-241 Web Programming	4	CSC 134 or CSC 162
CSC-245 UNIX and Shell Programming	4	CSC 133 or CSC 161
CSC-162 Object-Oriented Programming Using Java	4	CSC 161 and MAT 129 or MAT 129A

## Culinary Arts Certificate

### Culinary Arts Certificate - CULIN.CER (Certificate)

Credits: 34 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
_____ GE Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)), General Education Math, Science and Technology ([GE MST](#)), or General Education Social Science ([GE SS](#)).

HRI-103 Principles of Food Selection and Preparation	3	
HRI-107 Baking Fundamentals	3	
HRI-108 Quantity Food Production	3	HRI 103
HRI-111 Culinary Arts Externship	3	HRI 103 and admission to the Culinary Arts Program

HRI 103 and admission to the Culinary Arts Program

Note: This course is only offered in the summer.

HRI-114 Garde Manger	3	HRI 103
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Note: This course is only offered in the spring semester.

HRI-115 Foodservice Operations	3	
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Note: This course is only offered in the spring semester.

HRI-203 Banquet and Dining Room Management	4	HRI 108
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Note: This course is only offered during the day.

HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
HRI-208 Foodservice Sanitation	3	

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### HOSPITALITY AND CULINARY ARTS HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

#### Related Programs - You may also be interested in one of the following programs:

HRIC.AAS - Culinary Arts Management - Credits 62-65

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

#### Can students who major in Hospitality and Culinary Arts transfer to a four-year college?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to

the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### What do students learn if they study Hospitality and Culinary Arts?

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### Can students take more than one option in Hospitality and Culinary Arts?

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### How long will it take to complete these programs?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

#### Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

#### Why should students apply for a Certificate?

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

#### Questions?

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Dental Hygiene

### Dental Hygiene - DHY.AAS (Associate in Applied Science)

Credits: 72-74 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Hope-Claire Holbeck, department chair

Contact Phone: 732.906.2536

Contact Email: [HHolbeck@middlesexcc.edu](mailto:HHolbeck@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/dental-hygiene.html>

Courses	Credits	Requisites / Comments
<b>Semester 1</b>		
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
DHY-102 Dental Radiology	2	
Credit-by-examination available if the student is licensed to take radiographs in New Jersey.		
DHY-105 Oral Anatomy and Histology	4	
DHY-107 Preventive Oral Health Services I	4	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
<b>Semester II</b>		
BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
DHY-108 Preventive Oral Health Services II	5	DHY 102, DHY 105 and DHY 107 and current CPR certification
DHY-111 Nutrition and Oral Health	2	DHY 102, DHY 105 and DHY 107
DHY-204 Dental Materials	2	DHY 102, DHY 105 and DHY 107
DHY-115 Periodontology	2	BIO 211, DHY 102, DHY 105 and DHY 107
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
<b>Summer I</b>		
CHM-107 Principles of General, Organic and Biochemistry	4	One year of high school laboratory chemistry or CHM 010
BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
<b>Semester III</b>		
DHY-203 General and Oral Pathology	2	DHY 108, DHY 111, DHY 204 and DHY 205
DHY-207 Dental Health Education	2	DHY 108, DHY 110, DHY 204 and DHY 205
DHY-208 Pharmacology	2	CHM 107
DHY-211 Preventive Oral Health Services III	5	DHY 108, DHY 110, DHY 204, DHY 205 and current CPR certification
DHY-215 Advanced Periodontology	1	DHY 108, DHY 110, DHY 204 and DHY 205
PSY-123 Introduction to Psychology	3	

**Semester IV**

DHY-210 Community Health	2	DHY 203, DHY 207, DHY 211 and DHY 215
DHY-212 Preventive Oral Health Services IV	5	DHY 203, DHY 207, DHY 211, DHY 215 and current CPR certification
DHY-218 Local Anesthesia and Pain Control	2	DHY 105, DHY 208, DHY 211
DHY-224 Dental Hygiene Seminar	1	DHY 107, DHY 108, DHY 211
SOC-121 Introduction to Sociology	3	
____ Physical/Health Education Elective	1-3	

**Standards of Progress**

Maintain a cumulative grade point average of 2.0. Must achieve a "C" grade or better in all science courses to satisfy degree requirements. Must achieve a "C" grade or better in all dental hygiene courses in order to progress in the curriculum. An unsatisfactory grade (i.e. a grade less than "C") in any first semester dental hygiene course results in dismissal from the program. The student has the option to reapply to the Dental Hygiene Program. Upon readmission, the student is required to retake DHY 107- Preventative Oral Health Services I in addition to any other failed courses. If a student earns a grade of less than "C" in any dental hygiene course other than the first semester courses, the student may retake the course the next time it is offered, and if space is available in the program for the student to return. Upon returning, the student is also required to retake the Preventative Oral Health Services course that is the co-requisite for the semester they return. Student's retaking clinical courses must adhere to the conditions outlined in the Dental Hygiene program's Policy for Returning Students. A student may retake a failed dental hygiene course only once; a subsequent failure(s) in the same dental hygiene course will result in dismissal from the Dental Hygiene Program. Students who are dismissed from the Dental Hygiene Program have the option to re-apply.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****DENTAL HYGIENE****DENTAL AUXILIARIES EDUCATION DEPARTMENT**

The program in Dental Hygiene is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of approval. Graduates of this program qualify to take the American Board of Dental Examiners Licensing Examination in Dental Hygiene (ADEX DH) and the Dental Hygiene National Board Examination (DHNBE) for licensure to practice.

**Why major in Dental Hygiene?**

The student can become a licensed professional who works under the supervision of a dentist and performs services that detect, prevent and treat diseases of the mouth. Services include performing oral examinations, oral cancer screenings, scaling, root planning, polishing, applying decay preventing agents, taking and processing dental X-rays, and providing patient education in preventive dentistry.

**Can students who major in Dental Hygiene transfer to a four-year college or university?**

Some colleges and universities such as Thomas Edison, Montclair State University, UMDNJ, and New Jersey City University will apply the courses the student has taken toward a bachelor's degree.

**What will students learn by studying Dental Hygiene?**

Students will study comprehensive didactic, laboratory and clinic courses in dental hygiene and the dental sciences presented by highly qualified dental hygienists and dentists. State-of-the-art equipment is used in the on-site dental hygiene clinic and laboratories. Students will have additional clinical experiences in local hospitals and public schools. Basic science and general education requirements complete the course of study.

Are there any special requirements that must be satisfied before taking courses in the major?

- Students must be a U.S. citizen or permanent resident who have been permanently domiciled in the state of New Jersey for at least 12 months prior to the first day of classes.
- Students must have a "C" or better in high school laboratory biology and laboratory chemistry or an equivalent college course.
- Algebra 1 is a pre-requisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test of completion of the appropriate course. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.
- Students must have a cumulative GPA of 2.75. High school GPA will be used if the student has less than 12 college credits at the time of application.
- When students apply, they must take a Health Technologies entrance examination.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study.

**Are there any special requirements once the student is admitted to this major?**

Students must meet the Academic Standards of Progress outlined to progress through the curriculum. Students are also required to have completed CPR for the Health Care Provider and complete the health physical and required immunizations prior to starting classes.

**Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose dental hygiene as a career:

**Practical Considerations:**

The following Practical Considerations are listed so the student may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communications skills in the English language to effectively and accurately communicate with patients, peers, supervisors, families and other healthcare members.
2. Have sufficient visual acuity to accurately assess patient conditions and treat patients safely.
3. Have motor skills and strength capable of fine and delicate manipulation and adjustments of patient equipment. The student must have the physical capability to withstand prolonged hours in a sitting position and repetitive upper body motions.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.

**Health Considerations:**

Due to the nature of clinical experiences in the Dental Hygiene Program, students will be participating in a work environment that has the potential of exposure to bloodborne pathogens and infectious diseases. All students accepted into the Dental Hygiene Program are provided with instruction on infection control protocols specific to Dental Hygiene in order to reduce the risk of disease transmission.

**Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College and the Dental Hygiene Department and/or participating clinical facilities as a consideration of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check.

**Questions?**

Contact Name: Assistant Professor Hope-Claire Holbeck, department chair

Contact Phone: 732.906.2536

Contact Email: [HHolbeck@middlesexcc.edu](mailto:HHolbeck@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/dental-hygiene.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Dietetic Technology****Dietetic Technology - DIET.AAS (Associate in Applied Science)**

Credits: 65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-108 Essentials of Human Anatomy and Physiology	4	Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010
DTC-101 Introduction to Dietetic Technology	1	
Note: This course is only offered in the fall semester.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
HRI-103 Principles of Food Selection and Preparation	3	
HRI-105 Basic Nutrition	3	
Note: This course is only offered in the fall semester.		
HRI-208 Foodservice Sanitation	3	
<b>Semester II</b>		
DTC-102 Tools and Techniques of the Nutrition Care Process	1	DTC 101; HRI 103 and HRI 105. Students must have earned a grade of "C" or better in all prerequisites.
Note: This course is only offered in the spring semester.		
DTC-208 Supervised Field Experience: Nutrition Care	3	DTC 101 and HRI 105 both with a grade of "C" or better
Note: This course is only offered in the spring semester.		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
HRI-108 Quantity Food Production	3	HRI 103
HRI-210 Introduction to Medical Nutrition Therapy	3	HRI 105 with a grade of "C" or better
Note: This course is only offered in the spring semester.		
SPE-121 Fundamentals of Public Speaking	3	
<b>Semester III</b>		
DTC-209 Supervised Field Experience: Foodservice Systems Management	4	DTC 208 and HRI 210 both with a grade of "C" or better
Note: This course is only offered in the fall semester.		
HRI-203 Banquet and Dining Room Management	4	HRI 108
HRI-213 Food Service Systems Management in Dietetics	3	
Note: This course is only offered in the fall semester.		
SOC-121 Introduction to Sociology	3	
____ Physical Education Elective	1	
<b>Semester IV</b>		
DTC-210 Supervised Field Experience: Clinical, Community, Foodservice	4	DTC 209 and HRI 213 with a grade of "C" or better
Note: This course is only offered in the spring semester.		
DTC-220 Seminar in Dietetic Technology	1	DTC 209 with a grade of "C" or better
Note: This course is only offered in the spring semester.		

HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
HRI-218 Nutrition Throughout the Life Span	3	HRI 105 with a grade of "C" or better
Note: This course is only offered in the fall semester.		
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
Note: Students who choose to transfer, in consultation with their academic advisor, should enroll in a mathematics course for which they have the appropriate academic background.		
PSY-123 Introduction to Psychology	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**DIETETIC TECHNOLOGY  
HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

This program prepares students for a career as a dietetic technician in a health care facility, school, day care center, correction facility, corporation or community health setting. The Dietetic Technology Program is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Chicago, IL 60606-6995, 312.899.5400. Graduates are eligible for active membership in the Academy of Nutrition and Dietetics and to write the registration examination for dietetic technicians administered by the Commission on Dietetic Registration to become a Dietetic Technician Registered (DTR). Students are also eligible for membership in the Dietary Managers Association and to sit for the credentialing examination to become a Certified Dietary Manager (CDM).

**What will students learn by studying Dietetic Technology?**

They study the management of food service systems and how to function at the mid-management level in assessment, planning, implementation, and evaluation of the food service operations and nutrition care plans. They learn in the classroom and in clinical settings.

**Can students who major in Dietetic Technology transfer to a four-year college or university?**

Many four year colleges and universities will apply the courses taken towards a bachelor's degree in dietetics, foods and nutrition and hotel, restaurant management. The College has official articulation agreements with NYU, the College of St. Elizabeth, and Montclair State University.

**Are there any requirements that must be satisfied before taking classes in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students also need a grade of "C" or higher in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose dietetics as a career:

**Practical Considerations:**

The following Practical Considerations are listed so students may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communication skills in the English language to effectively and accurately communicate with patients, peers and supervisors.
2. Have sufficient visual acuity to accurately assess patient conditions and treat patients safely.
3. Must have the physical capability to withstand prolonged standing and walking, working near mechanical parts, and the ability to lift up to 50 pounds.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.

**Health Considerations:**

Due to the nature of clinical experiences in Dietetic Technology Program, students will be participating in a work environment that has the potential of exposure to bloodborne pathogens and infectious diseases. All students accepted into the Dietetic Technology Program are provided with instruction on infection control protocols specific to the Program in order to reduce the risk of disease transmission.

**Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College, and the Dietetic Technology Program and/or participating clinical facilities as a condition of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Drug testing is a requirement for some of the programs. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and the drug testing.

**Questions?**

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Dietetics - Transfer**

**Dietetics - Transfer - DIET.AS (Associate in Science Degree)**

Credits: 64-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
HRI-103 Principles of Food Selection and Preparation	3	
HRI-105 Basic Nutrition	3	
HRI-208 Foodservice Sanitation	3	
BIO-123 General Biology I	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
HRI-108 Quantity Food Production	3	HRI 103
BIO-124 General Biology II	4	BIO 123
SOC-121 Introduction to Sociology	3	
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
<b>Semester III</b>		
HRI-213 Food Service Systems Management in Dietetics	3	
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
PSY-123 Introduction to Psychology	3	
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester IV</b>		
HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
HRI-218 Nutrition Throughout the Life Span	3	HRI 105 with a grade of "C" or better
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
____ GE Humanities Elective	3-4	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

#### **DIETETICS - TRANSFER HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

This program parallels the first two years of the bachelor's degree program at a four-year college or university. It is designed to transfer.

#### **What will students learn if they study Dietetic Transfer?**

Students prepare to transfer to a four-year college or university in the study of dietetics after earning their associate degree.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

A passing score on the College's placement mathematics test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for all dietetics transfer majors. In addition, a high school laboratory biology course with a minimum grade of "C" or BIO 010 and a high school laboratory chemistry or CHM 010 with a minimum grade of "C" are also required.

#### **What will students learn if they study Dietetics?**

The program is an intensive one that includes challenging science and dietetics courses, as well as general education.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study.

#### **Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose dietetics as a career:

#### **Practical Considerations:**

The following Practical Considerations are listed so students may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communication skills in the English language to effectively and accurately communicate with patients, peers and supervisors.
2. Have sufficient visual acuity to accurately assess patient conditions and treat patients safely.
3. Must have the physical capability to withstand prolonged standing and walking, working near mechanical parts, and the ability to lift up to 50 pounds.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.



**Health Considerations:**

Due to the nature of clinical experiences in Dietetic Technology Program, students will be participating in a work environment that has the potential of exposure to bloodborne pathogens and infectious diseases. All students accepted into the Dietetic Technology Program are provided with instruction on infection control protocols specific to the Program in order to reduce the risk of disease transmission.

**Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College, and the Dietetic Technology Program and/or participating clinical facilities as a condition of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Drug testing is a requirement for some of the programs. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and the drug testing.

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Earth Science****Earth Science - EASC.AS (Associate in Science Degree)**

Credits: 61-65 Credits Required

Description: Below is required courses and recommended course groupings and sequences for program completion. Courses may have prerequisites and corequisites requirements.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
MAT-129 Precalculus I	4	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
____ Physical Education Elective	1-3	
Students may take a health elective in place of physical education. However, if the total credits exceed 66 upon graduation, they may not all transfer.		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
SCI-155 Introduction to Geology	4	MAT 013 or appropriate score on the College placement test
<b>Semester III</b>		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
SCI-158 Planetary Astronomy	4	One year of high school laboratory science, MAT 014 or appropriate score on the College placement test
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
____ Technical Elective	3-4	
Select from the list of Technical Electives below.		
<b>Semester IV</b>		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
SCI-157 Introduction to Meteorology	4	One year of high school laboratory science, MAT 013 or appropriate score on the College

		placement test
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
_____ Technical Elective	3-4	

Select from the list of Technical Electives below.

#### Technical Electives

SCI 160 Essentials of Oceanography

SCI 162 Historical Geology: Diamonds, Drilling and Dinosaurs

SCI 210 Environmental Geology

SCI 224 Atmospheric Pollution Control

SCI 256 Stellar and Galactic Astronomy

SCI 258 Climatology

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### EARTH SCIENCE

#### DEPARTMENT OF NATURAL SCIENCES

#### What will students learn if they study Earth Science?

Students will study the Earth as a giant, multi-dimensional system. Because knowledge about our planet and how it works is necessary to our survival and well-being, Earth and its natural resources will be the focus of this program.

#### Are there any requirements that must be satisfied before taking courses in the major?

A passing score on the College's placement mathematics test for both Algebra I and Algebra II or MAT 013 and MAT 014 is required for all Earth Science majors. In addition, a high school laboratory science course with a minimum grade of "C" or better is required.

#### Can Earth Science majors transfer to a four year college or university?

A New Jersey statewide transfer agreement ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree, and will have completed all of lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an academic advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the Earth Science degree can be completed in two years of fulltime study. Students can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Education Practitioner

### Education Practitioner - EDPR.AAS (Associate in Applied Science)

Credits: 63-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for additional details. Students who desire to take any courses out of sequence are permitted to do so as long as they have completed the prerequisites (if any) for the desired courses.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
PSY-123 Introduction to Psychology	3	
HED-150 Contemporary Health Issues	3	
SPE-121 Fundamentals of Public Speaking	3	
_____ Mathematics Elective	3-4	
Appropriate score on the College's placement test to start any of the following Math sequences: MAT 101-MAT 102, MAT 129-MAT 131, MAT 131- MAT 132 or higher levels.		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
PSY-223 Child Psychology	3	PSY 123
_____ GE Humanities Elective	3	
Students are advised to pick a humanities elective based on upper division receiving institution's requirements. Often recommended: World Literature I or II (ENG 225 or ENG 226).		
_____ Art Elective	3	
Students are advised to pick an art elective based on upper division receiving institution's requirements. Often recommended: ART 105, ART 109, ART 123, ART 124, ART 145, ART 201.		

_____ Mathematics Elective	3-4	
Appropriate score on the College's placement test to finish any of the following Math sequences: MAT 101 MAT 102, MAT 129-MAT 131, MAT 131-MAT 132 or higher.		
<b>Semester III</b>		
_____ GE Biology Elective	3-4	
Choices are: BIO 103, or all 4-credit Biology courses with the <a href="#">GE MST</a> designation. Note: Most 4-credit biology courses are best for transfer.		
MUS-140 Music Fundamentals	3	
Music 131 may be substituted on its acceptance by transfer institution and with chairperson's permission.		
PSY-226 Educational Psychology	3	PSY 123
PSY 226 is a prerequisite for EDU 280, Education Field Experience.		
SOC-121 Introduction to Sociology	3	
_____ Elective	3	
Students are advised to pick an approved elective based on transfer institution's requirements. Often recommended: History course (Consult advisor).		
<b>Semester IV</b>		
_____ Elective	3	
Students are advised to pick an approved elective based on transfer institution's requirements. Often recommended: 4 credit lab science (Not usually a Biology course - Consider SCI 155 or SCI 220 or consult advisor for additional choices).		
EDU-280 Education Field Experience	3	PSY 226; ENG 122 and approval of department chairperson
Students are required to work in an educational setting for 90 hours.		
ENG-212 Children's Literature	3	ENG 121
_____ Elective	3	
This elective is chosen with an advisor. Transfer institutions often require a course in the second major in a subject area (e. g.: English or history). The second major is different from the education major.		
_____ Elective	3	
This elective is chosen with an advisor. Transfer institutions often require a course in the second major in a subject area (e. g.: English or history). The second major is different from the education major.		
_____ Elective	3	
This elective is chosen with an advisor. Transfer institutions often require a course in the second major in a subject area (e. g.: English or history). The second major is different from the education major.		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**EDUCATION PRACTITIONER  
HISTORY AND SOCIAL SCIENCE DEPARTMENT**

Graduates may pursue either of two possibilities. First, some students major in Education Practitioner in order to custom tailor a plan of study at Middlesex County College for transfer to a four-year college or university. Second, some students want to take practical and applied courses that prepare them to work immediately after this degree. Indeed, some majors actually work in the field while completing degree requirements. People already employed in educational settings often receive salary or position upgrades when they complete this degree. For the student who desires to transfer as an Education major or to go to work immediately in an education-related setting, the Education Practitioner is the right choice. Students should tell their advisor which career path in education they wish to follow, so they can be directed to the proper elective choices. (**Note:** Some receiving institutions prefer an A.A. degree).

**Can students find employment without completing their four-year degree?**

Students are eligible for a substitute-teaching license after completion of their 60th credit. Many graduates have worked as paraprofessionals in a wide variety of educational settings (both public and private) as they continue their education at a four-year institution. Whether students choose the transfer or the early employment track, this degree can help obtain CDA certification obtained through the Council for Professional Recognition in Washington, D.C. or "Group Teacher Approval" obtained through the State of New Jersey Department of Human Services - Division of Youth and Family Services (DYFS). (Note: Advisor consultation is recommended. If the student selects applied courses for the approved electives rather than transfer-oriented courses, some of the applied courses may not be transferable).

**What will students learn if they study Education Practitioner?**

They will have a strong core of general education courses and practical experiences in teaching/learning field settings. Supervision is done by cooperating school personnel as well as by the college supervisor. Students may select to work in early childhood, special education, elementary education or high school level field placements.

**Are there any requirements students must satisfy before taking courses in the major?**

The student's performance on the College's placement test determines placement in developmental courses. Consultation with the department chairperson about math and science choices is strongly recommended. Often, in addition to the education major, the student's desired future second major at the transfer institution allows the advisor or chairperson to assist him or her with selecting the appropriate math and science courses.

Many schools require a police background check along with fingerprinting of those who work in educational settings. Middlesex students must comply with the policies that are in effect at their field placement. Students will not be able to graduate or to complete their Education Field Placement requirement unless they comply. Obtaining the appropriate background check, before the field work course and as the placement site requires, is the student's responsibility.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Can students complete all requirements by enrolling in evening classes?**

Almost all classes are offered at least one time each year during the evening sessions. Some courses are offered in one semester but not in the next. Students studying on a part-time basis should contact the department chairperson or an advisor to plan when they should take their courses.

**Questions?**

Contact Name: History and Social Science Department **OR** Academic Advising  
 Contact Phone: 732.906.2590 **OR** 732.906.2596  
 Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) **OR** [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)  
 Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>  
<https://applyto.middlesexcc.edu/application/login.php>

## Electrical Engineering Technology

### Electrical Engineering Technology - EET.AAS (Associate in Applied Science)

Credits: 63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
Appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, MAT 014 with a minimum grade of "C" or MAT 014A and MAT 014B with a minimum grade of "C", or departmental approval. MAT 129 may be substituted for MAT 129A and MAT 129B.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ELT-105 Foundations of Electrical and Electronics Technology	4	MAT 013 or appropriate score on College placement test
MEC-123 Technical Graphics/CAD I	3	
_____ Physical/Health Education Elective	1	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
ELT-110 Electrical/Electronics Devices and Circuits	4	ELT 105
ELT-111 Digital Electronics	3	
CSC-166 C++ Programming	3	
CSC 133 may be substituted for CSC 166		
<b>Semester III</b>		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
MAT 129, or MAT 129A/MAT 129B, or appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, or departmental approval. MAT 131 can be substituted for MAT 131A and MAT 131B.		
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
ELT-226 Microcomputers	3	ELT 111
ELT-210 Electronic Circuits and Systems	4	ELT 110
ELT-239 Digital/Data Communications and Networking	3	ELT 111
<b>Semester IV</b>		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
ELT-223 Electronic Design and Manufacturing	2	ELT 221 and ELT 226
ELT-224 Communication Electronics	3	ELT 110
MCT-220 Introduction to Robotics and Control Systems	3	MEC 123, MAT 129 or MAT 129B, ELT 105
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
_____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## **ELECTRICAL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT**

Electrical Engineering Technology graduates find employment opportunities in the design, manufacturing and maintenance of everything from nano-bots to supercomputers. Many industries employ electrical engineering technicians including bio-medical, robotics, controls, telecommunication, utilities, audio and consumer electronics, and manufacturing and service of every kind.

**Related Programs - You may also be interested in one of the following programs:**

ELT.CER - Electrical Engineering Technology Certificate - Credits 32

### **Can students who major in Electrical Engineering Technology Transfer to a four-year college or university?**

Many four-year colleges and universities will apply many of the courses students have taken toward a bachelor's degree. The College also has a Joint Admissions agreement with The New Jersey Institute of Technology which will allow students, upon graduation from this program, to enter the B.S. in Electrical Engineering Technology program with junior standing.

### **What will students learn if they study Electrical Engineering Technology?**

They develop skills and the understanding of the theory of electronics. Students develop skills in design, analysis, and the manufacture of electronic and computer equipment through courses that combine laboratory and classroom experience. The laboratories are equipped with modern industrial-grade equipment and provide for a great variety of applications of knowledge.

### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in three semesters.

### **Questions?**

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## **Electrical Engineering Technology Certificate**

### **Electrical Engineering Technology Certificate - ELT.CER (Certificate)**

Credits: 32 Credits Required

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<b>Courses</b>	<b>Credits</b>	<b>Requisites / Comments</b>
<b>Semester I</b>		
ELT-105 Foundations of Electrical and Electronics Technology	4	MAT 013 or appropriate score on College placement test
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
Appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, MAT 014 with a minimum grade of "C" or MAT 014A and MAT 014B with a minimum grade of "C", or departmental approval. MAT 129 may be substituted for MAT 129A and MAT 129B.		
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MEC-123 Technical Graphics/CAD I	3	
<b>Semester II</b>		
ELT-110 Electrical/Electronics Devices and Circuits	4	ELT 105
ELT-210 Electronic Circuits and Systems	4	ELT 110
ELT-111 Digital Electronics	3	
ELT-223 Electronic Design and Manufacturing	2	ELT 221 and ELT 226
ELT-226 Microcomputers	3	ELT 111
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## **ELECTRICAL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT**

Electrical Engineering Technology graduates find employment opportunities in the design, manufacturing and maintenance of everything from nano-bots to supercomputers. Many industries employ electrical engineering technicians including bio-medical, robotics, controls, telecommunication, utilities, audio and consumer electronics, and manufacturing and service of every kind.

**Related Programs - You may also be interested in one of the following programs:**

EET.AAS - Electrical Engineering Technology - Credits 63

**Can students who major in Electrical Engineering Technology Transfer to a four-year college or university?**

Many four-year colleges and universities will apply many of the courses students have taken toward a bachelor's degree. The College also has a Joint Admissions agreement with The New Jersey Institute of Technology which will allow students, upon graduation from this program, to enter the B.S. in Electrical Engineering Technology program with junior standing.

**What will students learn if they study Electrical Engineering Technology?**

They develop skills and the understanding of the theory of electronics. Students develop skills in design, analysis, and the manufacture of electronic and computer equipment through courses that combine laboratory and classroom experience. The laboratories are equipped with modern industrial-grade equipment and provide for a great variety of applications of knowledge.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the certificate in three semesters.

**Questions?**

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Event Planning Management Certificate****Event Planning Management Certificate - EPM.CER (Certificate)**

Credits: 34 Credits Required

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
BUS-101 Business Organization and Management	3	
OR		
SBM-120 Small Business Management	3	
OR		
HRI-101 Introduction to Hotel, Restaurant and Institution Management	3	
BUS-210 Introduction to Event Planning	3	BUS 101 or SBM 120 or HRI 101
BUS-213 Law for Event Planning Management	3	
OR		
HRI-250 Law for Hospitality Operations	3	
BUS-239 Field Experience in Event Planning Management	3	Completion of half the courses required in the Event Planning Management curricula and written permission of department chairperson
___ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
___ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
BUS-250 Seminar in Event Planning Management	3	BUS 210, BUS 213, BUS 239, BUS 240, HRI 206, HRI 250 and SBM 110
HRI-206 Merchandising for the Hospitality Industry	3	
SPE-121 Fundamentals of Public Speaking	3	
SBM-110 Accounting for Small Business	4	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**EVENT PLANNING MANAGEMENT  
ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

The Event Planning Management Certificate gives students the opportunity to join a firm or start their own event planning business in a rapidly growing field which is exciting and offers many opportunities for them to use their business and creative skills.

### Can students who receive the Event Planning Management Certificate transfer to a four-year college or university?

A number of college and universities will apply the courses taken in the Event Planning Management Certificate.

### What will students learn if they study Event Planning Management?

This program combines business, merchandising and marketing, communication skills and real life experience to help students gain the leadership and management skills needed to plan special events. With this certificate students will be able to develop their own event vision to create events, encompassing the development of an event budget, manage vendor contracts, be able to understand risk management in events, as well to have the communication skills necessary to present themselves and market their events.

### Are there any requirements that must be satisfied before taking courses in the certificate?

Algebra I is a prerequisite for all majors. Students may satisfy this requirement with a grade of "C" or better in high school Algebra I. Algebra I competency may be verified with a passing score on the College's placement test.

### How long will it take to complete this certificate?

Once students complete developmental coursework (if needed), they can complete the certificate in one year. Major courses are only offered in the evening and not every semester.

### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Engineering Science

### Engineering Science - ES.AS (Associate in Science Degree)

Credits: 67-68 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENR-106 Introduction to Solving Engineering Problems Using Computers	3	MAT 129A and MAT 129B or MAT 129
ENR 106 is not a required course for graduation at MCC. However, it is required for junior status at most transfer institutions. Transfer students should consult with their academic advisor to select an appropriate course that will satisfy the requirement of the transfer institution.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
MEC-119 Graphic Science	2	
____ Physical Education Elective	1	
Students may take a health elective in place of physical education. However, if the total credits exceed 66 upon graduation they may not all transfer.		
<b>Semester II</b>		
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
PHY-133 Analytical Physics I - Lecture	3	One year of high school laboratory physics
PHY-135 Analytical Physics I - Lab	1	One year of high school laboratory physics
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester III</b>		
____ Technical Elective	3-4	
See Technical Electives in list below.		
MAT-233 Analytic Geometry and Calculus III	4	MAT 132 or equivalent
MEC-221 Engineering Mechanics I	3	MAT 131
PHY-134 Analytical Physics II - Lecture	3	PHY 133
PHY-136 Analytical Physics II - Lab	1	PHY 135
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		

**Semester IV**

____ Technical Elective	4	
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See Technical Electives in list below.

MAT-234 Differential Equations	4	MAT 233 or written permission of the department chairperson
PHY-236 Analytical Physics III - Lecture	3	MAT 132 and PHY 134
PHY-239 Analytical Physics III - Lab	1	MAT 132 and PHY 136 or one year of integral and differential calculus.

____ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

OR

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).**Technical Electives****Chemical Engineering**

CHM-221 Organic Chemistry I - Lecture	3	CHM 122 with a grade of "C" or better
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AND

CHM-227 Organic Chemistry I - Lab	1	CHM 122, CHM 126 with a grade of "C" or better
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CHM-222 Organic Chemistry II - Lecture	3	CHM 221 Lecture with a grade of "C" or better, CHM 227 Lab
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AND

CHM-228 Organic Chemistry II - Lab	1	CHM 221, CHM 227 with a grade of "C" or better
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**Civil Engineering**

ELT-221 Electric Circuits I	4	
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Note: This course is only offered in the fall semester.

MEC-222 Engineering Mechanics II	3	MEC 221
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Note: This course is only offered in the spring semester.

CIT-253 Mechanics of Materials	3	MEC 221
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Note: This course is only offered in the spring semester.

**Electrical Engineering**

ELT-221 Electric Circuits I	4	
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Note: This course is only offered in the fall semester.

ELT-222 Electric Circuits II	4	ELT 221
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Note: This course is only offered in the spring semester.

CSC-133 Introduction to Computer Science Using C++	4	MAT 014 or appropriate score on the College placement test
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CSC-161 Introduction to Computer Science Using Java	4	MAT 014 or appropriate score on the College placement test
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**Mechanical Engineering**

ELT-221 Electric Circuits I	4	
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Note: This course only offered in the fall semester.

MEC-222 Engineering Mechanics II	3	MEC 221
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Note: This course only offered in the spring semester.

CIT-253 Mechanics of Materials	3	MEC 221
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Note: This course only offered in the spring semester.



**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****ENGINEERING SCIENCE  
ENGINEERING TECHNOLOGIES DEPARTMENT****Why major in Engineering Science?**

Engineers are professionals with competency in mathematics and the physical and technical sciences. For students who enjoy solving problems and working with technical or scientific equipment, and do well in mathematics and science, engineering science is a good choice of major. The college has a transfer agreement with Rutgers College of Engineering and the New Jersey Institute of Technology. Articulation agreements with many other engineering colleges facilitate transfer with full credit.

**What will students learn by studying Engineering Science?**

They study theoretical and applied science, mathematics, and engineering subjects. They learn to apply mathematics and science to technical operations. Students have the opportunity to study in small groups in an environment with close faculty contact. Are there any requirements that must be satisfied before taking courses in the major? Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students also need a grade of "C" or better in high school algebra II, geometry, advanced algebra, trigonometry, laboratory chemistry and laboratory physics.

**Can Engineering Science students transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**English as a Second Language****English as a Second Language - ESL.UN (Non-Degree)**

Credits: 66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Mr. Gary Abbott, department chair

Contact Phone: 732.906.2597

Contact Email: [GAbbott@middlesexcc.edu](mailto:GAbbott@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/esl-languages-and-cultures-and-center-for-international-education.html>

Courses	Credits	Requisites / Comments
<b>ESL Level I - Intensive</b>		
ESL-060 Listening-Intensive Level I	3	
ESL-061 Phonology-Intensive Level I	3	
ESL-062 Discussion-Intensive Level I	3	
ESL-063 Structure-Intensive Level I	4	
ESL-064 Writing Intensive Level I	4	
<b>ESL Level II - Intensive</b>		
ESL-071 Phonology-Intensive Level II	3	ESL 061 or written permission of the department chairperson
ESL-072 Discussion/Cultural Orientation-Intensive Level II	3	ESL 062 or written permission of the department chairperson
ESL-073 Structure-Intensive Level II	4	ESL 063 or written permission of the department chairperson
ESL-074 Writing-Intensive Level II	4	ESL 064
ESL-075 Reading/Vocabulary-Intensive Level II	3	ESL 063
<b>ESL Level III - Intensive</b>		
ESL-083 Structure-Intensive Level III	4	ESL 073 or written permission of the department chairperson
ESL-084 Writing-Intensive Level III	4	ESL 074 or written permission of the department chairperson
ESL-085 Reading/Vocabulary-Intensive III	3	ESL 075 or written permission of the department chairperson
ESL-086 Phonology/Discussion-Intensive Level III	3	ESL 071 and ESL 072 or written permission of the department chairperson
Program Note: Students may also take a mathematics course.		
<b>ESL Level IV - Intensive</b>		
ESL-091 Advanced Phonology/Discussion Level IV	3	ESL 086 or written permission of the department chairperson
ESL-092 ESL Advanced Structure Level IV	3	ESL 083 or written permission of the department chairperson
ESL-093 ESL Advanced Writing Level IV	4	ESL 084 or written permission of the department chairperson
ESL-094 ESL Advanced Reading/Vocabulary Level IV	4	ESL 085 or written permission of the department chairperson

Program Note: Students may also take a mathematics course or one major course.

### ESL Level V - Intensive

ESL-099 ESL Reading/Writing Level V	4	ESL 093 or written permission of the department chairperson
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Program Note: Students may also take a mathematics course or two major courses.

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### ENGLISH AS A SECOND LANGUAGE ESL/LANGUAGES AND CULTURE DEPARTMENT

This program provides intensive language study for those whose native language is not English and are not yet proficient in English.

#### How is the English as a Second Language Program different from other ESL programs?

Students can study English full-time at the beginning, intermediate or advanced level. They study in class for 14 to 17 hours per week including ESL labs. They may also study in this program part time.

#### Can international students enroll in the ESL Program?

Yes. They may obtain an I-20 to study in this program and be admitted as a full-time student.

#### What is the application process for this program?

Students submit a completed application form with a \$25 application fee to the Office of Admissions. They should make an appointment for the ESL Placement Exam by calling 732.906.2508 or visiting the Testing Center in JLC 229. After the exam, students make an appointment in the ESL/Languages and Cultures Department to attend an oral interview, which is part of the placement test. Students will be told what their placement is when they complete the oral interview.

#### What is the ESL Placement Exam?

It is a written test that takes approximately two hours to complete. The oral interview tests speaking and listening abilities. The written test measures grammar, writing and reading abilities.

#### Who is required to take the test and can TOEFL scores be used for placement?

Students with a four-year degree and a TOEFL score on the paper and pencil test of 550 or over or on the IBT test of 79 or over may be exempt from the grammar and reading parts of the placement test, but they are still required to take the essay and oral interview tests.

#### When is the test administered and is there a charge?

Students may take the test Thursdays from 9 a.m. to 5 p.m. or at other times through a special appointment and approval by the director of the Testing Center. The test is free.

#### Can ESL students receive financial aid?

United States citizens and permanent residents may be eligible for financial aid but must declare a major.

#### Questions?

Contact Name: Mr. Gary Abbott, department chair

Contact Phone: 732.906.2597

Contact Email: [GAbbott@middlesexcc.edu](mailto:GAbbott@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/esl-languages-and-cultures-and-center-for-international-education.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Forensic Accounting and Fraud Examination Certificate of Achievement

### Forensic Accounting and Fraud Examination Certificate of Achievement - FAFE.COA (Certificate of Achievement)

Credits: 18 Credits Required

Description: The Forensic Accounting and Fraud Examination Certificate of Achievement is designed for the person who already has a college degree - Associate's, Bachelor's or higher.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
ACC-207 Auditing	3	ACC 212 or permission of the department chair
CSC-105 Computer Applications and Systems	3	
ACC-221 Fraud Examination	3	ACC 207 or CSC 105 or CSC 106
ACC-222 Fraud Data Analysis	3	ACC 221
ACC-223 Fraud and the Law	3	ACC 221
ACC-224 Advanced Fraud Examination	3	ACC 221, ACC 222 and ACC 223

Students may select an alternate Computer Science ([GE MST](#)) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.

\* Students with A.S. or A.A.S. degrees must show that they have taken 18 credits of general education courses. Holder of A.A. degrees are presumed to have satisfied the general education requirement.

\*\* For students with a degree, who are granted transfer credits, this total will be reduced.

Note: Not all courses in the Forensic Accounting and Fraud Examination Certificate Achievement program are offered every semester. Please call the Department Chairperson at 732.906.2594 to discuss course offerings for future semesters.

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### ACCOUNTING

**ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

Accounting is one of the most rapidly expanding fields in today's economy. Since it is service oriented, it involves working with people almost as much as with financial records. Accountants not only collect and report financial data, but they also serve as the link between the data and the people who use it.

**Related Programs - You may also be interested in one of the following programs:**

ACC.AAS - Accounting - Credits 63-66

ACC.COA - Accounting Certificate of Achievement - Credits 20

**What will students learn studying Accounting?**

They acquire an extensive background in accounting and a strong fundamental knowledge of the major functions of business and industry. They study business law, business organization and management, mathematics and economics.

**Are there any requirements students must satisfy before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completing the appropriate class.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Fire Science Technology****Fire Science Technology - FIRE.AAS (Associate in Applied Science)**

Credits: 59-61 Credits Required

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
FSC-103 Introduction to Fire Protection	3	
SCI-207 Principles of Fire Protection Chemistry and Physics	4	One year of high school chemistry or CHM 010
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
CSC-105 Computer Applications and Systems	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-108 Mathematics II	3	MAT 107
With advisor approval students may select a higher level mathematics sequence.		
FSC-204 Building Construction	3	FSC 103 or written permission of the department chairperson
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>Semester III</b>		
FSC-206 Fire Strategy and Tactics	3	FSC 103 or written permission of the department chairperson
FSC-207 Hazardous Materials	3	FSC 103 or written permission of the department chairperson
FSC-209 Fire Suppression and Detection Systems	3	FSC 103 or written permission of the department chairperson
POS-201 United States State and Local Government	3	
FSC-214 Rescue Company Operations in the Fire Service	3	FSC 103
<b>Semester IV</b>		
FSC-210 Fire and Arson Investigation	3	FSC 103 or written permission of the department chairperson
FSC-212 Fire Prevention and Inspection	3	FSC 103 or written permission of the department chairperson
MGT-200 Principles of Supervision	3	
MGT 200 is offered in the spring semester only.		
____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

OR

___ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ Elective	3	
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Recommended: EMT 101 or EMP 100

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## **FIRE SCIENCE TECHNOLOGY DEPARTMENT OF NATURAL SCIENCES**

This program meets the continuing education needs of professional and volunteer firefighters. It enables firefighters to perform their current duties more effectively and to prepare for greater levels of responsibility within the fire service system.

**Related Programs - You may also be interested in one of the following programs:**

FIRE.CER - Fire Science Certificate - Credits 31

### **Can students who major in Fire Science Technology transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

### **What will students learn in Fire Science Technology?**

Students develop skills and knowledge in protection systems, hydraulics, hazardous materials, building construction and codes, departmental organization, investigation, fire ground strategy and tactics, and fire prevention and inspection.

### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory chemistry.

### **How long will it take to complete this degree?**

Fire Science courses are offered exclusively in the evening. Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### **Questions?**

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## **Fire Science Certificate**

### **Fire Science Certificate - FIRE.CER (Certificate)**

Credits: 31 Credits Required

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<b>Courses</b>	<b>Credits</b>	<b>Requisites / Comments</b>
CHM-107 Principles of General, Organic and Biochemistry	4	One year of high school laboratory chemistry or CHM 010
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
FSC-103 Introduction to Fire Protection	3	
FSC-204 Building Construction	3	FSC 103 or written permission of the department chairperson
FSC-206 Fire Strategy and Tactics	3	FSC 103 or written permission of the department chairperson
FSC-207 Hazardous Materials	3	FSC 103 or written permission of the department chairperson
FSC-209 Fire Suppression and Detection Systems	3	FSC 103 or written permission of the department chairperson
FSC-210 Fire and Arson Investigation	3	FSC 103 or written permission of the department chairperson
FSC-212 Fire Prevention and Inspection	3	FSC 103 or written permission of the department chairperson
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## **FIRE SCIENCE TECHNOLOGY DEPARTMENT OF NATURAL SCIENCES**

This program meets the continuing education needs of professional and volunteer firefighters. It enables firefighters to perform their current duties more effectively and to prepare for greater levels of responsibility within the fire service system.

**Related Programs - You may also be interested in one of the following programs:**

**FIRE.AAS - Fire Science Technology - Credits 59-61****Can students who major in Fire Science Technology transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**What will students learn in Fire Science Technology?**

Students develop skills and knowledge in protection systems, hydraulics, hazardous materials, building construction and codes, departmental organization, investigation, fire ground strategy and tactics, and fire prevention and inspection.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory chemistry.

**How long will it take to complete this degree?**

Fire Science courses are offered exclusively in the evening. Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Fashion Merchandising and Retail Management****Fashion Merchandising and Retail Management - FMR.AAS (Associate in Applied Science)**

Credits: 61-64 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
BUS-101 Business Organization and Management	3	
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
FMR-201 Fashion Merchandise Information	4	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
MAT 101 is recommended. Students with the appropriate academic prerequisites, in consultation with their academic advisor, should enroll in an appropriate mathematics course.		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
ACC-101 Financial Accounting	4	
BUS-201 Business Law I	3	
MKT-201 Marketing I	3	BUS 101
FMR-207 Retail Advertising, Sales Promotion and Display	3	
<b>Semester III</b>		
ACC-102 Managerial Accounting	4	ACC 101
MKT-143 Salesmanship	3	
FMR-202 Retail Buying and Merchandising	3	
SPE-121 Fundamentals of Public Speaking	3	
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester IV</b>		
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
FMR-204 Retail Management	3	BUS 101, FMR 201, FMR 202, FMR 207, MKT 143 and MKT 201
FMR-206 Store Field Experience	3	The student must have completed half the courses in the Fashion Merchandising and Retail program. Management and written permission of the department chairperson and Counseling and Career Services Office.
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
OR		

___ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

___ GE Science Elective	3	
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Students must select courses with the [GE MST](#) designation and with the BIO, CHM, PHY and SCI course codes.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### FASHION MERCHANDISING AND RETAIL MANAGEMENT ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Few areas of employment offer a better outlook for trained personnel. Students will find career opportunities in the areas of fashion merchandising, sales promotion, retail advertising, and supportive retail service. Graduates may find work in department stores, specialty shops, discount stores, as a retailing executive, an assistant buyer, an assistant department manager, an executive trainee, an advertising assistant, or an assistant fashion coordinator.

#### Can students who major in Fashion Merchandising and Retail Management transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### What will students learn by studying Fashion Merchandising and Retail Management?

They acquire knowledge in areas of general education, business, retailing and fashion. Students apply classroom theory to on-the-job situations through a cooperative education work experience or internships. Classes prepare them for actual situations in retailing through multimedia instruction and a fully equipped retail laboratory offers students realistic preparation.

#### Are there any requirements before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. **Note:** Not all FMR courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Health Science

### Health Science - HLTH.AAS (Associate in Applied Science)

Credits: 65 Credits Required

Description: Below are the General Education requirements for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Stephen Larkin, department chair

Contact Phone: 732.906.2581

Contact Email: [SLarkin@middlesexcc.edu](mailto:SLarkin@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/medical-laboratory-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
___ Laboratory Science	4	
One year sequence of lab science requirements satisfied by Biology (BIO 117 & BIO 118 or higher) or Anatomy & Physiology (BIO 111 & BIO 112) or Chemistry (CHM 117 & CHM 118 or higher).		
SPE-121 Fundamentals of Public Speaking	3	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
<b>Semester II</b>		
___ Laboratory Science	4	
One year sequence of lab science requirement satisfied by Biology (BIO 117 & BIO 118 or higher) or Anatomy & Physiology (BIO 111 & BIO 112) or Chemistry (CHM 117 & CHM 118 or higher).		
CSC-107 Computers in Health Technologies	1	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-108 Mathematics II	3	MAT 107
<b>Semester III</b>		
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
PSY-123 Introduction to Psychology	3	
___ Physical Education Elective	1	
___ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		

**Semester IV**

Allied Health Requirement \* (see note below)

**Program Notes**

Electives \*\* (see note below)

Allied Health Requirement: (previously completed) 30 (Maximum)\*  
 Students may receive up to 30 credits for previous allied health training.  
 The determination will be made based upon an evaluation of the total hours of training and the level of training and responsibility. If the training is equivalent to less than thirty credits, the remainder is completed with electives.  
 Students are not required to complete thirty credits in one semester.

Electives: 24 (Maximum)\*\*

The number of electives will depend on the number of credits approved from previous allied health training.  
 The student will select electives from a list of courses based on individual goals.  
 The electives may be taken from Small Business Administration, Psychology, or other courses as approved by the department.  
 A list of choices can be provided.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****HEALTH SCIENCE  
MEDICAL LABORATORY TECHNOLOGY DEPARTMENT**

This program is for any allied health practitioner who holds a certificate or license such as dental, medical and lab assistants, phlebotomists; ultrasound, surgical, and dental technicians; EMTs, paramedics, LPNs, RNs (diploma) and military trained allied health practitioners.

**What are the benefits?**

Credit for previous study in a specific discipline can be awarded. Students who are a non-degree certified or licensed allied health practitioner or graduate of a certificate or diploma program may be able to earn valuable credits toward a college degree.

**What are the requirements for admission to the Health Science program?**

Students in the Health Science program must have non-degree certification or licensure in an allied health field. Full- or part-time study is available.

**Can students receive credit for previous Allied Health training?**

After successful completion of the general education requirements with a GPA of 2.0 or higher, students must submit an original post-secondary school transcript and a current license or certificate as part of the process. The number of credits awarded will be based upon an evaluation of the candidate's prior training and licensure or certification. The director of Health Technology programs and the dean of Science, Mathematics and Health Technologies will conduct the review.

**Can students who major in Health Science transfer to a four-year college?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**What are the employment opportunities for graduates?**

Graduates of Health Science programs have chosen to work in hospital laboratories, private or reference laboratories, pharmaceutical companies, the insurance industry, doctor's offices, HMO's and clinics, veterinarian hospitals, assisted living facilities, long-term care facilities, research and sales. Graduates may use this degree for career advancement or change, to enhance job security, or to satisfy personal fulfillment.

Contact Name: Stephen Larkin, department chair

Contact Phone: 732.906.2581

Contact Email: [SLarkin@middlesexcc.edu](mailto:SLarkin@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/medical-laboratory-homepage.html><https://applyto.middlesexcc.edu/application/login.php>**Hotel Operations Certificate of Achievement****Hotel Operations Certificate of Achievement - HMHO.CO.A (Certificate of Achievement)**

Credits: 18 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
CSC-105 Computer Applications and Systems	3	
HRI-110 Supervisory Development in the Lodging and Foodservice Industry	3	
Note: This course is only offered in the spring semester.		
HRI-201 Hotel-Motel Front Office Operations	3	CSC 105
Note: This course is only offered in the fall semester.		
HRI-206 Merchandising for the Hospitality Industry	3	

Note: This course is only offered in the fall semester.

HRI-216 Hospitality Property Management	3	
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Note: This course is only offered in the spring semester.

HRI-217 Supervisory Housekeeping	3	
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Note: This course is only offered in the fall semester.

#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### **HOSPITALITY AND CULINARY ARTS HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

#### **Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

#### **Can students who major in Hospitality and Culinary Arts transfer to a four-year college?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### **What do students learn if they study Hospitality and Culinary Arts?**

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### **Can students take more than one option in Hospitality and Culinary Arts?**

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### **How long will it take to complete these programs?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

#### **Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?**

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

#### **Why should students apply for a Certificate?**

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

#### **Questions?**

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

## **Restaurant Operations Certificate of Achievement**

### **Restaurant Operations Certificate of Achievement - HMRO.COA (Certificate of Achievement)**

Credits: 18 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:



Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
CSC-105 Computer Applications and Systems	3	
HRI-103 Principles of Food Selection and Preparation	3	
HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
HRI-206 Merchandising for the Hospitality Industry	3	
Note: This course is only offered in the fall semester.		
HRI-208 Foodservice Sanitation	3	
HRI-215 Beverage Management	3	
Note: This course is only offered in the fall semester.		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### **HOSPITALITY AND CULINARY ARTS HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

**Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

#### **Can students who major in Hospitality and Culinary Arts transfer to a four-year college?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### **What do students learn if they study Hospitality and Culinary Arts?**

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### **Can students take more than one option in Hospitality and Culinary Arts?**

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### **How long will it take to complete these programs?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

#### **Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?**

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

#### **Why should students apply for a Certificate?**

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

#### **Questions?**

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html><https://applyto.middlesexcc.edu/application/login.php>

## Culinary Arts Management

### Culinary Arts Management - HRIC.AAS (Associate in Applied Science)

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-105 Computer Applications and Systems	3	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
HRI-103 Principles of Food Selection and Preparation	3	
HRI-208 Foodservice Sanitation	3	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
HRI-108 Quantity Food Production	3	HRI 103
HRI-109 Professional Culinary Techniques	3	HRI 103
Note: This course is only offered in the spring semester.		
HRI-115 Foodservice Operations	3	
Note: This course is only offered in the spring semester.		
PSY-123 Introduction to Psychology	3	
<b>Semester III</b>		
HRI-107 Baking Fundamentals	3	
HRI-203 Banquet and Dining Room Management	4	HRI 108
Note: This course is only offered during the day.		
HRI-215 Beverage Management	3	
Note: This course is only offered in the fall semester.		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester IV</b>		
HRI-114 Garde Manger	3	HRI 103
Note: This course is only offered in the spring semester.		
HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
____ HRI Elective	3	
Students can choose from HRI 105, HRI 110, HRI 201, HRI 202, HRI 206, HRI 213, HRI 216, HRI 217, HRI 220 and HRI 250.		
____ GE Science Elective	3	
Students must select courses with the <a href="#">GE MST</a> designation and with the BIO, CHM, PHY and SCI course codes.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Summer Session</b>		
HRI-111 Culinary Arts Externship	3	HRI 103 and admission to the Culinary Arts Program
Note: This course is only offered in the summer session.		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****HOSPITALITY AND CULINARY ARTS****HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT**

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

**Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

**Can students who major in Hospitality and Culinary Arts transfer to a four-year college?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

**What do students learn if they study Hospitality and Culinary Arts?**

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

**Can students take more than one option in Hospitality and Culinary Arts?**

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

**How long will it take to complete these programs?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

**Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?**

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

**Why should students apply for a Certificate?**

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

**Questions?**

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Hotel/Motel Management****Hotel/Motel Management - HRIH.AAS (Associate in Applied Science)**

Credits: 63-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
HRI-101 Introduction to Hotel, Restaurant and	3	

Institution Management		
HRI-103 Principles of Food Selection and Preparation	3	
HRI-208 Foodservice Sanitation	3	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
_____ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course.

#### Semester II

ACC-108 Accounting Practices for Hotels, Restaurants and Institutions	4	
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Note: This course is only offered in the spring semester.

CSC-105 Computer Applications and Systems	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
HRI-108 Quantity Food Production	3	HRI 103
HRI-110 Supervisory Development in the Lodging and Foodservice Industry	3	

Note: This course is only offered in the spring semester.

#### Semester III

HRI-201 Hotel-Motel Front Office Operations	3	CSC 105
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Note: This course is only offered in the fall semester.

HRI-206 Merchandising for the Hospitality Industry	3	
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Note: This course is only offered in the fall semester.

HRI-217 Supervisory Housekeeping	3	
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Note: This course is only offered in the fall semester.

HRI-250 Law for Hospitality Operations	3	
_____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

#### Semester IV

HRI-203 Banquet and Dining Room Management	4	HRI 108
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Note: This course is only offered during the day.

HRI-216 Hospitality Property Management	3	
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Note: This course is only offered in the spring semester.

PSY-123 Introduction to Psychology	3	
_____ GE Science Elective	3	

Students must select courses with the [GE MST](#) designation and with the BIO, CHM, PHY and SCI course codes.

_____ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### HOSPITALITY AND CULINARY ARTS HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

**Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HRIR.AAS - Restaurant/Food Service Management - Credits 63-66

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

#### Can students who major in Hospitality and Culinary Arts transfer to a four-year college?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### What do students learn if they study Hospitality and Culinary Arts?

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### Can students take more than one option in Hospitality and Culinary Arts?

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### How long will it take to complete these programs?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

#### Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

#### Why should students apply for a Certificate?

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

#### Questions?

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Restaurant/Food Service Management

### Restaurant/Food Service Management - HRIR.AAS (Associate in Applied Science)

Credits: 63-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hospitality-culinary-arts-and-dietetics.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
HRI-101 Introduction to Hotel, Restaurant and Institution Management	3	
HRI-103 Principles of Food Selection and Preparation	3	
HRI-208 Foodservice Sanitation	3	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
ACC-108 Accounting Practices for Hotels, Restaurants and Institutions	4	
Note: This course is only offered in the spring semester.		
CSC-105 Computer Applications and Systems	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121

HRI-108 Quantity Food Production	3	HRI 103
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HRI-110 Supervisory Development in the Lodging and Foodservice Industry	3	
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Note: This course is only offered in the spring semester.

### Semester III

HRI-203 Banquet and Dining Room Management	4	HRI 108
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Note: This course is only offered during the day.

HRI-206 Merchandising for the Hospitality Industry	3	
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Note: This course is only offered in the fall semester.

HRI-215 Beverage Management	3	
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Note: This course is only offered in the fall semester.

HRI-250 Law for Hospitality Operations	3	
_____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

### Semester IV

HRI-202 Facilities Layout and Design	3	
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Note: This course is only offered in the spring semester.

HRI-205 Food and Beverage Controls and Purchasing	3	HRI 103
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PSY-123 Introduction to Psychology	3	
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_____ GE Science Elective	3-4	
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Students must select courses with the [GE MST](#) designation and with the BIO, CHM, PHY and SCI course codes.

_____ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### HOSPITALITY AND CULINARY ARTS HOSPITALITY, CULINARY ARTS, AND DIETETICS DEPARTMENT

In this program, students acquire the necessary practical and theoretical skills for employment in one of the nation's fastest growing industries. Graduates may be employed as an assistant restaurant manager, hotel/motel assistant manager, front office manager, dining room manager, cafeteria production manager, cook, sous chef or management trainee. They are eligible for certification in several course areas by the American Hotel and Lodging Association and the National Restaurant Association. Students may choose the Hotel-Motel Management Option, the Restaurant Food Service Management Option, or the Culinary Arts Management Option which prepares students to work in hotels, motels, resorts, restaurants, clubs, cruise ships, catering centers and health care facilities.

**Related Programs - You may also be interested in one of the following programs:**

CULIN.CER - Culinary Arts Certificate - Credits 34

HRIC.AAS - Culinary Arts Management - Credits 62-65

HRIH.AAS - Hotel/Motel Management - Credits 63-66

HMHO.COA - Hotel Operations Certificate of Achievement - Credits 18

HMRO.COA - Restaurant Operations Certificate of Achievement - Credits 18

BPA.COA - Baking and Pastry Arts Certificate of Achievement - Credits 18

#### Can students who major in Hospitality and Culinary Arts transfer to a four-year college?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer most of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor. Many colleges and universities with hotel and restaurant management programs, including Fairleigh Dickinson University, NYU, Montclair State University, Widener University, The Culinary Institute of America, Johnson & Wales, as well as other schools, will apply the courses taken toward a bachelor's degree.

#### What do students learn if they study Hospitality and Culinary Arts?

They receive training in restaurant and food service management, hotel-motel management or culinary arts. Those with limited related industry experience are encouraged to enroll in a cooperative work experience seminar that includes paid employment in the final semester. In culinary arts additional training is provided in a culinary externship.

#### Can students take more than one option in Hospitality and Culinary Arts?

Students with interests in both hotel-motel management and restaurant foodservice management can apply for a dual option.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

**How long will it take to complete these programs?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Certificates may be completed in approximately 14 months and the certificate of achievement in approximately 2 semesters.

**Can students who take the Culinary Certificate Program also work toward the A.A.S. degree in Restaurant/Food Service Management?**

Yes. All of the culinary courses in the certificate program may be applied to meet the requirements for the A.A.S. degree in the Restaurant/Foodservice option.

**Why should students apply for a Certificate?**

The Certificate was designed for those individuals who have completed a degree in another discipline and are currently working in the hospitality field. The Certificates were also designed for individuals who do not have a post-secondary education and are interested in the hospitality field or who have several years of experience in the field and need to acquire academic credentials for promotional opportunities.

**Questions?**

Contact Name: Associate Professor Mary-Pat Maciolek, department chair

Contact Phone: 732.906.2538

Contact Email: [MMaciolek@middlesexcc.edu](mailto:MMaciolek@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/hotel-restaurant-and-institution-management-home.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Liberal Arts - African-American Studies****Liberal Arts - African-American Studies - LAAFA.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking		
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course except PED 270.		
AFS-121 Introduction to African-American Studies	3	
AFS-123 Introduction to African Civilizations	3	
AFS-231 African-American History	3	
PSY-163 Psychology of the African-American	3	

Experience		
<b>Divisional Elective</b>		
HIS-202 Ancient Egypt's History: An Introduction	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## **LIBERAL ARTS**

### **Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

### **Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**



<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Business

### Liberal Arts - Business - LABUS.AA (Associate in Arts Degree)

Credits: 60-65 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking		
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
For their math electives, students should choose one of the following sequences:		
MAT 123, MAT 124 MAT 129A, MAT 129B, MAT 131A, MAT 131B MAT 129, MAT 131A, MAT 131B MAT 129, MAT 131 MAT 131A, MAT 131B, MAT 132 MAT 131, MAT 132 MAT 131 A, MAT 131B, MAT 285 MAT 131, MAT 285		
___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
___ GE Social Science Elective	3	
___ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
___ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
___ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
ACC-101 Financial Accounting	4	
ACC-102 Managerial Accounting	4	ACC 101
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
ECO-202 Principles of Economics II	3	ECO 201 or written permission of the department chairperson

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### LIBERAL ARTS

#### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Cinema Studies

### Liberal Arts - Cinema Studies - LACIN.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Michael Nester, department chair

Contact Phone: 732.906.3048

Contact Email: [MNester@middlesexcc.edu](mailto:MNester@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/english.html>

Courses	Credits	Requisites / Comments
<a href="#">General Education Communication</a>		

ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121

SPE-121 Fundamentals of Public Speaking	3	
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OR

SPE-123 Discussion and Debate	3	
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**General Education History**

HIS-121 History of Western Civilization I	3	
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HIS-122 History of Western Civilization II	3	
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**General Education Humanities**

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

____ GE Humanities Elective	3	
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____ GE Humanities - Language Elective	3	
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____ GE Humanities - Language Elective	3	
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**General Education Mathematics, Science and Technology**

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

____ GE Technology Elective	3	
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____ GE Mathematics Elective	3-4	
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____ GE Science Elective	3-4	
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____ GE Mathematics or Science Elective	3-4	
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**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

____ GE Social Science Elective	3	
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____ GE Social Science Elective	3	
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**Liberal Arts Electives**

____ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course except PED 270.

ENG-255 Introduction to Film	3	ENG 122 or written permission of the department chairperson
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ENG-262 Cinema History	3	ENG 122 or written permission of the department chairperson
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ENG-263 Survey of American Cinema	3	ENG 122 or written permission of the department chairperson
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ENG-264 Survey of World Cinema	3	ENG 122 or written permission of the department chairperson
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**Divisional Elective**

ENG-265 Survey of Great Cinema Directors	3	ENG 122 or written permission of the department chairperson
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**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Communication

### Liberal Arts - Communication - LACOM.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <b>GE HUM</b> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	

**General Education Mathematics, Science and Technology**

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

___ ___ GE Technology Elective	3	
___ ___ GE Mathematics Elective	3-4	
___ ___ GE Science Elective	3-4	
___ ___ GE Mathematics or Science Elective	3-4	

**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ ___ GE Social Science Elective	3	
___ ___ GE Social Science Elective	3	

**Liberal Arts Electives**

___ ___ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

___ ___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

___ ___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

COM-105 Introduction to Communication Study	3	
COM-110 Interpersonal Communication	3	COM 105
COM-121 Mass Communication Study	3	COM 105

Recommended Courses (select one - 3 credits each):

COM-115 Intercultural Communication	3	
COM-120 Introduction to Public Relations	3	ENG 121
COM-131 Introduction to Broadcasting	3	COM 105
COM-208 Communication Seminar and Field Experience	3	Written permission of the department chairperson and Counseling and Career Services Office

With permission of the department chair, COM 208 or COM 210 may be replaced with a course relevant to the student's special focus in the communication field which will assist the student in transferring to a four-year college or university in Communication.

COM-210 Radio Broadcasting Production	3	
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With permission of the department chair, COM 208 or COM 210 may be replaced with a course relevant to the student's special focus in the communication field which will assist the student in transferring to a four-year college or university in Communication.

LNC-123 Introduction to the Study of Human Language	3	
SPE-123 Discussion and Debate	3	
ENG-205 Introduction to Journalism	3	ENG 122 or written permission of the department chairperson

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Dance

### Liberal Arts - Dance - LADAN.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Associate Professor Robert Wisniewski, department chair

Contact Phone: 732.906.2558

Contact Email: [RWisniewski@middlesexcc.edu](mailto:RWisniewski@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/health-physical-education-recreation-and-dance.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <b>GE HUM</b> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	

**General Education Mathematics, Science and Technology**

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

___ ___ GE Technology Elective	3	
___ ___ GE Mathematics Elective	3-4	
___ ___ GE Science Elective	3-4	
___ ___ GE Mathematics or Science Elective	3-4	

**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ ___ GE Social Science Elective	3	
___ ___ GE Social Science Elective	3	

**Liberal Arts Electives**

___ ___ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

___ ___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT MUS, PED, PHI, PHY, POL, POS, PS Y, SSD, SOC, SPA, SPE and THE.

___ ___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

DAN-131 Elements of Dance	3	
DAN-132 Dance Appreciation	3	
DAN-201 Methods and Modern Techniques in Dance	3	
DAN-202 Improvisation and Composition	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Education

### Liberal Arts - Education - LAEDU.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
OR		
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
PSY-123 Introduction to Psychology	3	
OR		
PSY-255 Adolescent Psychology	3	PSY 123
OR		
PSY-223 Child Psychology	3	PSY 123



**Liberal Arts Electives**

____ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

PSY-226 Educational Psychology	3	PSY 123
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Choose electives in Liberal Arts content areas from any of the college's two divisions. These include courses with the following designations: AFS, ART, BIO, CHM, COM, DAN, ECO, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POS, PSY, SCI, SOC, SPA, SPE and THE. Consult with your advisor or a transfer counselor for electives related to the four-year college or university you plan to attend.

____ Content Area Elective	3	
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____ Content Area Elective	3	
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____ Content Area Elective	3	
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**Divisional Elective**

EDU-121 Introduction to Education	3	
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**Concentrations**

Subject area concentrations may be added to the Liberal Arts Education degree by working with an academic advisor to select the 9-credit content area electives in a particular subject area.

Here are some examples:

**Music Concentration**

MUS-123 Music History: Traditional	3	
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MUS-131 Keyboard Studies I	3	
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MUS-140 Music Fundamentals	3	
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**Modern Language Concentration**

LNC-123 Introduction to the Study of Human Language	3	
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____ Modern Language Elective	6	
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Choose 6 additional credits in modern language courses that have not been taken to satisfy the requirements of the degree.

**History Concentration**

HIS-221 United States History I	3	
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HIS-222 United States History II	3	
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HIS-256 History of the Twentieth Century	3	
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**English Concentration**

ENG-221 English Literature I	3	ENG 122 or written permission of the department chairperson
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OR

ENG-225 World Literature I	3	ENG 122 or written permission of the department chairperson
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ENG-222 English Literature II	3	ENG 122 or written permission of the department chairperson
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OR

ENG-226 World Literature II	3	ENG 122 or written permission of the department chairperson
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ENG-212 Children's Literature	3	ENG 121
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OR

ENG-228 Modern British and American Poetry	3	ENG 122 or written permission of the department chairperson
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**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - English

### Liberal Arts - English - LAENG.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Department:

Contact Name: Assistant Professor Michael Nester, department chair

Contact Phone: 732.906.3048

Contact Email: [MNester@middlesexcc.edu](mailto:MNester@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/english.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		

HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	

### General Education Humanities

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	

### General Education Mathematics, Science and Technology

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	

### General Education Social Science

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

____ GE Social Science Elective	3	
____ GE Social Science Elective	3	

### Liberal Arts Electives

____ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

____ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Choose four English courses (ENG) numbered 200 or higher that the student is not taking to satisfy other requirements for the degree. All courses have a prerequisite of ENG 122. In addition, courses with a prerequisite should be completed sequentially.

____ English Elective	3	
____ English Elective	3	
____ English Elective	3	
____ English Elective	3	

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### LIBERAL ARTS

#### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAIFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - General

### Liberal Arts - General - LAGEN.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Dean David Edwards, Dean, Division of Arts and Sciences

OR Dr. Kathleen Pearle, Assistant Dean, Division of Arts and Sciences

Contact Phone: 732.906.2533 OR 732.906.4256

Contact Email: [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	

___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3-4	

**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ GE Social Science Elective	3	
___ GE Social Science Elective	3	

**Liberal Arts Electives**

___ GE Diversity Elective	3	
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Choose one course designated in the course described as General Education Diversity ([GE DIV](#)).

___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Choose four courses from the following areas that are not being taken to satisfy other requirements: AFS, ART, BIO, CHM, COM, DAN, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POS, PSY, SOC, SPA, SPE and THE.

___ Liberal Arts Elective	3	
___ Liberal Arts Elective	3	
___ Liberal Arts Elective	3	
___ Liberal Arts Elective	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAIFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Genocide and the Holocaust

### Liberal Arts - Genocide and the Holocaust - LAGNH.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
_____ History of Western Civilization I	3	
_____ History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
_____ GE Humanities Elective	3	
_____ GE Humanities - Language Elective	3	
_____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
_____ GE Technology Elective	3	
_____ GE Mathematics Elective	3-4	
_____ GE Science Elective	3-4	
_____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
_____ GE Social Science Elective	3	
_____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
_____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
_____ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course except PED 270.

HIS-124 History of Civilization in the Third World	3	
HIS-245 History of Major World Religions	3	
HIS-256 History of the Twentieth Century	3	
HIS-260 Dimensions of Prejudice, Genocide and the Holocaust	3	

#### Divisional Elective

PSY-222 Social Psychology	3	PSY 123 or SOC 121
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#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### LIBERAL ARTS

##### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAGA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

**Liberal Arts - History****Liberal Arts - History - LAHIS.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
_____ English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
_____ English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
_____ GE Humanities Elective	3	
_____ GE Humanities - Language Elective	3	
_____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
_____ GE Technology Elective	3	
_____ GE Mathematics Elective	3-4	
_____ GE Science Elective	3-4	
_____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
_____ GE Social Science Elective	3	
_____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
_____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
_____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAD, MAT, MUS, PED, PHI, PHY, POL, P OS, PSY, SSD, SOC, SPA, SPE and THE.		
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
Students should choose four History (HIS) courses that they are not taking to satisfy other requirements for the degree.		
_____ History Elective	3	
_____ History Elective	3	
_____ History Elective	3	
_____ History Elective	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**LIBERAL ARTS****Associate in Arts (A.A.) Degree**



This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### **Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### **Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

## **Liberal Arts - Journalism**

### **Liberal Arts - Journalism - LAJOU.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Michael Nester, department chair

Contact Phone: 732.906.3048

Contact Email: [MNester@middlesexcc.edu](mailto:MNester@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/english.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
ENG-205 Introduction to Journalism	3	ENG 122 or written permission of the department chairperson
ENG-206 Journalism II	3	ENG 205 or written permission of the department chairperson
ENG-214 Journalism/Writing Field Experience	3	BUS 205 or ENG 205 or ENG 235 and written permission of the department chairperson and Counseling and Career Services Office
Recommended Courses (select one - 3 credits each):		
ENG-235 Creative Writing I	3	ENG 122 or written permission of the department chairperson
ENG-225 World Literature I	3	ENG 122 or written permission of the department chairperson
ENG-226 World Literature II	3	ENG 122 or written permission of the department chairperson
POS-201 United States State and Local Government	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**LIBERAL ARTS**

**Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Modern Language

### Liberal Arts - Modern Language - LAMLA.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Mr. Gary Abbott, department chair

Contact Phone: 732.906.2529

Contact Email: [GAbbott@middlesexcc.edu](mailto:GAbbott@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/esl-languages-and-cultures-and-center-for-international-education.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121

SPE-121 Fundamentals of Public Speaking	3	
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OR

SPE-123 Discussion and Debate	3	
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#### General Education History

HIS-121 History of Western Civilization I	3	
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HIS-122 History of Western Civilization II	3	
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#### General Education Humanities

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

___ GE Humanities Elective	3	
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___ GE Humanities - Language Elective	3	
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___ GE Humanities - Language Elective	3	
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#### General Education Mathematics, Science and Technology

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

___ GE Technology Elective	3	
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___ GE Mathematics Elective	3-4	
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___ GE Science Elective	3-4	
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___ GE Mathematics or Science Elective	3-4	
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#### General Education Social Science

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ GE Social Science Elective	3	
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___ GE Social Science Elective	3	
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#### Liberal Arts Electives

___ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Choose four modern language courses that you are not taking to satisfy courses the requirement of the degree.

The following courses are recommended:

LNC 123 Introduction to the Study of Modern Languages COM 115 Intercultural Communication

___ Modern Language Elective	3	
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___ Modern Language Elective	3	
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___ Modern Language Elective	3	
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___ Modern Language Elective	3	
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#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### LIBERAL ARTS

##### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAIFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Music

### Liberal Arts - Music - LAMUS.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	

#### General Education Mathematics, Science and Technology

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3-4	

#### General Education Social Science

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ GE Social Science Elective	3	
___ GE Social Science Elective	3	

#### Liberal Arts Electives

___ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

MUS-131 Keyboard Studies I	3	
MUS-132 Keyboard Studies II	3	MUS 131
MUS-140 Music Fundamentals	3	
MUS-201 Music Notation and Composition I	3	MUS 140 or passing score on music theory placement test

#### Divisional Elective

MUS-202 Music Notation and Composition II	3	MUS 201
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#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

##### LIBERAL ARTS

##### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Physical Education/Recreation

### Liberal Arts - Physical Education/Recreation - LAPED.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Associate Professor Robert Wisniewski, department chair

Contact Phone: 732.906.2558

Contact Email: [RWisniewski@middlesexcc.edu](mailto:RWisniewski@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/health-physical-education-recreation-and-dance.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
___ GE Social Science Elective	3	
___ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		

___ GE Diversity Elective	3	
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Choose one course designated in the course described as General Education Diversity ([GE DIV](#)).

___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

HED-150 Contemporary Health Issues	3	
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HED-200 Human Sexuality and Family Life	3	
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PED-225 First Aid, CPR and Safety Education	3	
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Choose three 1-credit activity classes offered by the department.

___ Physical/Health Education Elective	1	
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___ Physical/Health Education Elective	1	
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___ Physical/Health Education Elective	1	
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#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

#### **LIBERAL ARTS**

#### **Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65



**Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

**Liberal Arts - Philosophy****Liberal Arts - Philosophy - LAPHI.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
OR		
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course described as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
PHI-121 Philosophy	3	
PHI-122 Logic	3	

PHI-123 Ethics	3	
HIS-245 History of Major World Religions	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

**Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Political Science

### Liberal Arts - Political Science - LAPOS.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking		
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
POS-121 Introductory Government and Politics	3	
POS-220 United States National Government	3	
Choose two courses from the following - 3 credits each:		
POS-201 United States State and Local Government	3	
POS-222 Comparative Government	3	
POS-231 Constitutional Law	3	POS 121 or POS 201 or POS 220

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### LIBERAL ARTS

#### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### **Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### **Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

## **Liberal Arts - Psychology**

### **Liberal Arts - Psychology - LAPSY.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

<b>Courses</b>	<b>Credits</b>	<b>Requisites / Comments</b>
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**General Education Communication**

ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	

OR

SPE-123 Discussion and Debate	3	
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**General Education History**

HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	

**General Education Humanities**

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	

**General Education Mathematics, Science and Technology**

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	

**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

____ GE Social Science Elective	3	
____ GE Social Science Elective	3	

**Liberal Arts Electives**

____ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

____ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Students should choose four Psychology courses (PSY) that are not being taken to satisfy other requirements for the degree.

____ Psychology Elective	3	
____ Psychology Elective	3	
____ Psychology Elective	3	
____ Psychology Elective	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Sociology

### Liberal Arts - Sociology - LASOC.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
OR		
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. Fo

For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	

#### General Education Mathematics, Science and Technology

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	

#### General Education Social Science

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

____ GE Social Science Elective	3	
____ GE Social Science Elective	3	

#### Liberal Arts Electives

____ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

____ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Students should choose four Sociology courses (SOC) that they are not taking to satisfy other requirements for the degree.

____ Sociology Elective	3	
____ Sociology Elective	3	
____ Sociology Elective	3	
____ Sociology Elective	3	

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

##### LIBERAL ARTS

##### Associate in Arts (A.A.) Degree

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Social and Rehabilitation Services

### Liberal Arts - Social and Rehabilitation Services - LASRS.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
OR		
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3	
<b>General Education Social Science</b>		
PSY-123 Introduction to Psychology	3	



SOC-121 Introduction to Sociology	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
SOC-131 Contemporary Social Problems	3	
SOC-141 Introduction to Social Work and Social Welfare Policy	3	
SOC-205 Diversity and Multiculturalism in U.S. Society	3	
SOC-210 Methods of Casework and Counseling	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**LIBERAL ARTS**

**Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

**Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

**Liberal Arts - Social Sciences****Liberal Arts - Social Sciences - LASS.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: History and Social Science Department

Contact Phone: 732.906.2590

Contact Email: [HSS@middlesexcc.edu](mailto:HSS@middlesexcc.edu) OR [Advising@middlesexcc.edu](mailto:Advising@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/history-and-social-science.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
Students should choose four social science courses (POS, PSY, or SOC) that they are not taking to satisfy other requirements for the degree.		

___ ___ Social Science Elective	3	
___ ___ Social Science Elective	3	
___ ___ Social Science Elective	3	
___ ___ Social Science Elective	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**LIBERAL ARTS**

**Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

**Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Theatre

### Liberal Arts - Theatre - LATHE.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
___ GE Humanities Elective	3	
___ GE Humanities - Language Elective	3	
___ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
___ GE Technology Elective	3	
___ GE Mathematics Elective	3-4	
___ GE Science Elective	3-4	
___ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
___ GE Social Science Elective	3	
___ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
___ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
___ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
___ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
THE-145 Stagecraft	3	
THE-146 Play Production	3	
Choose two of the following courses - 3 credits each:		
DAN-131 Elements of Dance	3	
DAN-132 Dance Appreciation	3	
DAN-201 Methods and Modern Techniques in Dance	3	
SPE-124 Oral Interpretation	3	
THE-105 Introduction to Theatre	3	
THE-123 Theatre History	3	
THE-124 Contemporary Theatre	3	
THE-131 Acting I	3	
THE-132 Acting II	3	THE 131
THE-152 American Musical Theatre	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAAFA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

**Why study the Liberal Arts?**

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Please See Department Contact Information On Top of Page**

<https://applyto.middlesexcc.edu/application/login.php>

**Liberal Arts - Visual Arts****Liberal Arts - Visual Arts - LAVA.AA (Associate in Arts Degree)**

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
OR		
SPE-123 Discussion and Debate	3	
<b>General Education History</b>		
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
<b>General Education Humanities</b>		
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.		
____ GE Humanities Elective	3	
____ GE Humanities - Language Elective	3	
____ GE Humanities - Language Elective	3	
<b>General Education Mathematics, Science and Technology</b>		
Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ( <a href="#">GE MST</a> ), one or two math courses ( <a href="#">GE MST</a> ) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.		
____ GE Technology Elective	3	
____ GE Mathematics Elective	3-4	
____ GE Science Elective	3-4	
____ GE Mathematics or Science Elective	3-4	
<b>General Education Social Science</b>		
Choose courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ GE Social Science Elective	3	
____ GE Social Science Elective	3	
<b>Liberal Arts Electives</b>		
____ GE Diversity Elective	3	
Choose one course designated in the course descriptions as General Education Diversity ( <a href="#">GE DIV</a> ).		
____ Divisional Elective	3	
Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
ART-145 Art Fundamentals: Two Dimensions	3	
ART-146 Art Fundamentals: Three Dimensions	3	
Choose two of the following courses - 3 credits each:		
ART-123 Art History: Ancient to Renaissance	3	
ART-124 Art History: Renaissance to Modern	3	
ART-125 Art History: Modern and Contemporary	3	

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**LIBERAL ARTS**

**Associate in Arts (A.A.) Degree**

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**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAWRT.AA - Liberal Arts - Writing - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66

LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Liberal Arts - Writing

### Liberal Arts - Writing - LAWRT.AA (Associate in Arts Degree)

Credits: 61-66 Credits Required

Description: Below are required courses for program completion.

Department:

Contact Name: Assistant Professor Michael Nester, department chair

Contact Phone: 732.906. 3048

Contact Email: [MNester@middlesexcc.edu](mailto:MNester@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/english.html>

Courses	Credits	Requisites / Comments
<b>General Education Communication</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121

SPE-121 Fundamentals of Public Speaking	3	
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OR

SPE-123 Discussion and Debate	3	
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**General Education History**

HIS-121 History of Western Civilization I	3	
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HIS-122 History of Western Civilization II	3	
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**General Education Humanities**

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)). Choose two modern language courses in sequence from either: FRE, GER, ITA or SPA. For students who completed at least two years of high school study in one modern language, their level of language will be determined by a placement test excluding SPA 242.

___ GE Humanities Elective	3	
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___ GE Humanities - Language Elective	3	
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___ GE Humanities - Language Elective	3	
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**General Education Mathematics, Science and Technology**

Students must take 12-15 credits in General Education Mathematics, Science, and Technology courses. Choose one or two science courses ([GE MST](#)), one or two math courses ([GE MST](#)) and one technology course, in consultation with an academic advisor. For the technology elective, choose either CSC 105 or CSC 106.

___ GE Technology Elective	3	
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___ GE Mathematics Elective	3-4	
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___ GE Science Elective	3-4	
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___ GE Mathematics or Science Elective	3-4	
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**General Education Social Science**

Choose courses designated in the course descriptions as General Education Social Science ([GE SS](#)).

___ GE Social Science Elective	3	
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___ GE Social Science Elective	3	
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**Liberal Arts Electives**

___ GE Diversity Elective	3	
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Choose one course designated in the course descriptions as General Education Diversity ([GE DIV](#)).

___ Divisional Elective	3	
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Choose one course from the following areas: AFS, ART, ASL, BIO, CHM, CJU, COM, COR, DAN, EDU, ENG, FRE, GER, HED, HIS, ITA, LNC, MAT, MUS, PED, PHI, PHY, POL, POS, PSY, SSD, SOC, SPA, SPE and THE.

___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

Choose 4 English courses (ENG) from the following list of (writing-intensive) courses - 3 credits each:

ENG-205 Introduction to Journalism	3	ENG 122 or written permission of the department chairperson
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ENG-206 Journalism II	3	ENG 205 or written permission of the department chairperson
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ENG-235 Creative Writing I	3	ENG 122 or written permission of the department chairperson
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ENG-236 Creative Writing II	3	ENG 122 or written permission of the department chairperson
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ENG-237 Advanced Writing Workshop	3	ENG 122 or written permission of the department chairperson
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ENG-238 Technical Writing	3	ENG 122 or written permission of the department chairperson
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ENG-240 Business Communication	3	ENG 122
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ENG-260 Scriptwriting	3	ENG 122 or written permission of the department chairperson
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**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****LIBERAL ARTS****Associate in Arts (A.A.) Degree**

This program provides graduates a foundation for lifelong intellectual development and a fulfilling life. It also develops a powerful knowledge base and set of critical thinking skills they will use over the course of their professional careers.

**Related Programs - You may also be interested in one of the following programs:**

LAFAA.AA - Liberal Arts - African-American Studies - Credits 61-66

LAVA.AA - Liberal Arts - Visual Arts - Credits 61-66

LATHE.AA - Liberal Arts - Theatre - Credits 61-66

LASS.AA - Liberal Arts - Social Sciences - Credits 61-66

LASRS.AA - Liberal Arts - Social and Rehabilitation Services - Credits 61-66

LASOC.AA - Liberal Arts - Sociology - Credits 61-66

LAPSY.AA - Liberal Arts - Psychology - Credits 61-66

LAPOS.AA - Liberal Arts - Political Science - Credits 61-66



LAPHI.AA - Liberal Arts - Philosophy - Credits 61-66

LAPED.AA - Liberal Arts - Physical Education/Recreation - Credits 61-66

LAMUS.AA - Liberal Arts - Music - Credits 61-66

LAMLA.AA - Liberal Arts - Modern Language - Credits 61-66

LAJOU.AA - Liberal Arts - Journalism - Credits 61-66

LAHIS.AA - Liberal Arts - History - Credits 61-66

LAGNH.AA - Liberal Arts - Genocide and the Holocaust - Credits 61-66

LAGEN.AA - Liberal Arts - General - Credits 61-66

LAENG.AA - Liberal Arts - English - Credits 61-66

LAEDU.AA - Liberal Arts - Education - Credits 61-66

LADAN.AA - Liberal Arts - Dance - Credits 61-66

LACOM.AA - Liberal Arts - Communication - Credits 61-66

LACIN.AA - Liberal Arts - Cinema Studies - Credits 61-66

LABUS.AA - Liberal Arts - Business - Credits 60-65

#### Why study the Liberal Arts?

A Liberal Arts education helps students develop strong and ordered minds as they explore the world's collected wisdom in literature, history, mathematics, science, philosophy and the arts. It teaches them to recognize and construct arguments, to appreciate diverse cultures and perspectives, and to have a sense of humility about lives and minds that have gone before. Its emphasis on language helps students broaden their cultural perspective and become more aware of their own identity. The courses comprising a liberal arts education at Middlesex are the core of all liberal arts programs at the bachelor's level. Students may select the general degree, the most flexible of all our Liberal Arts programs, or one of the many specialized options.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Competency in Algebra I may be verified with a passing score on the College's placement test or by completion of the appropriate course. Students must also have a grade of "C" or better in one year of high school laboratory science.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Please See Department Contact Information On Top of Page

<https://applyto.middlesexcc.edu/application/login.php>

## Media Arts and Design - Advertising Graphic Design

### Media Arts and Design - Advertising Graphic Design - MADAD.AAS (Associate in Applied Science)

Credits: 61-63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Note: As not all courses are offered every semester, it is important to follow the recommended sequence below.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-105 Computer Applications and Systems	3	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAD-107 Photography I	3	
MAD-113 Two-Dimensional Design	3	
MAD-117 Freehand Drawing	3	
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
ART-104 History of Photography	3	

OR		
ART-124 Art History: Renaissance to Modern	3	
OR		
ART-125 Art History: Modern and Contemporary	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAD-108 Photography II	3	MAD-107
MAD-114 Three-Dimensional Design	3	MAD 113, MAD 117
MAD-118 Graphic Design Skills	3	MAD 113, MAD 117
<b>Semester III</b>		
BUS-101 Business Organization and Management	3	
OR		
SBM-120 Small Business Management	3	
AGD-213 Typography	3	All MAD courses
AGD-219 Digital Graphics	3	All MAD courses
___ GE Mathematics or Science Elective	3	
MAT 101 or higher level mathematics course OR any General Education 3-credit science course. Students who are planning to transfer to a four-year school should discuss their choices with an academic advisor.		
___ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
___ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester IV</b>		
AGD-212 Advertising Design	3	AGD 213 and AGD 219
AGD-214 Print Production	3	All MAD courses and AGD 219
AGD-280 Portfolio	3	All MAD courses and 6 credits of AGD courses
MKT-143 Salesmanship	3	
OR		
MKT-203 Principles of Advertising	3	BUS 101
___ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**MEDIA ARTS AND DESIGN  
VISUAL, PERFORMING, AND MEDIA ARTS DEPARTMENT**

In this program, students have the opportunity to explore the media arts field by combining courses in web design, digital commercial photography, and advertising/graphic design. In addition to coursework which is directly applicable to the evolving media arts and design field, students will take general education courses that prepare them for a competitive workforce. The program emphasizes hands-on experience in the laboratory or studio to develop both creative ability and the technical skills essential to media arts careers. This degree prepares students for a career as a web designer, commercial artist, or photographer in a variety of settings including advertising agencies, company advertising departments, publishing companies, photography studios, color reproduction laboratories, printing firms, or retail establishments. The faculty who teach major courses have professional experience in the media arts and design field.

**Related Programs - You may also be interested in one of the following programs:**

MADPH.AAS - Media Arts and Design - Professional Commercial Photography - Credits 61-63

**Can students transfer to a four-year college or university?**

Students who earn the A.A.S. degree have the opportunity to transfer their coursework to a four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**Why major in Media Arts & Design?**

There is a growing need for web designers, graphic artists, advertising professionals, and photographers. Students who choose the A.A.S. degree in Media Arts and Design have the opportunity to explore a variety of directions as they gain skills. Students who select either Advertising/Graphic Design, or Professional Commercial Photography will focus more closely on one aspect of this growing field. In each case, students gain hands-on experience with state-of-the-art equipment used by professional designers and photographers. Small class sizes allow students to work on individual as well as team projects, finding creative solutions to design problems, just as they would in the professional art and design fields. Students will develop their own e-portfolios of creative work which will assist them in securing employment, starting their own business, or continuing their education in the field.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web:

<https://applyto.middlesexcc.edu/application/login.php>

**Media Arts and Design - Professional Commercial Photography****Media Arts and Design - Professional Commercial Photography - MADPH.AAS (Associate in Applied Science)**

Credits: 61-63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Note: As not all courses are offered every semester, it is important to follow the recommended sequence below.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CSC-105 Computer Applications and Systems	3	
MAD-107 Photography I	3	
MAD-113 Two-Dimensional Design	3	
MAD-117 Freehand Drawing	3	
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
ART-104 History of Photography	3	
OR		
ART-124 Art History: Renaissance to Modern	3	
OR		
ART-125 Art History: Modern and Contemporary	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAD-108 Photography II	3	MAD-107
MAD-114 Three-Dimensional Design	3	MAD 113, MAD 117
MAD-118 Graphic Design Skills	3	MAD 113, MAD 117
<b>Semester III</b>		
BUS-101 Business Organization and Management	3	
OR		
SBM-120 Small Business Management	3	
Students who take SBM 120 need special permission to enroll in MKT 203.		
PCP-221 Color Photography	3	MAD 107 and MAD 108
PCP-225 Commercial Photography	3	MAD 107 and MAD 108
_____ GE Mathematics or Science Elective	3	
MAT 101 or higher level mathematics course OR any General Education 3-credit science course. Students who are planning to transfer to a four-year school should discuss their choices with an academic advisor.		
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
_____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester IV</b>		

MKT-143 Salesmanship	3	
OR		
MKT-203 Principles of Advertising	3	BUS 101
PCP-224 Digital Imaging	3	MAD 107 and MAD 108
PCP-226 Professional Studio Photography	3	MAD 107 and MAD 108
PCP-280 Portfolio	3	MAD 107 and MAD 108 and a minimum of two PCP courses

MAD 107, MAD 108 and a minimum of 2 PCP courses. Corequisite(s): the remaining six credits of PCP courses.

___ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## MEDIA ARTS AND DESIGN VISUAL, PERFORMING, AND MEDIA ARTS DEPARTMENT

In this program, students have the opportunity to explore the media arts field by combining courses in web design, digital commercial photography, and advertising/graphic design. In addition to coursework which is directly applicable to the evolving media arts and design field, students will take general education courses that prepare them for a competitive workforce. The program emphasizes hands-on experience in the laboratory or studio to develop both creative ability and the technical skills essential to media arts careers. This degree prepares students for a career as a web designer, commercial artist, or photographer in a variety of settings including advertising agencies, company advertising departments, publishing companies, photography studios, color reproduction laboratories, printing firms, or retail establishments. The faculty who teach major courses have professional experience in the media arts and design field.

**Related Programs - You may also be interested in one of the following programs:**

MADAD.AAS - Media Arts and Design - Advertising Graphic Design - Credits 61-63

### Can students transfer to a four-year college or university?

Students who earn the A.A.S. degree have the opportunity to transfer their coursework to a four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

### Why major in Media Arts & Design?

There is a growing need for web designers, graphic artists, advertising professionals, and photographers. Students who choose the A.A.S. degree in Media Arts and Design have the opportunity to explore a variety of directions as they gain skills. Students who select either Advertising/Graphic Design, or Professional Commercial Photography will focus more closely on one aspect of this growing field. In each case, students gain hands-on experience with state-of-the-art equipment used by professional designers and photographers. Small class sizes allow students to work on individual as well as team projects, finding creative solutions to design problems, just as they would in the professional art and design fields. Students will develop their own e-portfolios of creative work which will assist them in securing employment, starting their own business, or continuing their education in the field.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Questions?

Contact Name: Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web:

<https://applyto.middlesexcc.edu/application/login.php>

## Mathematics - Science Transfer

### Mathematics - Science Transfer - MAT.AS (Associate in Science Degree)

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Dr. Don Groninger, associate department chair

Contact Phone: 732.906.3730

Contact Email: [DGroninger@middlesexcc.edu](mailto:DGroninger@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/mathematics.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-123 General Biology I	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.
OR		
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
AND		
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school

		chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
OR		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
AND		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
_____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
BIO-124 General Biology II	4	BIO 123
OR		
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
AND		
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>Semester III</b>		
MAT-233 Analytic Geometry and Calculus III	4	MAT 132 or equivalent
_____ Mathematics Elective	4	
Choose from MAT 206, MAT 210, MAT 257, MAT 285		
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
_____ Elective	3	
Except SSD 101		
<b>Semester IV</b>		
MAT-234 Differential Equations	4	MAT 233 or written permission of the department chairperson
_____ Mathematics Elective	4	
Choose from MAT 206, MAT 210, MAT 257, MAT 285		
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		
GE SS GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****MATHEMATICS  
MATHEMATICS DEPARTMENT**

This program parallels the first two years of a baccalaureate degree program in mathematics. The mathematics major prepares students, upon graduation, to transfer to a four-year college or university to pursue professional careers requiring quantitative reasoning and analytical thinking. Traditional mathematics occupations consist of teaching positions in schools and colleges or research positions in universities or industry. Other related mathematics fields include statistics, survey and market research, operations research, computer systems design and programming, economics and finances, and robotics and aerodynamics. Careers in applied mathematics usually focus on developing mathematical models for technical and scientific data, whether in physics, chemistry, biology, engineering or medicine.

**Are there any requirements that must be satisfied before taking courses in the major?**

Students must demonstrate proficiency in elementary (MAT 013 or MAT 013A/MAT 013B) and intermediate (MAT 014 or MAT 014A/MAT 014B) algebra, as well as precalculus (MAT 129 or MAT 129A/MAT 129B). In addition, they must successfully complete all courses required by the College's placement tests, and fulfill the science course prerequisites. The science courses of biology and chemistry require a high school laboratory course with a minimum grade of "C" or the equivalent developmental science courses (BIO 010, CHM 010).

#### Can students transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Don Groninger, associate department chair

Contact Phone: 732.906.3730

Contact Email: [DGroninger@middlesexcc.edu](mailto:DGroninger@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/mathematics.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Mechanical Engineering Technology

### Mechanical Engineering Technology - MEC.AAS (Associate in Applied Science)

Credits: 63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ELT-105 Foundations of Electrical and Electronics Technology	4	MAT 013 or appropriate score on College placement test
MEC-123 Technical Graphics/CAD I	3	
_____ Physical/Health Education Elective	1	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
CIT-105 Statics for Technicians	3	MCT 101, MAT 129 or MAT 129A
MEC-125 Advanced Mechanical Drawing/CAD II	3	MEC 123
MEC-130 Manufacturing Processes and Materials	3	
<b>Semester III</b>		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
CIT-203 Strength of Materials	4	CIT 105
MEC-228 Kinematics Design	3	MEC 123 and MAT 129 or MAT 129B
MEC-250 Solid Modeling	3	MEC 123
<b>Semester IV</b>		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
MEC-204 Fluid Mechanics	4	CIT 105 and MAT 129 or MAT 129B
MEC-260 Mechanical Design Project	2	MEC 228
MCT-220 Introduction to Robotics and Control Systems	3	MEC 123, MAT 129 or MAT 129B, ELT 105
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
OR		

___ GE Social Science Elective	3
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### MECHANICAL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT

Mechanical Engineering Technology provides the right combination of theory and hands-on training to prepare students for employment opportunities in the design, manufacture and set-up of mechanical equipment such as engines, power generation and control systems, and manufacturing systems (including robots). Specific job responsibilities include working as a designer, computer aided design/drafting, instrumentation and testing of machines and systems, and developing and troubleshooting manufacturing systems.

**Related Programs - You may also be interested in one of the following programs:**

MECCD.COA - Computer Aided Drafting Certificate of Achievement - Credits 16

#### Can students who major in Mechanical Engineering Technology transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a grade of "C" or better in high school algebra II and geometry.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Computer Aided Drafting Certificate of Achievement

### Computer Aided Drafting Certificate of Achievement - MECCD.COA (Certificate of Achievement)

Credits: 16 Credits Required

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MEC-130 Manufacturing Processes and Materials	3	
MEC-123 Technical Graphics/CAD I	3	
CIT-126 Advanced Civil Drawing/CAD-II	3	MEC 123
OR		
MEC-125 Advanced Mechanical Drawing/CAD II	3	MEC 123
CIT-125 Construction Estimating	2	
MEC-250 Solid Modeling	3	MEC 123

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### MECHANICAL ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT

Mechanical Engineering Technology provides the right combination of theory and hands-on training to prepare students for employment opportunities in the design, manufacture and set-up of mechanical equipment such as engines, power generation and control systems, and manufacturing systems (including robots). Specific job responsibilities include working as a designer, computer aided design/drafting, instrumentation and testing of machines and systems, and developing and troubleshooting manufacturing systems.

**Related Programs - You may also be interested in one of the following programs:**

MEC.AAS - Mechanical Engineering Technology - Credits 63

#### Can students who major in Mechanical Engineering Technology transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Articulation agreements with public and

private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a grade of "C" or better in high school algebra II and geometry.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Medical Laboratory Technology

### Medical Laboratory Technology - MED.AAS (Associate in Applied Science)

Credits: 71 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Stephen Larkin, department chair

Contact Phone: 732.906.2581

Contact Email: [SLarkin@middlesexcc.edu](mailto:SLarkin@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/medical-laboratory-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-117 Biology I	4	Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010
BIO 123-BIO 124 and CHM 121/CHM 125 - CHM 122/CHM 126 may be substituted for BIO 117-BIO 118, CHM 117- CHM 118 for students who meet those course prerequisites and with the chairperson's written approval.		
CHM-117 Chemistry I	4	MAT 013 or appropriate score on the College placement test and one year of high school laboratory science or departmental approval
BIO 123-BIO 124 and CHM 121/CHM 125 - CHM 122/CHM 126 may be substituted for BIO 117-BIO 118, CHM 117- CHM 118 for students who meet those course prerequisites and with the chairperson's written approval.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
MAT 123-MAT 124 or MAT 129-MAT 131 may be substituted for MAT 107-MAT 108 for students who have completed two or more years of high school Algebra, with the Chairperson's written approval.		
MED-101 Introduction to the Medical Laboratory I	2	Admission to the Medical Laboratory Technology program required
Admission to the Medical Laboratory Technology program required or departmental approval. MED 101 is only offered in the fall.		
<b>Semester II</b>		
BIO-118 Biology II	4	BIO 117
BIO 123-BIO 124 and CHM 121/CHM 125 - CHM 122/CHM 126 may be substituted for BIO 117-BIO 118, CHM 117- CHM 118 for students who meet those course prerequisites and with the chairperson's written approval.		
CHM-118 Chemistry II	4	CHM 117
BIO 123-BIO 124 and CHM 121/CHM 125 - CHM 122/CHM 126 may be substituted for BIO 117-BIO 118, CHM 117- CHM 118 for students who meet those course prerequisites and with the chairperson's written approval.		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-108 Mathematics II	3	MAT 107
MAT 123-MAT 124 or MAT 129-MAT 131 may be substituted for MAT 107-MAT 108 for students who have completed two or more years of high school Algebra, with the Chairperson's written approval.		
MED-102 Introduction to the Medical Laboratory II	3	BIO 117; CHM 117; ENG 121; MAT 107 and MED 101
MED 102 is only offered in the spring.		
PSY-123 Introduction to Psychology	3	
<b>Semester III</b>		
MED-210 Medical Laboratory Technology I	6	BIO 118; CHM 118; ENG 122; MAT 108; MED 102 and written permission of the department chairperson
MED 210 is only offered in the summer.		
This is an eight week, 40 hour/week summer clinical practicum.		
<b>Semester IV</b>		



MED-211 Medical Laboratory Technology II	8	MED 210
MED 211 is only offered in the fall.		
This includes a 16 hour/week clinical practicum.		
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
BIO 221 may be substituted for BIO 211.		
CHM-201 Principles of Organic Chemistry	4	CHM 118, CHM 122, CHM 126 or equivalent
_____ Physical Education Elective	1	

#### Semester V

CHM-202 Biochemistry	4	CHM 201
MED-212 Medical Laboratory Technology III	8	BIO 211 and MED 211

This includes a 16 hour/week clinical practicum.

#### Standards of Progress

Maintain a cumulative grade point average of 2.0. Must achieve a "C" grade or better in all the Medical Laboratory and science courses. Those not attaining these levels of achievement will be dropped from the program. May retake a science or Medical Laboratory course only once and obtain a passing grade. (i.e. "C" or better) Repeating a Medical Laboratory course is subject to the restrictions as outlined below in #6. Any student achieving a grade less than a "C" in a clinical MED course may not continue in the program. The clinical course with the deficient grade must be repeated, subject to the restrictions of the program as outlined below in #6. Any student failing the practicum portion of the course will fail the course. Must complete the MED sequence of MED 210, MED 211, MED 212, in consecutive sequential semesters as offered, i.e. MED 210 in summer, MED 211 in fall, and MED 212 in spring. A break in the sequence of MED 210, MED 211, MED 212 for any reason will require the student to reapply. Readmission to the MED course(s) will be determined by seat availability. Formal sanctions for cheating in any course will result in dismissal from the MLT program. The goals of the program are consistent with the college's mission of developing competencies for employment and continuing education.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### MEDICAL LABORATORY TECHNOLOGY MEDICAL LABORATORY TECHNOLOGY DEPARTMENT

*The Program in Medical Laboratory Technology is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS)\*.*

Qualified personnel are needed to work for laboratories, research laboratories, pharmaceutical companies, veterinary laboratories, as well as sales and quality control. Students can find positions in hospitals and reference laboratories. Technicians perform scientific analyses that facilitate physicians' diagnoses and treatment of diseases.

#### What will students learn if they study Medical Laboratory Technology?

Students receive an integrated experience, with lectures and laboratory practices, both on-campus and in clinical facilities offcampus. They learn how to test specimens accurately and swiftly, with the highest ethical standards.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must have a "C" or better in high school laboratory biology and laboratory chemistry. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. Students who register for an average of 17 credits each semester can complete the degree in two years. Students must register for the summer session following their first year.

#### Are graduates eligible for any national certification exams?

Successful completion of the program leads to an Associates in Applied Science degree. After graduation, graduates are eligible to take the national certification exam offered through the American Society of Clinical Pathology Board of Certification in the Medical Laboratory Technology category. Students are eligible for this certification exam, as well as other exams that may be offered.

#### Are there any special requirements once the student is admitted to this major?

He or she must meet the academic standards of progress outlined on the next page to stay in the program. Are there any other things I should consider before I apply? Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose medical laboratory technology as a career:

#### Practical Considerations:

The following Practical Considerations are listed so the student may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communications skills in the English language to effectively and accurately communicate with patients, peers, and supervisors.
2. Have sufficient visual acuity to determine a specimen's macroscopic characteristics and color. Have sufficient visual acuity to determine microscopic cell characteristics and staining properties.
3. Have motor skills and strength capable of fine and delicate manipulation and adjustments.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.

#### Health Considerations:

Due to the nature of clinical experiences in the Medical Laboratory Technology Program, students will be participating in a work environment that has the potential of exposure to blood borne pathogens and infectious diseases. All students accepted into the Medical Laboratory Technology Program are provided with instruction on infection control protocols specific to the Program in order to reduce the risk of disease transmission.

#### Legal Considerations:

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College and the Medical Laboratory Technology Department and/or participating clinical facilities as a consideration of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check .

**\* National Accrediting Agency for Clinical Laboratory Science (NAACLS)**

5600 N. River Road, Suite 720

Rosemont, IL 60018

Phone: 773.714.8800

Website: [www.naacls.org](http://www.naacls.org)**Questions?**

Contact Name: Associate Professor Stephen Larkin, department chair

Contact Phone: 732.906.2581

Contact Email: [SLarkin@middlesexcc.edu](mailto:SLarkin@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/medical-laboratory-homepage.html><https://applyto.middlesexcc.edu/application/login.php>**Management****Management - MGT.AAS (Associate in Applied Science)**

Credits: 60-63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BUS-101 Business Organization and Management	3	
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
Students with the appropriate academic prerequisites, in consultation with their academic advisor, should select the appropriate mathematics course. MAT courses with the designation <a href="#">GE MST</a> fulfills the general education elective.		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>Semester II</b>		
ACC-101 Financial Accounting	4	
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MGT-210 Concepts of Business Management	3	BUS 101
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester III</b>		
ACC-102 Managerial Accounting	4	ACC 101
MGT-214 Operations Management	3	MGT 210
ECO-202 Principles of Economics II	3	ECO 201 or written permission of the department chairperson
____ Business Elective	3	
The following business electives are recommended (3 credits each):		
MGT 208 Management Field Experience		
MKT 201 Marketing I		
SPE-121 Fundamentals of Public Speaking	3	
<b>Semester IV</b>		
BUS-201 Business Law I	3	
MGT-205 Principles of Labor Relations	3	BUS 101 or MGT 220
MGT-216 Seminar in Management Experiences	3	ACC 102, ECO 202, ENG 122, MGT 205, MGT 210 and MGT 220
MGT-220 Human Resources Management	3	
____ GE Science Elective	3-4	

Choose one Science course designated in the course descriptions as General Education Math, Science and Technology ([GE MST](#)) and with a BIO, CHM, PHY or SCI course code.

Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****MANAGEMENT  
ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

Management is a people-oriented career requiring students to have an understanding of the role of management in a complex and dynamic society. For students with experience in a particular field, earning their degree in management may open up employment and promotion opportunities in various aspects of industry, commerce, specialized institutions, and government.

**Related Programs - You may also be interested in one of the following programs:**

MGTS.CER - Management Support Services Certificate - Credits 30

#### Can students who major in Management transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### What will students learn if they study Management?

They establish or upgrade their managerial skills. The program is a comprehensive blend of social science theories, organizational behavior and design, classical management theories, managerial processes, functions, and decision-making.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Management Support Services Certificate

### Management Support Services Certificate - MGTS.CER (Certificate)

Credits: 30 Credits Required

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
BUS-101 Business Organization and Management	3	
BUS-240 Business Communication	3	ENG 122 or permission of department chair
MGT-210 Concepts of Business Management	3	BUS 101
MGT-220 Human Resources Management	3	
MGT-205 Principles of Labor Relations	3	BUS 101 or MGT 220
___ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GESS](#)).

___ Business Elective	3	
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The following business electives are recommended (3 credits each):

MKT 201 Marketing I

MGT 200 Principles of Supervision

MGT 208 Management Field Experience

___ Business Elective	3	
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The following business electives are recommended (3 credits each):

MKT 201 Marketing I

MGT 200 Principles of Supervision

MGT 208 Management Field Experience

#### Program Note

Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

### MANAGEMENT ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Management is a people-oriented career requiring students to have an understanding of the role of management in a complex and dynamic society. For students with experience in a particular field, earning their degree in management may open up employment and promotion opportunities in various aspects of industry, commerce, specialized institutions, and government.

**Related Programs - You may also be interested in one of the following programs:**

MGT.AAS - Management - Credits 60-63

**Can students who major in Management transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**What will students learn if they study Management?**

They establish or upgrade their managerial skills. The program is a comprehensive blend of social science theories, organizational behavior and design, classical management theories, managerial processes, functions, and decision-making.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or by completion of the appropriate course.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Marketing****Marketing - MKT.AAS (Associate in Applied Science)**

Credits: 60-63 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ACC-101 Financial Accounting	4	
BUS-101 Business Organization and Management	3	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
Students with the appropriate academic prerequisites, in consultation with their academic advisor, should select the appropriate mathematics course. Only MAT courses with the designation <a href="#">GE MST</a> fulfill the General Education elective.		
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
<b>Semester II</b>		
ACC-102 Managerial Accounting	4	ACC 101
BUS-201 Business Law I	3	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MKT-201 Marketing I	3	BUS 101
SPE-121 Fundamentals of Public Speaking	3	
<b>Semester III</b>		
____ Business Elective	3	
Recommended Business Electives (3 credits each):		
MKT 209 Marketing Field Experience		
BUS 202 Business Law II		
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
MKT-202 Marketing II	3	
MKT-203 Principles of Advertising	3	BUS 101
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester IV</b>		
ECO-202 Principles of Economics II	3	ECO 201 or written permission of the department chairperson
MKT-143 Salesmanship	3	
MKT-206 Marketing Management Seminar	3	MKT 202
____ GE Science Elective	3	

Choose one Science course designated in the course descriptions as General Education Math, Science and Technology ([GE MST](#)) and with a BIO, CHM, PHY or SCI course code.

___ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### MARKETING ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

The distribution of goods and services is one of the fastest growing business fields in the nation. It is especially appropriate for alert, vigorous individuals who are capable of bringing new ideas and talents to a dynamic and diversified business establishment. Career possibilities include employment as a marketing trainee, marketing research assistant, advertising assistant, customer relations representative, or sales representative.

#### Can students who major in Marketing transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### What will students learn by studying Marketing?

They acquire a firm base of knowledge of business law and mathematics, accounting, computer applications, and economics. Students also study courses in general education and specific courses in marketing. Note: Not all MKT courses are offered every semester both day and evening. Students should call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Fine Arts - Music Option

### Fine Arts - Music Option - MUS.AFA (Associate in Fine Arts Degree)

Credits: 64-68 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisites and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>Communications (9 credits)</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
___ GE Social Science Elective	3	

Choose three credits from courses designated in the course descriptions as [GE SS](#) from the following: African-American Studies, Anthropology, Economics, Political Science, Psychology and Sociology.

___ GE Humanities Elective	6	
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Choose six credits in sequence of the same modern language from FRE, GER, ITA, SPA. If students completed at least two years of high school study in one modern language, the level of language will be determined by a placement test excluding SPA 242.

___ GE Humanities Elective	3	
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Choose three credits in humanities from courses designated as [GE HUM](#) from the following: African-American Studies, Art, Dance, English, History, Modern Language, Music, Philosophy, Speech, and Theatre.

___ GE Mathematics or Science Elective	6-8	
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Choose any math and/or science courses with the [GE MST](#) designation numbered 101 or above that when combined will total 6-8 credits.

___ GE Diversity Elective	3	
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Choose a minimum of three credits from courses designated as [GE DIV](#). If the course is also designated as [GE HUM](#), [GE SS](#), or [GE MST](#), it may also be used to satisfy an additional graduation requirement.

CSC-105 Computer Applications and Systems	3	
___ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course.		
_____ Elective	3	
MUS-123 Music History: Traditional	3	
OR		
MUS-124 Music History: Contemporary	3	
MUS-131 Keyboard Studies I	3	
MUS-132 Keyboard Studies II	3	MUS 131
MUS-140 Music Fundamentals	3	
MUS-201 Music Notation and Composition I	3	MUS 140 or passing score on music theory placement test
MUS-202 Music Notation and Composition II	3	MUS 201
_____ Elective	3	
Additional music courses to total 3 credits		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

**FINE ARTS  
VISUAL, PERFORMING, AND MEDIA ARTS DEPARTMENT**

The Associate in Fine Arts (A.F.A.) offers the first two years of concentrated study in studio courses for students planning to transfer to a visual arts, theatre, or music baccalaureate program. As a fine arts major, the student may choose to concentrate in either theater, art or music.

**Related Programs - You may also be interested in one of the following programs:**

ART.AFA - Fine Arts - Art Option - Credits 66

THE.AFA - Fine Arts - Theatre Option - Credits 61-65

**What will students learn if they study Fine Arts?**

Fine arts will provide a strong foundation in the creative field of choice as well as a well-rounded education with a generous range of liberal arts courses required by baccalaureate fine arts programs. Students create a body of work or enhance skills in a chosen field in ways that will assist them in being accepted into a competitive fine arts program at a four-year institution.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

**How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

**Questions?**

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Nursing

### Nursing - NRB.AS (Associate in Science Degree)

Credits: 70-72 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Ms. Nancy Berger, Director of Nursing Education

**OR** Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 732.906.4660

**OR** 732.906.3502

Contact Email: [NBerger@middlesexcc.edu](mailto:NBerger@middlesexcc.edu)

**OR** [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/nursing.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
PSY-123 Introduction to Psychology	3	
CSC-107 Computers in Health Technologies	1	
Students may take other CSC courses with permission of department chairperson.		

NRB-121 Nursing Concepts in Health and Wellness	7	American Heart Association Basic Life Support (BLS) Certification for Health Care Providers
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**Semester II**

BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
PSY-232 Lifespan Development	3	PSY 123
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
NRB-122 Nursing Concepts in Health Alterations I	9	NRB 121, BIO 111, PSY 123

**Semester III**

BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
HRI-214 Nutrition Fundamentals for Nursing	3	NRB 122, BIO 112
NRB-221 Nursing Concepts Applied to Families	9	NRB 122, PSY 232, BIO 112

**Semester IV**

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ GE Elective	3	
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Choose one course designated in the course descriptions as General Education Communications ([GE COM](#)), General Education Diversity ([GE DIV](#)), General Education Humanities ([GE HUM](#)), General Education Math, Science and Technology ([GE MST](#)), or General Education Social Science ([GE SS](#)).

____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

NRB-222 Nursing Concepts in Health Alterations II	10	NRB 221, BIO 112, BIO 211, HRI 214
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**Standards of Progress**

Prior to matriculation, a nursing student must undergo a complete history and physical examination and be in compliance with the MCC and Nursing Department policy on immunizations. A student is required to have a criminal background check and drug test performed with satisfactory results acceptable by MCC and the Nursing Department and/or participating clinical facility as a condition of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and drug test. Maintain a cumulative GPA of 2.0. Achieve a "C" grade or better in all nursing courses in order to progress in the curriculum. A "C" in nursing is 77-84. Achieve a "C" grade or better for all science courses in the nursing program. If a student receives a grade less than "C" in any science course of the nursing program, the student is allowed to repeat one science course only once. Any other unsatisfactory science grades will result in program dismissal. An unsatisfactory grade (i.e. a grade less than "C") in NRB 121 results in dismissal from the Nursing Program. The student has the option to reapply to the program once. If a student earns a grade less than "C" in any nursing course other than NRB 121, the student may retake the course once and must achieve a grade of "C" or better; any subsequent failure(s) in a nursing course will result in a dismissal from the Nursing Program. The student has the option to reapply to the Nursing Program, in which case the student may retake the course once and must achieve a "C" grade or better. Attendance and participation in all scheduled learning activities of the program are expected. Students must adhere to the policies of MCC and affiliated health care agencies. A student should complete the nursing program within three years of beginning enrollment in the first nursing course, unless written allowance by the nursing director or dean is provided. A student who does not successfully complete the major nursing sequence under the above conditions may not continue in the program. Prior to graduation, the student must achieve a passing score on a NCLEX predictor test.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****NURSING  
NURSING DEPARTMENT**

This program prepares students for entry-level positions in nursing and for taking the National Council Licensure Examination for Registered Nurses (NCLEX-RN). It has been approved by the New Jersey State Board of Nursing, the New Jersey Council of Presidents, and the National League for Nursing Accrediting Commission (NLNAC).

**What is the pass rate for the NCLEX?**

The pass rate for the NCLEX is as follows:

Class of 2009 - 97.44%

Class of 2010 - 94.12%

Class of 2011 - 92.75%

**What is the role of Raritan Bay Medical Center (RBMC)?**

Raritan Bay Medical Center (RBMC) is the primary clinical site for the Nursing program.

**Are there any special requirements that must be satisfied before taking courses in the major?**

- An applicant must be a U.S. citizen or permanent resident who has been permanently domiciled in the state of New Jersey for at least one year prior to the application process.
- Students must have a "B" or better in high school laboratory biology and laboratory chemistry or an equivalent college course.
- Algebra 1 is a pre-requisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test of completion of the appropriate course. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.
- Students must have a cumulative GPA of 2.75. High school GPA will be used if the student has less than 12 college credits at the time of application.
- When students apply, they must take a Health Technologies entrance examination.

**Is there a waitlist for the Nursing program?**

No. When an applicant is admitted to the nursing program, the student starts the first nursing course and begins clinical within two weeks. If you are not admitted, then you may reapply for the next class.

**How long will it take to complete this degree?**

The standard duration of this Associate Degree program is four semesters (two years). Many students elect to take the science and general education courses required in the program before entry into the program. However, the four nursing courses must be taken in sequence and still require four semesters before graduation. Each nursing course may require Monday through Friday attendance.

**Are there any special requirements once the student is admitted to this major?**

The student must maintain a GPA of 2.0 or higher and meet the academic standards of progress to stay in the nursing program.

**Are there additional requirements after graduation to be eligible for licensure?**

The New Jersey State Board of Nursing requires that an applicant for licensure as a registered nurse must submit to the Board evidence, in such form as the Board may prescribe, that the applicant is of good moral character, is not a habitual user of drugs and never been convicted or has not pleaded nolo contendere, non vult contendere or non vult to an indictment, information or complaint alleging a violation of any Federal or State law relating to narcotic drugs. Application for licensure may be denied by the Board if violations exist. All licensure candidates must undergo a criminal history record background check, including fingerprinting prior to the issuance of the license.

**Can students who major in Nursing transfer to a four-year college or university?**

The courses students take may be applied to the Bachelor of Science (BSN) Degree. Any final decision regarding transfer courses will be made by the receiving college. MCC has articulation agreements with Felician College and Kean University that makes the transfer process as seamless as possible.

**Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose nursing as a career:

**Practical Considerations:**

The following Practical Considerations are listed so the student may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communications skills in the English language to effectively and accurately communicate with patients, peers, and supervisors.
2. Have sufficient visual acuity to accurately assess patient conditions and treat patients safely.
3. Have motor skills capable of fine and delicate manipulation of patient equipment.
4. The ability to transfer, lift and move patients without restrictions.
5. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
6. Comprehend and follow clinical policies and procedures related to the profession you choose.

**Health Considerations:**

Due to the nature of clinical experiences in the Nursing Program, students will be participating in a work environment that has the potential of exposure to bloodborne pathogens and infectious diseases. All students accepted into the Nursing Program are provided with instruction on infection control protocols specific to the Program in order to reduce the risk of disease transmission.

**Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College and the Nursing Department and/or participating clinical facilities as a consideration of admission, initial enrollment and/ or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Drug testing is a requirement for the program. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and the drug testing.

**Questions?**

Contact Name: Ms. Nancy Berger, Director of Nursing Education OR Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 732.906.4660 OR 732.906.3502

Contact Email: [NBerger@middlesexcc.edu](mailto:NBerger@middlesexcc.edu) OR [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/nursing.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Physics - Science Transfer****Physics - Science Transfer - PHY.AS (Associate in Science Degree)**

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CHM-121 General Chemistry I - Lecture	3	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
CHM-125 General Chemistry I - Lab	1	Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-131 Analytic Geometry and Calculus I	4	MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
CHM-122 General Chemistry II - Lecture	3	CHM 121 with a grade of "C" or better
CHM-126 General Chemistry II - Lab	1	CHM 121, CHM 125 with a grade of "C" or better
MAT-132 Analytic Geometry and Calculus II	4	MAT 131 or equivalent
PHY-133 Analytical Physics I - Lecture	3	One year of high school laboratory physics
PHY-136 Analytical Physics II - Lab	1	PHY 135
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
<b>Semester III</b>		



MAT-210 Linear Algebra	4	MAT 132
MAT-233 Analytic Geometry and Calculus III	4	MAT 132 or equivalent
PHY-134 Analytical Physics II - Lecture	3	PHY 133
PHY-136 Analytical Physics II - Lab	1	PHY 135
____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

#### Semester IV

MAT-234 Differential Equations	4	MAT 233 or written permission of the department chairperson
PHY-236 Analytical Physics III - Lecture	3	MAT 132 and PHY 134
PHY-239 Analytical Physics III - Lab	1	MAT 132 and PHY 136 or one year of integral and differential calculus.
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

OR

____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ Science Elective	4	
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Select from CHM 221 (lecture) with CHM 227 (lab), SCI 155, SCI 157, SCI 158, SCI 256 or a course with permission of the department chairperson. Please see catalog for appropriate prerequisites.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### PHYSICS

#### DEPARTMENT OF NATURAL SCIENCES

This program parallels the first two years of baccalaureate degree programs in physics related fields. The major prepares graduates to transfer to a four-year college or university to pursue studies in physics, applied physics, computational physics, astronomy, astrophysics, geology, meteorology, material sciences, and other related fields.

#### What will students learn if they study Science Transfer?

Students concentrate on theoretical and applied physics, and mathematics. This prepares them to meet the challenges of advanced physics in professional careers.

#### Are there any requirements that must be satisfied before taking courses in the major?

Students must have a grade of "C" or better in high school algebra II, geometry, advanced algebra and trigonometry, laboratory chemistry and laboratory physics. They must also pass the College's placement test.

#### Can students transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Paralegal Studies

### Paralegal Studies - PL.AAS (Associate in Applied Science)

Credits: 63-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		

ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
PLS-100 Introduction to the Paralegal Profession	2	
PLS-101 Legal Research	3	ENG 121, PLS 100
PLS-113 Legal Writing	2	PLS 100, PLS 101
____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

#### Semester II

PLS-121 Advanced Legal Research	2	PLS 100, PLS 101, PLS 113, CSC 105 or CSC 106
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
PLS-104 Property Transactions	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
PLS-110 Litigation Procedure	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
PLS-111 Contracts and Uniform Commercial Code	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
PLS-123 Advanced Legal Writing	2	PLS 100, PLS 101, PLS 113

#### Semester III

PLS-108 Torts	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
PLS-112 Business Organizations and Government Regulations	3	PLS 100, PLS 101, PLS 113, PLS 101 Prerequisite(s) or Corequisite(s): PLS 121 and PLS 123

#### Paralegal Electives

Choose one of the following courses (3 credits each):

PLS-105 Family Law	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
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OR

PLS-106 Wills and Estate Administration	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
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OR

PLS-109 Criminal Law and Procedure	3	PLS 100, PLS 101, PLS 113, PLS 121
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OR

PLS-208 Paralegal Field Experience	3	PLS 100, PLS 101, PLS 110, PLS 113, PLS 121 and PLS 104 or PLS 108 or PLS 109 and permission of the program director
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SPE-121 Fundamentals of Public Speaking	3	
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____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

BUS-115 Mathematics of Finance	3	Passing score on the College placement test or successful completion of MAT 013
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BUS 115 will satisfy the math requirement. Students considering transfer to a baccalaureate program should consult an academic advisor as to other math choices.

#### Semester IV

ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013
PLS-225 Portfolio Project for Paralegals	1	PLS 100, PLS 101, PLS 113, PLS 121, PLS 123, and 15 additional credits of paralegal courses (PLS Courses) and permission of the PLS program director or department chair.

#### Paralegal Electives

Choose one of the following courses (3 credits each):

PLS-105 Family Law	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
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OR

PLS-106 Wills and Estate Administration	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
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OR

PLS-109 Criminal Law and Procedure	3	PLS 100, PLS 101, PLS 113, PLS 121
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OR

PLS-208 Paralegal Field Experience	3	PLS 100, PLS 101, PLS 110, PLS 113, PLS 121 and PLS 104 or PLS 108 or PLS 109 and permission of the program director
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____ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

____ GE Science Elective	3-4	
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Choose one Science course designated in the course descriptions as General Education Math, Science and Technology ([GE MST](#)).

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### PARALEGAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Paralegals are trained specialists who, under the supervision of an attorney, perform a wide variety of legal tasks. These tasks may include legal research, law office management and preparation of legal documents. Only an attorney may provide legal services directly to the public. Students can earn the Associate in Applied Science which prepares graduates for employment

in law offices, corporate legal departments, legal services corporations, state government offices, title companies and federal and state courts. Students who have already earned an A.A., A.S., A.A.S., B.A. or B.S. degree can earn the certificate. Students with one of these degrees plus three years of full-time paralegal work experience can earn the Certificate of Achievement.

#### Can students who major in Paralegal Studies transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Students must either have a high school diploma or have passed an equivalency examination. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### What are the objectives of this program?

1. Provide a rigorous, flexible program for the quality education of the occupationally competent paralegal.
2. Provide a paralegal education program that leads to the opportunity for employment of its graduates by a wide range of employers.
3. Provide paralegals with a well-rounded, balanced education founded on a beneficial mix of general education, theory, and practical courses, stressing understanding and reasoning rather than rote learning of facts.
4. Support the general principle of ethical legal practice, professional responsibility and the prohibitions against the unauthorized practice of law by non-lawyers.
5. Provide an educational program that is responsive to the needs of the State of New Jersey and contributes to the advancement of legal professionals.
6. Provide a program that instills respect for the legal profession and its foundations, institutions, and quest for justice.
7. Maintain equality of opportunity in the educational program without discrimination or segregation on the grounds of race, color, religion, national origin or sex. The program's overall objective is to provide quality education for paralegals so that they might assist the legal profession in rendering more personal, economical services to a greater number of persons.

#### How are these objectives met?

1. Through flexible curriculum planning which stresses a balance among General Education courses, law related courses, legal specialty courses, and electives.
2. Through continual assessment of the need for the program as evidenced by the legal profession's response to regular surveys and the ability of the program to place graduates.
3. By keeping the enrollment of the program to a size that will ensure a good student-teacher ratio and give graduates a good chance for paralegal employment. This is determined in the same method as number 2 above.
4. By providing the program with a well qualified full-time director with the necessary time to devote to the extensive administrative duties of the position.

#### When students complete the program, what skills will they have?

1. Use the law library, including encyclopedias, reporter systems, digests, and practice manuals, including updating sources; utilize computer-assisted research including WESTLAW, reporter systems, statutes, administrative codes, updating sources and extended databases.
2. Understand and use rules governing courts and basic litigation procedures including telephone technique, client interviews, complaints, interrogatories, and motions.
3. Use forms and filing procedures relevant to typical legal proceedings.
4. Use forms and filing procedures in real and personal property transactions, including Real Estate Settlement Procedures Act.

**Note:** For students matriculating in this program, degree credit will not ordinarily be given for any course designated PLS which was completed more than six years prior to completion of the degree program.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Paralegal Studies Certificate

### Paralegal Studies Certificate - PLC.CER (Certificate)

Credits: 31 Credits Required

Description: The Paralegal Studies Certificate is designed for the person who already has a college degree - Associate's, Bachelor's or higher. The Program is approved by the American Bar Association and the College is a member of the American Association for Paralegal Education.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
PLS-100 Introduction to the Paralegal Profession	2	
PLS-101 Legal Research	3	ENG 121, PLS 100
PLS-113 Legal Writing	2	PLS 100, PLS 101
PLS-121 Advanced Legal Research	2	PLS 100, PLS 101, PLS 113, CSC 105 or CSC 106
PLS-123 Advanced Legal Writing	2	PLS 100, PLS 101, PLS 113
<b>Paralegal Electives</b>		
Select from the following electives. Students may choose to take more than 14 credits of electives.		
PLS-104 Property Transactions	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-105 Family Law	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-106 Wills and Estate Administration	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-108 Torts	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		

PLS-110 Litigation Procedure	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-111 Contracts and Uniform Commercial Code	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-112 Business Organizations and Government Regulations	3	PLS 100, PLS 101, PLS 113, PLS 101 Prerequisite(s) or Corequisite(s): PLS 121 and PLS 123
OR		
PLS-109 Criminal Law and Procedure	3	PLS 100, PLS 101, PLS 113, PLS 121
OR		
PLS-225 Portfolio Project for Paralegals	1	PLS 100, PLS 101, PLS 113, PLS 121, PLS 123, and 15 additional credits of paralegal courses (PLS Courses) and permission of the PLS program director or department chair.

\* Holders of A.S. and A.A.S. degrees must show that they have taken 18 credits of general education courses. Holders of A.A. degrees are presumed to have satisfied the general education requirement.

\*\* For students who are granted transfer credits, total will be reduced.

Note: Not all PLS courses are offered every semester, both day and evening. Please contact the department chairperson at 732.906.2576 to discuss course offerings for future semesters.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

### PARALEGAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Paralegals are trained specialists who, under the supervision of an attorney, perform a wide variety of legal tasks. These tasks may include legal research, law office management and preparation of legal documents. Only an attorney may provide legal services directly to the public. Students can earn the Associate in Applied Science which prepares graduates for employment in law offices, corporate legal departments, legal services corporations, state government offices, title companies and federal and state courts. Students who have already earned an A.A., A.S., A.A.S., B.A. or B.S. degree can earn the certificate. Students with one of these degrees plus three years of full-time paralegal work experience can earn the Certificate of Achievement.

#### Can students who major in Paralegal Studies transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Students must either have a high school diploma or have passed an equivalency examination. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### What are the objectives of this program?

1. Provide a rigorous, flexible program for the quality education of the occupationally competent paralegal.
2. Provide a paralegal education program that leads to the opportunity for employment of its graduates by a wide range of employers.
3. Provide paralegals with a well-rounded, balanced education founded on a beneficial mix of general education, theory, and practical courses, stressing understanding and reasoning rather than rote learning of facts.
4. Support the general principle of ethical legal practice, professional responsibility and the prohibitions against the unauthorized practice of law by non-lawyers.
5. Provide an educational program that is responsive to the needs of the State of New Jersey and contributes to the advancement of legal professionals.
6. Provide a program that instills respect for the legal profession and its foundations, institutions, and quest for justice.
7. Maintain equality of opportunity in the educational program without discrimination or segregation on the grounds of race, color, religion, national origin or sex. The program's overall objective is to provide quality education for paralegals so that they might assist the legal profession in rendering more personal, economical services to a greater number of persons.

#### How are these objectives met?

1. Through flexible curriculum planning which stresses a balance among General Education courses, law related courses, legal specialty courses, and electives.
2. Through continual assessment of the need for the program as evidenced by the legal profession's response to regular surveys and the ability of the program to place graduates.
3. By keeping the enrollment of the program to a size that will ensure a good student-teacher ratio and give graduates a good chance for paralegal employment. This is determined in the same method as number 2 above.
4. By providing the program with a well qualified full-time director with the necessary time to devote to the extensive administrative duties of the position.

#### When students complete the program, what skills will they have?

1. Use the law library, including encyclopedias, reporter systems, digests, and practice manuals, including updating sources; utilize computer-assisted research including WESTLAW, reporter systems, statutes, administrative codes, updating sources and extended databases.
2. Understand and use rules governing courts and basic litigation procedures including telephone technique, client interviews, complaints, interrogatories, and motions.
3. Use forms and filing procedures relevant to typical legal proceedings.
4. Use forms and filing procedures in real and personal property transactions, including Real Estate Settlement Procedures Act.

**Note:** For students matriculating in this program, degree credit will not ordinarily be given for any course designated PLS which was completed more than six years prior to completion of the degree program.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906. 2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Paralegal Studies Certificate of Achievement

### Paralegal Studies Certificate of Achievement - PLT.COA (Certificate of Achievement)

Credits: 18 Credits Required

Description: The Paralegal Studies Certificate of Achievement is designed for the person who already has an Associate's, Bachelor's degree or higher and three years full time (or part time equivalent) work experience as a paralegal. The Program is approved by the American Bar Association and the college is a member of the American Association for Paralegal Education. \* Holders of A.S. and A.A.S. degrees must show that they have taken 18 credits of general education courses. Holders of A.A. degrees are presumed to have satisfied the general education requirement.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
PLS-100 Introduction to the Paralegal Profession	2	
PLS-101 Legal Research	3	ENG 121, PLS 100
PLS-113 Legal Writing	2	PLS 100, PLS 101
PLS-121 Advanced Legal Research	2	PLS 100, PLS 101, PLS 113, CSC 105 or CSC 106
PLS-123 Advanced Legal Writing	2	PLS 100, PLS 101, PLS 113
<b>Paralegal Electives</b>		
Select a minimum of 7 credits from the following electives - students may choose to take more than 7 credits of electives.		
PLS-104 Property Transactions	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-105 Family Law	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-106 Wills and Estate Administration	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-108 Torts	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-109 Criminal Law and Procedure	3	PLS 100, PLS 101, PLS 113, PLS 121
OR		
PLS-110 Litigation Procedure	4	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-111 Contracts and Uniform Commercial Code	3	PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121
OR		
PLS-112 Business Organizations and Government Regulations	3	PLS 100, PLS 101, PLS 113, PLS 101 Prerequisite(s) or Corequisite(s): PLS 121 and PLS 123
OR		
PLS-225 Portfolio Project for Paralegals	1	PLS 100, PLS 101, PLS 113, PLS 121, PLS 123, and 15 additional credits of paralegal courses (PLS Courses) and permission of the PLS program director or department chair.
Note: Not all PLS courses are offered every semester, both day and evening. Please contact the department chairperson at 732.906.2594 to discuss course offerings for future semesters.		

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

### PARALEGAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Paralegals are trained specialists who, under the supervision of an attorney, perform a wide variety of legal tasks. These tasks may include legal research, law office management and preparation of legal documents. Only an attorney may provide legal services directly to the public. Students can earn the Associate in Applied Science which prepares graduates for employment in law offices, corporate legal departments, legal services corporations, state government offices, title companies and federal and state courts. Students who have already earned an A.A., A.S., A.A.S., B.A. or B.S. degree can earn the certificate. Students with one of these degrees plus three years of full-time paralegal work experience can earn the Certificate of Achievement.

#### Can students who major in Paralegal Studies transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### Are there any requirements that must be satisfied before taking courses in the major?

Students must either have a high school diploma or have passed an equivalency examination. Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### What are the objectives of this program?

1. Provide a rigorous, flexible program for the quality education of the occupationally competent paralegal.
2. Provide a paralegal education program that leads to the opportunity for employment of its graduates by a wide range of employers.
3. Provide paralegals with a well-rounded, balanced education founded on a beneficial mix of general education, theory, and practical courses, stressing understanding and reasoning rather than rote learning of facts.
4. Support the general principle of ethical legal practice, professional responsibility and the prohibitions against the unauthorized practice of law by non-lawyers.
5. Provide an educational program that is responsive to the needs of the State of New Jersey and contributes to the advancement of legal professionals.
6. Provide a program that instills respect for the legal profession and its foundations, institutions, and quest for justice.
7. Maintain equality of opportunity in the educational program without discrimination or segregation on the grounds of race, color, religion, national origin or sex. The program's overall objective is to provide quality education for paralegals so that they might assist the legal profession in rendering more personal, economical services to a greater number of persons.

#### How are these objectives met?

1. Through flexible curriculum planning which stresses a balance among General Education courses, law related courses, legal specialty courses, and electives.
2. Through continual assessment of the need for the program as evidenced by the legal profession's response to regular surveys and the ability of the program to place graduates.
3. By keeping the enrollment of the program to a size that will ensure a good student-teacher ratio and give graduates a good chance for paralegal employment. This is determined in the same method as number 2 above.
4. By providing the program with a well qualified full-time director with the necessary time to devote to the extensive administrative duties of the position.

#### When students complete the program, what skills will they have?

1. Use the law library, including encyclopedias, reporter systems, digests, and practice manuals, including updating sources; utilize computer-assisted research including WESTLAW, reporter systems, statutes, administrative codes, updating sources and extended databases.
2. Understand and use rules governing courts and basic litigation procedures including telephone technique, client interviews, complaints, interrogatories, and motions.
3. Use forms and filing procedures relevant to typical legal proceedings.
4. Use forms and filing procedures in real and personal property transactions, including Real Estate Settlement Procedures Act.

**Note:** For students matriculating in this program, degree credit will not ordinarily be given for any course designated PLS which was completed more than six years prior to completion of the degree program.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Process Technology

### Process Technology - PRT.AAS (Associate in Applied Science)

Credits: 63-67 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CHM-117 Chemistry I	4	MAT 013 or appropriate score on the College placement test and one year of high school laboratory science or departmental approval
Students may substitute CHM 121/ CHM 125 - CHM 122/CHM 126 for CHM 117- CHM 118 if they have completed a high school chemistry laboratory course.		
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
Appropriate score on the College's placement test, MAT 013 or MAT 013A/MAT 013B or departmental approval. Students may substitute MAT 123-MAT 124 or MAT 129-MAT 131 for MAT 107-MAT 108.		
CSC-105 Computer Applications and Systems	3	
CPT-100 Introduction to Chemical Process Technology	3	
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
MAT-108 Mathematics II	3	MAT 107
SCI-222 Principles of Occupational Safety and Health	3	CHM 118 or equivalent
CPT-205 Process Technology Instrumentation	3	CHM 117 and CPT 100
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester III</b>		
SPE-121 Fundamentals of Public Speaking	3	
CPT-206 Process Technology Equipment	4	CHM 117 and CPT 100
CPT-210 Process Technology Systems	4	CPT 100
PHY-101 Principles of Physics	4	MAT 107 or equivalent
____ Technical Elective	3-4	
CHM 118 Chemistry II (4 credits) OR UTI-109 Introduction to Gas Distribution (3 credits)		
<b>Semester IV</b>		
CPT-212 Process Technology Operations	4	CPT 100
CPT-214 Process Technology Troubleshooting	3	CPT 100
CPT-226 Process Technology Cooperative Education	3	CPT 100, CPT 205 and written permission of the department chairperson and Counseling and Career Services Office
____ Technical Elective	3-4	
CHM 118 Chemistry II (4 credits) OR UTI-109 Introduction to Gas Distribution (3 credits)		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### PROCESS TECHNOLOGY DEPARTMENT OF NATURAL SCIENCES

Process Technology is a job-oriented program, preparing students for career opportunities in all process-related industries as process technicians. Process technologies such as food, pharmaceutical, oil & gas, chemical and petrochemical, paper mills, and power generation plants all employ process technicians.

**What will students learn if they study Process Technology?**

They learn how to monitor and control mechanical, physical and /or chemical changes throughout many processes to produce a final product made from raw materials. Process technicians are responsible for start up, maintenance, troubleshooting, and shutdown of process equipment. Upon successful completion of this program, students will know how to analyze, evaluate, and communicate process-related data, understand various processes, troubleshoot process equipment and instruments, and maintain a safe and healthy work environment.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Dr. Parag Muley, department chair

Contact Phone: 732.906.2592

Contact Email: [pmuley@middlesexcc.edu](mailto:pmuley@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Psychosocial Rehabilitation and Treatment - Joint Program with UMDNJ

### Psychosocial Rehabilitation and Treatment - Joint Program with UMDNJ - PSR.AS (Associate in Science Degree)

Credits: 62-64 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Professor Nora Barrett, department chair

OR Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 732.906.4177 (UMDNJ)

OR 732.906.3502 (MCC)

Contact Email: [barretnm@umdnj.edu](mailto:barretnm@umdnj.edu)

OR [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CSC-105 Computer Applications and Systems	3	
PSY-123 Introduction to Psychology	3	
MAT-116 College Algebra	3	MAT 014, MAT 014A/MAT 014B, or equivalent
PHI-123 Ethics	3	
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SOC-121 Introduction to Sociology	3	
____ General Education Psychology Elective	3	
Choose one Psychology course designated as General Education Social Science ( <a href="#">GE.SS</a> ) or General Education Diversity ( <a href="#">GE.DIV</a> ).		
PSR-101 Introduction to the Principles of Psychosocial Rehabilitation	3	
BIO-106 Human Biology, Biomedical Issues and Society	4	Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or a three-credit college level science course with a grade of "C" or better
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE.HUM</a> ).		
Program Note: A minimum of 18 General Education credits and PSR 101 must be taken before entering the professional phase of the program (i.e. PSR 102 and beyond). Students in the professional phase of the program register through UMDNJ and pay the current UMDNJ undergraduate tuition rate and fees. Most PSR courses are offered on the UMDNJ Scotch Plains Campus.		
<b>Semester III - Spring</b>		
PSR-102 Communication Techniques in Interviewing and Counseling	3	
PSR-103 Introduction to Group Dynamics	3	
PSR-104 Clinical Principles in Psychosocial Rehabilitation and Treatment	3	
<b>Semester IV - Fall</b>		
PSR-207 Community Resource Management and the Individual with Severe Mental Illness	3	PSR 101
PSR-210 Clinical Practicum in Psychosocial Rehabilitation I	6	PSR 101, PSR 102, PSR 103 and PSR 104

**Semester V - Spring**

PSR-209 Emerging Topics in Psychosocial Rehabilitation and Treatment	3	
PSR-211 Clinical Practicum in Psychosocial Rehabilitation II	6	PSR 210

**Standards of Progress**

Must achieve a "C" or better in all PSR courses May retake a PSR course only once and obtain a passing grade (i.e. "C" or better)

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****PSYCHOSOCIAL REHABILITATION AND TREATMENT****JOINT PROGRAM WITH THE UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY PSYCHIATRIC REHABILITATION AND COUNSELING PROFESSIONS DEPARTMENT**

This is an exciting and innovative field in which service providers assist people in obtaining the skills, support and resources they will need to achieve success and satisfaction in their living, learning, working and social environments. The overall goals of this field are promotion of recovery, community integration, and improved quality of life for people coping with psychiatric disabilities. Graduates can transfer all of their credits to the UMDNJ-Kean University Bachelor of Science Degree Program in Psychiatric Rehabilitation & Psychology (Joint program with Kean University, Georgian Court University or Felician College).

**What will students learn if they study Psychosocial Rehabilitation and Treatment?**

Courses focus on imparting the knowledge, practical skills and attitudes needed to provide support and services to people with psychiatric disabilities in a variety of community settings that provide social, vocational, residential and case management services.

**Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency must be satisfied with a passing score on the College's placement test or completion of the appropriate course. Students must have a "C" or better in one year of a high school laboratory science. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program. PSR majors need to complete 18 credits of general education and Introduction to Psychosocial Rehabilitation (PSR 101) before beginning the professional phase of the program (PSR 102 and beyond).

**Can students transfer to a four-year college or university?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

The degree can be completed in five semesters. Part time study is also an option.

**Are there any special requirements once the student is admitted to this major?**

Students must meet the academic standards of progress outlined on the next page to stay in the program. They must meet with the program director each semester prior to registration.

**Questions?**

Contact Name: Professor Nora Barrett, department chair OR Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 732.906.4177 (UMDNJ) OR 732.906.3502 (MCC)

Contact Email: [barretnm@umdj.edu](mailto:barretnm@umdj.edu) OR [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

<https://applyto.middlesexcc.edu/application/login.php>

**Radiography Education - Career Track****Radiography Education - Career Track - RADC.AAS (Associate in Applied Science)**

Credits: 71-73 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor James Ferrell, department chair

Contact Phone: 732.906.2583

Contact Email: [JFerrell@middlesexcc.edu](mailto:JFerrell@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/radiography.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
RAD-128 Basic Medical Principles	4	
RAD-141 Radiographic Positioning, Anatomy and Pathology I	2	
RAD-142 Radiographic Positioning Laboratory I	1	
RAD-171 Radiographic Imaging and Science I	4	
RAD-190 Clinical Orientation	1	
Prerequisite(s): CPR certification for health care professionals, criminal background check, five panel non-DOT drug screening and have completed the health physical and required immunizations.		
BIO-131 Human Structure and Function	4	One year of high school biology or BIO 010, and one year of high school chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Semester II</b>		



RAD-139 Radiation Protection and Biology	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-143 Radiographic Positioning, Anatomy and Pathology II	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-144 Radiographic Positioning Laboratory II	1	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-172 Radiographic Imaging and Science II	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-210 Clinical Practicum I	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
____ GE Mathematics Elective	3	

Choose one Mathematics course designated in the course descriptions as General Education Math, Science and Technology ([GE MST](#)).

____ GE Elective	3	
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Choose one course designated in the course descriptions as General Education Communications ([GE COM](#)), General Education Diversity ([GE DIV](#)), General Education Humanities ([GE HUM](#)), General Education Math, Science and Technology ([GE MST](#)), or General Education Social Science ([GE SS](#)).

#### Summer Session I

RAD-145 Radiographic Positioning, Anatomy and Pathology III	3	RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210
RAD-146 Radiographic Positioning Laboratory III	1	RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210

#### Summer Session II

RAD-220 Clinical Practicum II	2	RAD 145 and RAD 146
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#### Semester III

RAD-247 Radiographic Positioning, Anatomy and Pathology IV	2	RAD 145, RAD 146 and RAD 220
RAD-248 Radiographic Positioning Laboratory IV	1	RAD 145, RAD 146 and RAD 220
RAD-275 Radiographic Physics and Equipment Maintenance	3	
RAD-230 Clinical Practicum III	2	RAD 220
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

#### Semester IV

RAD-250 Clinical Practicum IV	3	RAD 230, RAD 247, RAD 248 and RAD 275
RAD-256 Radiographic Seminar I	2	RAD 230, RAD 247, RAD 248 and RAD 275
RAD-285 Advanced Radiographic Imaging	2	RAD 230, RAD 247, RAD 248 and RAD 275
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
____ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course.

CSC-107 Computers in Health Technologies	1	
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#### Summer Session I

RAD-260 Clinical Practicum V	3	RAD 250, RAD 256 and RAD 285
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#### Summer Session II

RAD-257 Radiographic Seminar II	2	RAD 256 and RAD 260
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#### Standards of Progress

Maintain a cumulative grade point average of 2.0. Must achieve a "C" grade or better in all Radiography courses in order to progress through the curriculum. Must achieve a "C" grade or better in all science courses to satisfy degree requirements. Must complete the Radiography Education program in no fewer than two and no more than five consecutive years from the point of admission to the full-time program track. Students who do not complete the major Radiography course under these conditions may not continue in the program.

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### RADIOGRAPHY EDUCATION RADIOGRAPHY EDUCATION DEPARTMENT

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology, JRCERT, <http://www.jrcert.org/> and the Radiologic Technology Board of Examiners, New Jersey Department of Environmental Protection, Bureau of X-ray Compliance/Technologist Certification Section, <http://www.state.nj.us/dep/rpp/tec/rtboard.htm>.

**Related Programs - You may also be interested in one of the following programs:**

RADT.AAS - Radiography Education - Transfer Track - Credits 72-74

#### Why major in Radiography Education?

There is a national demand for individuals trained in this allied health discipline. Positions are available in hospitals, industry, with private physicians and chiropractors, and clinics. Related jobs can be found in x-ray equipment, manufacturing firms and medical supply companies. Graduates qualify to take the American Registry of Radiologic Technologists Board examination for National Registration as well as New Jersey State Licensure.

#### What do students learn by studying Radiography Education?

Extensive study in radiographic principles provides students with comprehensive theoretical and practical knowledge and skills. Instruction takes place in well-equipped classrooms, small group study areas and a laboratory area containing three energized radiographic units with an associated film processing room. The laboratory is also equipped to provide experience in computed radiography, Direct Digital Radiography (DDR) and Patient Archive and Communication Systems (PACS). Clinical practical experience is provided by rotations at affiliated hospitals providing the "hands-on" experience necessary to perform the tasks of an entry-level radiographer. The curriculum also includes the general education and science courses required for the Associate in Applied Science degree.

**Are there any requirements that must be satisfied before taking courses in the major?**

- Students must be a U.S. citizen or permanent resident who have been permanently domiciled in the state of New Jersey or the borough of Staten Island, New York\* for at least one year prior to the application process.
  - Students must have a "C" or better in high school laboratory biology or an equivalent college course and students must also have a "C" or better in either laboratory chemistry or laboratory physics or an equivalent college course. For admission to the Radiology program your grade in laboratory physics may be substituted for laboratory chemistry however, laboratory chemistry remains a prerequisite for admission into the program.
  - Algebra 1 is a pre-requisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test or completion of the appropriate course. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.
  - Students must have a cumulative GPA of 2.75. High school GPA will be used if the student has less than 12 college credits at the time of application.
  - When students apply, they must take a Health Technologies entrance examination.
- \* Middlesex County College has a New York Regents accredited clinical training affiliation with a Staten Island, NY hospital.

**Can a student transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

**How long will it take to complete this degree?**

In accordance with NJ State law, this program runs for a minimum of 24 consecutive months. Students must register for major coursework in the summer session of both years. Students can complete the degree in a two-year period.

**Once the student is admitted to this major, are there any special requirements?**

Students must meet the academic standards of progress outlined to progress through the curriculum. Students are also required to have completed CPR for health care providers, a criminal background check, a five panel non-DOT drug screening and complete the health physical and required immunizations prior to entering the clinical practice phase of the program.

**Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose radiography technology as a career:

**Practical Considerations:**

The following Practical Considerations are listed so the student may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communications skills in the English language to effectively and accurately communicate with patients, peers, supervisors, families and other healthcare members.
2. Have sufficient visual acuity to make radiographic technical adjustments to equipment to produce acceptable radiographs and to assess the completed product for technical accuracy.
3. Have motor skills and strength capable of manipulation and adjustments of patients and equipment.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.

**Health Considerations:**

Due to the nature of clinical experiences in the Radiography Education Program, students will be participating in a work environment that has the potential of exposure to bloodborne pathogens and infectious diseases. All students accepted into Radiography Education are provided with instruction on infection control protocols and Standard Precautions in order to reduce the risk of disease transmission.

**Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College and the Radiographic Education Department and/or participating clinical facilities as a consideration of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Drug testing is a requirement for the program. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and the drug testing.

**Questions?**

Contact Name: Assistant Professor James Ferrell, department chair

Contact Phone: 732.906.2583

Contact Email: [JFerrell@middlesexcc.edu](mailto:JFerrell@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/radiography.html>

<https://applyto.middlesexcc.edu/application/login.php>

**Radiography Education - Transfer Track****Radiography Education - Transfer Track - RADT.AAS (Associate in Applied Science)**

Credits: 72-74 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor James Ferrell, department chair

Contact Phone: 732.906.2583

Contact Email: [JFerrell@middlesexcc.edu](mailto:JFerrell@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/radiography.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
RAD-128 Basic Medical Principles	4	
RAD-141 Radiographic Positioning, Anatomy and Pathology I	2	
RAD-142 Radiographic Positioning Laboratory I	1	
RAD-171 Radiographic Imaging and Science I	4	
RAD-190 Clinical Orientation	1	

Prerequisite(s): CPR certification for health care professionals, criminal background check, five panel non-DOT drug screening and have completed the health physical and required immunizations.

BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
_____ GE Social Science Elective	3	

Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

#### Semester II

RAD-139 Radiation Protection and Biology	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-143 Radiographic Positioning, Anatomy and Pathology II	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-144 Radiographic Positioning Laboratory II	1	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-172 Radiographic Imaging and Science II	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
RAD-210 Clinical Practicum I	2	RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190
BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"

A continuation of BIO 111. A study of the structure and function of the body is continued by examining the endocrine, reproductive, circulatory, digestive, respiratory and excretory systems.

#### Summer Session I

RAD-145 Radiographic Positioning, Anatomy and Pathology III	3	RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210
RAD-146 Radiographic Positioning Laboratory III	1	RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210

#### Summer Session II

RAD-220 Clinical Practicum II	2	RAD 145 and RAD 146
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#### Semester III

RAD-247 Radiographic Positioning, Anatomy and Pathology IV	2	RAD 145, RAD 146 and RAD 220
RAD-248 Radiographic Positioning Laboratory IV	1	RAD 145, RAD 146 and RAD 220
RAD-275 Radiographic Physics and Equipment Maintenance	3	
RAD-230 Clinical Practicum III	2	RAD 220
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
_____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

_____ GE Mathematics Elective	3	
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Choose one Mathematics course designated in the course descriptions as General Education Math, Science and Technology ([GE MST](#)).

#### Semester IV

RAD-250 Clinical Practicum IV	3	RAD 230, RAD 247, RAD 248 and RAD 275
RAD-256 Radiographic Seminar I	2	RAD 230, RAD 247, RAD 248 and RAD 275
RAD-285 Advanced Radiographic Imaging	2	RAD 230, RAD 247, RAD 248 and RAD 275
CSC-107 Computers in Health Technologies	1	
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
_____ Physical/Health Education Elective	1-3	

Students may satisfy this requirement with any HED or PED course.

#### Summer Session I

RAD-260 Clinical Practicum V	3	RAD 250, RAD 256 and RAD 285
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#### Summer Session II

RAD-257 Radiographic Seminar II	2	RAD 256 and RAD 260
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#### Standards of Progress

Maintain a cumulative grade point average of 2.0. Must achieve a "C" grade or better in all Radiography courses in order to progress through the curriculum. Must achieve a "C" grade or better in all science courses to satisfy degree requirements. Must complete the Radiography Education program in no fewer than two and no more than five consecutive years from the point of admission to the full-time program track. Students who do not complete the major Radiography course under these conditions may not continue in the program.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

### RADIOGRAPHY EDUCATION RADIOGRAPHY EDUCATION DEPARTMENT

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology, JRCERT, <http://www.jrcert.org/> and the Radiologic Technology Board of Examiners, New Jersey Department of Environmental Protection, Bureau of X-ray Compliance/Technologist Certification Section, <http://www.state.nj.us/dep/rpp/tec/rtboard.htm>.

**Related Programs - You may also be interested in one of the following programs:**

RADC.AAS - Radiography Education - Career Track - Credits 71-73

#### Why major in Radiography Education?

There is a national demand for individuals trained in this allied health discipline. Positions are available in hospitals, industry, with private physicians and

chiropractors, and clinics. Related jobs can be found in x-ray equipment, manufacturing firms and medical supply companies. Graduates qualify to take the American Registry of Radiologic Technologists Board examination for National Registration as well as New Jersey State Licensure.

#### **What do students learn by studying Radiography Education?**

Extensive study in radiographic principles provides students with comprehensive theoretical and practical knowledge and skills. Instruction takes place in well-equipped classrooms, small group study areas and a laboratory area containing three energized radiographic units with an associated film processing room. The laboratory is also equipped to provide experience in computed radiography, Direct Digital Radiography (DDR) and Patient Archive and Communication Systems (PACS). Clinical practical experience is provided by rotations at affiliated hospitals providing the "hands-on" experience necessary to perform the tasks of an entry-level radiographer. The curriculum also includes the general education and science courses required for the Associate in Applied Science degree.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

- Students must be a U.S. citizen or permanent resident who have been permanently domiciled in the state of New Jersey or the borough of Staten Island, New York\* for at least one year prior to the application process.
- Students must have a "C" or better in high school laboratory biology or an equivalent college course and students must also have a "C" or better in either laboratory chemistry or laboratory physics or an equivalent college course. For admission to the Radiology program your grade in laboratory physics may be substituted for laboratory chemistry however, laboratory chemistry remains a prerequisite for admission into the program.
- Algebra 1 is a pre-requisite for all majors. Algebra 1 competency may be verified with a passing score on the College's placement test of completion of the appropriate course. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.
- Students must have a cumulative GPA of 2.75. High school GPA will be used if the student has less than 12 college credits at the time of application.
- When students apply, they must take a Health Technologies entrance examination.

\* Middlesex County College has a New York Regents accredited clinical training affiliation with a Staten Island, NY hospital.

#### **Can a student transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### **How long will it take to complete this degree?**

In accordance with NJ State law, this program runs for a minimum of 24 consecutive months. Students must register for major coursework in the summer session of both years. Students can complete the degree in a two-year period.

#### **Once the student is admitted to this major, are there any special requirements?**

Students must meet the academic standards of progress outlined to progress through the curriculum. Students are also required to have completed CPR for health care providers, a criminal background check, a five panel non-DOT drug screening and complete the health physical and required immunizations prior to entering the clinical practice phase of the program.

#### **Are there any other things I should consider before I apply?**

Yes, there are practical considerations, health considerations and legal considerations that you should review before making the decision to choose radiography technology as a career:

#### **Practical Considerations:**

The following Practical Considerations are listed so the student may be better able to assess their career choice in terms of ability to succeed in the program and gain employment in the field:

1. Have written and oral communications skills in the English language to effectively and accurately communicate with patients, peers, supervisors, families and other healthcare members.
2. Have sufficient visual acuity to make radiographic technical adjustments to equipment to produce acceptable radiographs and to assess the completed product for technical accuracy.
3. Have motor skills and strength capable of manipulation and adjustments of patients and equipment.
4. Demonstrate acceptable affective behaviors required by health care employees such as maintaining excellent attendance and integrity and being able to work under pressure.
5. Comprehend and follow clinical policies and procedures related to the profession you choose.

#### **Health Considerations:**

Due to the nature of clinical experiences in the Radiography Education Program, students will be participating in a work environment that has the potential of exposure to airborne pathogens and infectious diseases. All students accepted into Radiography Education are provided with instruction on infection control protocols and Standard Precautions in order to reduce the risk of disease transmission.

#### **Legal Considerations:**

A student is required to have a criminal background check performed with satisfactory results acceptable by Middlesex County College and the Radiographic Education Department and/or participating clinical facilities as a consideration of admission, initial enrollment and/or continued enrollment. An offer of admission will not be final and enrollment not permitted until the completion of a satisfactory criminal background check. Drug testing is a requirement for the program. Admission may be denied or rescinded or enrollment terminated based on the results of the criminal background check and the drug testing.

#### **Questions?**

Contact Name: Assistant Professor James Ferrell, department chair

Contact Phone: 732.906.2583

Contact Email: [JFerrell@middlesexcc.edu](mailto:JFerrell@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/radiography.html>

<https://applyto.middlesexcc.edu/application/login.php>

## **Respiratory Care - Joint Program with UMDNJ**

### **Respiratory Care - Joint Program with UMDNJ - RST.AS (Associate in Science Degree)**

Credits: 74-76 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Narciso Rodriguez, UMDNJ program director

**OR** Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 973.972.0386 (UMDNJ)  
OR 732.906.3502 (MCC)

Contact Email: [RSTNOR@umdnj.edu](mailto:RSTNOR@umdnj.edu)  
OR [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

Department Web: <http://www.umdnj.edu>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
BIO-111 Human Anatomy and Physiology I	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
CHM-107 Principles of General, Organic and Biochemistry	4	One year of high school laboratory chemistry or CHM 010
CSC-107 Computers in Health Technologies	1	
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
<b>Semester II</b>		
BIO-112 Human Anatomy and Physiology II	4	BIO 111 with a minimum grade of "C"
BIO-211 Principles of Microbiology	4	One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
_____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		
PSY-123 Introduction to Psychology	3	
_____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
_____ GE Social Science Elective	3	
Choose two courses designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
<b>Summer Session</b>		
RST-100 Core Concepts in Respiratory Care	1	Acceptance into Respiratory Care Program and BIO 111
BIO 111 and acceptance into the Respiratory Care Program - Clinical Phase		
RST-101 Fundamentals of Respiratory Care	4	Acceptance into Respiratory Care Program
RST-102 Clinical Practice I	1	Acceptance into Respiratory Care Program
RST-103 Applied Cardiopulmonary Pathophysiology I	2	
<b>Semester III</b>		
RST-203 Applied Cardiopulmonary Pathophysiology II	2	RST 103
RST-207 Cardiopulmonary Pharmacology	1	RST 103
RST-208 Principles of Ventilatory Support	4	RST-101
RST-209 Clinical Practice II	2	RST 101 and RST 102
RST-210 Cardiopulmonary Evaluation	2	RST 103
<b>Semester IV</b>		
RST-201 Patient Management - Critical Care	3	RST 208 and RST 211
RST-211 Pediatric/Neonatal Respiratory Care	3	RST 208 and RST 209
RST-212 Long-Term, Home and Rehabilitative Care	3	RST 203, RST 207 and RST 210
RST-215 Clinical Practice III	3	RST 208 and RST 209
<b>Standards of Progress</b>		
Maintenance of cumulative grade point average of 2.5. Must achieve a "C" grade or better in all Respiratory Care and science courses in order to progress in the curriculum. May have only one (1) unsatisfactory grade (i.e. grade less than "C") in any Respiratory Care or science course for the duration of the program. May retake a Respiratory Care or science course only once and obtain a passing grade (i.e. "C" or better).		
<b>Program Note</b>		
Currently, all Respiratory Care Courses (RST) are offered only at the UMDNJ campus in Newark. In order to continue to the clinical phase of the Respiratory Care Courses, student must have completed almost all the major science and General Education courses prior to the summer session. All RST courses are assessed the UMDNJ tuition and fee rates.		
<b>IMPORTANT - Read the Program Information and FAQs Below for Additional Details</b>		
<b>RESPIRATORY CARE RESPIRATORY CARE JOINT PROGRAM WITH THE UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY RESPIRATORY THERAPY DEPARTMENT</b>		
A degree in Respiratory Care is for individuals who like to help people of all ages recover from serious illness and who enjoy working with high tech equipment. All major courses taught at UMDNJ in Newark.		
<b>What do students learn by studying Respiratory Care?</b>		
They learn the latest techniques used to diagnose, treat and prevent cardiopulmonary disorders among infants, children and adults. Students also learn the		

work skills needed to get and maintain a satisfying job in the fast-paced health care environment.

#### Are there any requirements that must be satisfied before taking classes in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a "C" or better in high school laboratory biology and laboratory chemistry and algebra II. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before the student is considered for admission to the program.

#### Can a student transfer to a four-year college or university?

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### How long will it take to complete this degree?

Students can complete the degree in two years. They must register for the summer session at the end of their first year.

#### Are there any special requirements once the student is admitted to this major?

He or she must meet the academic standards of progress outlined on the next page to stay in the program.

#### Questions?

Contact Name: Mr. Narciso Rodriguez, UMDNJ program director OR Ms. Marilyn Laskowski-Sachnoff, Dean, Division of Professional Studies

Contact Phone: 973.972.0386 (UMDNJ) OR 732.906.3502 (MCC)

Contact Email: [RSTNOR@umdnj.edu](mailto:RSTNOR@umdnj.edu) OR [MLaskowski-Sachnoff@middlesexcc.edu](mailto:MLaskowski-Sachnoff@middlesexcc.edu)

Department Web: <http://www.umdnj.edu>

<https://applyto.middlesexcc.edu/application/login.php>

## Small Business Management

### Small Business Management - SBUS.AAS (Associate in Arts Degree)

Credits: 62-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
BUS-101 Business Organization and Management	3	
MAT-101 Freshman Mathematics I	3	Appropriate score on the College placement test, MAT 013 or departmental approval
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE.MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
_____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE.SS</a> ).		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SBM-110 Accounting for Small Business	4	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-120 Small Business Management	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-130 Marketing and Sales for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SPE-121 Fundamentals of Public Speaking	3	
<b>Semester III</b>		
BUS-201 Business Law I	3	
SBM-210 Advertising and Promotion for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-220 Leadership and Supervision	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
_____ Business Elective	3	
Courses with MKT or MGT for which students have the appropriate preparation are recommended or see department chair.		
ECO-201 Principles of Economics I	3	A passing score on the algebra portion of the College placement test or MAT 013

___ ___ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

#### Semester IV

SBM-230 Risk and Financial Management	3	
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Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

SBM-240 Cooperative Education/Internship in Small Business	3	Student must have completed half the courses in the Small Business Management curriculum or written permission of the department chairperson and Counseling and Career Services Office
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Senior status in SBM curriculum or written permission of department chairperson.

SBM-250 Seminar in Entrepreneurial Studies	3	BUS 101, SBM 110, SBM 120, SBM 130 and SBM 210 or written permission of the department chairperson
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Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

___ ___ GE Science Elective	3	
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Students may select science courses with a [GE MST](#) designation in BIO, CHM, PHY or SCI for which they have the appropriate academic preparation.

___ ___ GE Humanities Elective	3	
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Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### SMALL BUSINESS MANAGEMENT/ENTREPRENEURIAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Small Business Management/Entrepreneurial Studies is for people who intend to start, or who already operate a small business. This program can help students who have a skill or idea - and want to be their own boss - to realize their goal of running a successful business. The degree program incorporates General Education courses with the Small Business Management curriculum. The certificate is designed for those with no prior college course work and includes English composition with the Small Business Management curriculum. The certificate of achievement program is geared toward people who already hold a College degree and intend to operate a small business.

**Related Programs - You may also be interested in one of the following programs:**

SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31

SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19

#### Can students who major in Small Business Management/Entrepreneurial Studies transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### What will students learn if they study Small Business Management/Entrepreneurial Studies?

They will study the elements that are necessary for a thriving business: business plan, capital needs, marketing strategies, legal and tax issues, forms of ownership, employee management, new technologies, sales, marketing and new product development. They will acquire skills particular to entrepreneurs but transferable to the general business environment.

**Note:** Not all SBM courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Students may satisfy this requirement with a grade of "C" or better in high school Algebra I. Algebra I competency may be verified with a passing score on the College's placement test or by the completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Some major courses in the Small Business Management program may only be offered in the evenings and not every semester.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>

#### Small Business Management/Entrepreneurial Studies Certificate

##### Small Business Management/Entrepreneurial Studies Certificate - SBUS.CER (Certificate)

Credits: 31 Credits Required

Description: Below are required courses for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details. Assumes Basic Skills and Math requirements are satisfied.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
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BUS-101 Business Organization and Management	3	
CSC-105 Computer Applications and Systems	3	
Students may select an alternate Computer Science ( <a href="#">GE MST</a> ) course for which they have appropriate academic advisement and preparation in mathematics, such as CSC 106.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
OR		
____ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
SBM-110 Accounting for Small Business	4	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-120 Small Business Management	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-130 Marketing and Sales for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-210 Advertising and Promotion for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-230 Risk and Financial Management	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-250 Seminar in Entrepreneurial Studies	3	BUS 101, SBM 110, SBM 120, SBM 130 and SBM 210 or written permission of the department chairperson
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		

#### **IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

#### **SMALL BUSINESS MANAGEMENT/ENTREPRENEURIAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT**

Small Business Management/Entrepreneurial Studies is for people who intend to start, or who already operate a small business. This program can help students who have a skill or idea - and want to be their own boss - to realize their goal of running a successful business. The degree program incorporates General Education courses with the Small Business Management curriculum. The certificate is designed for those with no prior college course work and includes English composition with the Small Business Management curriculum. The certificate of achievement program is geared toward people who already hold a College degree and intend to operate a small business.

#### **Related Programs - You may also be interested in one of the following programs:**

SBUS.AAS - Small Business Management - Credits 62-65

SBUS.COA - Small Business Management/Entrepreneurial Studies Certificate of Achievement - Credits 19

#### **Can students who major in Small Business Management/Entrepreneurial Studies transfer to a four-year college or university?**

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### **What will students learn if they study Small Business Management/Entrepreneurial Studies?**

They will study the elements that are necessary for a thriving business: business plan, capital needs, marketing strategies, legal and tax issues, forms of ownership, employee management, new technologies, sales, marketing and new product development. They will acquire skills particular to entrepreneurs but transferable to the general business environment.

**Note:** Not all SBM courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Students may satisfy this requirement with a grade of "C" or better in high school Algebra I. Algebra I competency may be verified with a passing score on the College's placement test or by the completion of the appropriate course.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Some major courses in the Small Business Management program may only be offered in the evenings and not every semester.

#### **Questions?**

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

<https://applyto.middlesexcc.edu/application/login.php>



## Small Business Management/Entrepreneurial Studies Certificate of Achievement

### Small Business Management/Entrepreneurial Studies Certificate of Achievement - SBUS.COA (Certificate of Achievement)

Credits: 19 Credits Required

Description: Below are required courses for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details. Designed for the person with an associate degree or higher. Assumes basic skills and General Education (including math) requirements are satisfied.

Department:

Contact Name: Associate Professor Nancy Bailey, department chair

Contact Phone: 732.906.2594

Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>

Courses	Credits	Requisites / Comments
BUS-101 Business Organization and Management	3	
SBM-110 Accounting for Small Business	4	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-120 Small Business Management	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-130 Marketing and Sales for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-210 Advertising and Promotion for Small Business	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
OR		
SBM-230 Risk and Financial Management	3	
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		
SBM-250 Seminar in Entrepreneurial Studies	3	BUS 101, SBM 110, SBM 120, SBM 130 and SBM 210 or written permission of the department chairperson
Note: Not all major courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.		

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### SMALL BUSINESS MANAGEMENT/ENTREPRENEURIAL STUDIES ACCOUNTING, BUSINESS AND LEGAL STUDIES DEPARTMENT

Small Business Management/Entrepreneurial Studies is for people who intend to start, or who already operate a small business. This program can help students who have a skill or idea - and want to be their own boss - to realize their goal of running a successful business. The degree program incorporates General Education courses with the Small Business Management curriculum. The certificate is designed for those with no prior college course work and includes English composition with the Small Business Management curriculum. The certificate of achievement program is geared toward people who already hold a College degree and intend to operate a small business.

#### Related Programs - You may also be interested in one of the following programs:

SBUS.AAS - Small Business Management - Credits 62-65

SBUS.CER - Small Business Management/Entrepreneurial Studies Certificate - Credits 31

#### Can students who major in Small Business Management/Entrepreneurial Studies transfer to a four-year college or university?

Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

#### What will students learn if they study Small Business Management/Entrepreneurial Studies?

They will study the elements that are necessary for a thriving business: business plan, capital needs, marketing strategies, legal and tax issues, forms of ownership, employee management, new technologies, sales, marketing and new product development. They will acquire skills particular to entrepreneurs but transferable to the general business environment.

**Note:** Not all SBM courses are offered every semester both day and evening. Please call the department chair at 732.906.2594 to discuss course offerings for future semesters.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Students may satisfy this requirement with a grade of "C" or better in high school Algebra I. Algebra I competency may be verified with a passing score on the College's placement test or by the completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. Some major courses in the Small Business Management program may only be offered in the evenings and not every semester.

#### Questions?

Contact Name: Associate Professor Nancy Bailey, department chair  
 Contact Phone: 732.906.2594  
 Contact Email: [ABLS@middlesexcc.edu](mailto:ABLS@middlesexcc.edu)  
 Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/accounting-business-and-legal-studies.html>  
<https://applyto.middlesexcc.edu/application/login.php>

## Surveying Engineering Technology

### Surveying Engineering Technology - SET.AAS (Associate in Applied Science)

Credits: 65-66 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair  
 Contact Phone: 732.906.2586  
 Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)  
 Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
MCT-101 Introduction to Technology	2	MAT 013 or passing score on the College placement test
MAT-129A Precalculus I (Part A)	2	Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval
Note: MAT 129 may be substituted for MAT 129A & MAT 129B.		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
MEC-123 Technical Graphics/CAD I	3	
___ GE Humanities Elective	3	
Choose one course designated in the course descriptions as General Education Humanities ( <a href="#">GE HUM</a> ).		
___ Physical/Health Education Elective	1	
Students may satisfy this requirement with any HED or PED course.		
<b>Semester II</b>		
MAT-129B Precalculus I (Part B)	2	MAT 129A or equivalent
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
CSC-105 Computer Applications and Systems	3	
CIT-126 Advanced Civil Drawing/CAD-II	3	MEC 123
CIT-104 Construction Surveying I	3	MAT 129 or MAT 129A
BUS-201 Business Law I	3	
<b>Semester III</b>		
MAT-131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval
Note: MAT 131 may be substituted for MAT 131A & MAT 131B.		
PHY-123 General Physics I - Lecture	3	MAT 129 or MAT 129A/MAT 129B
PHY-125 General Physics I - Lab	1	MAT 129 or MAT 129A/MAT 129B
CIT-205 Construction Surveying II	3	CIT 104
BUS-202 Business Law II	3	BUS 201
CIT-151 Urban and Suburban Development	3	CIT 205
<b>Semester IV</b>		
MAT-131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A or equivalent
PHY-124 General Physics II - Lecture	3	PHY 123
PHY-126 General Physics II - Lab	1	PHY 125
CIT-252 Boundary Law	3	
CIT-212 Water Resources Technology	4	CIT 105 and MAT 129B or MAT 129
___ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
___ Elective	3-4	
Choose from the following:		
CIT 125 Construction Estimating (Credits 2)		
MGT 200 Principles of Supervision (Credits 3)		
SBM 120 Small Business Management (Credits 3)		
SCI 155 Introduction to Geology (Credits 4)		
SCI 157 Introduction to Meteorology (Credits 4)		

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details**

## SURVEYING ENGINEERING TECHNOLOGY ENGINEERING TECHNOLOGIES DEPARTMENT

Surveying Engineering Technology prepares students for employment in the land surveying field. Surveying involves mapping features of the land as well as property boundaries, and laying out construction lines and grades. It involves the use of computerized electronic equipment for land based as well as satellite assisted measurements, and the preparation of maps by computer aided design (CAD). Jobs in the field for those seeking immediate employment range from field crew member to CAD operator, and are typically found in surveying firms, consulting engineering firms, utility companies, and in the engineering departments of governmental agencies.

### Can students who major in Surveying Engineering Technology transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer their coursework to the four-year institution.

### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate class.

### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

### Questions?

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Technical Studies

### Technical Studies - TECH.AAS (Associate in Applied Science)

Credits: 63 Credits Required

Description: Admission to the Technical Studies, AAS program is restricted. An individual must be enrolled in or have graduated from an American Council on Education recommended and approved Federal Bureau Apprenticeship Training Program in order to be eligible for admission to the Associate in Applied Science Degree in Technical Studies. Below are required courses and recommended course groupings and sequences for program completion.

Department:

Contact Name: Associate Professor Thomas Sabol, department chair

Contact Phone: 732.906.2586

Contact Email: [Tsabol@middlesexcc.edu](mailto:Tsabol@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/engineering-technologies.html>

Courses	Credits	Requisites / Comments
<b>Semester I</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
CSC-105 Computer Applications and Systems	3	
OR		
CSC-106 Intermediate PC Applications with Programming	3	CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test
MAT-107 Mathematics I	3	Appropriate score on the College placement test, MAT 013 or equivalent
Prerequisite(s): Appropriate score on the College's placement test, MAT 013, MAT 013A MAT 013B, or department approval. Students in consultation with their Academic Advisor should select a mathematics course that will fulfill the requirements/prerequisites for the Technical Electives chosen.		
____ Technical Elective	3-4	
Technical Electives may be selected from any of the following areas: Accounting (ACC), Business (BUS), Computer Science (CSC), or Engineering Technologies (CIT, CMT, ELT, MCT, MEC) for which they have the appropriate academic prerequisites.		
<b>Semester II</b>		
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
PHY-101 Principles of Physics	4	MAT 107 or equivalent
Students may select courses offered by the Biology, Chemistry or Physics Departments for which they have the appropriate academic prerequisites.		
____ Technical Elective	3-4	
Technical Electives may be selected from any of the following areas: Accounting (ACC), Business (BUS), Computer Science (CSC), or Engineering Technologies (CIT, CMT, ELT, MCT, MEC) for which they have the appropriate academic prerequisites.		
<b>Semester III</b>		
____ GE Social Science Elective	3	
Choose one course designated in the course descriptions as General Education Social Science ( <a href="#">GE SS</a> ).		
____ Technical Elective	3-4	
Technical Electives may be selected from any of the following areas: Accounting (ACC), Business (BUS), Computer Science (CSC), or Engineering Technologies (CIT, CMT, ELT, MCT, MEC) for which they have the appropriate academic prerequisites.		
____ Physical/Health Education Elective	1-3	
Students may satisfy this requirement with any HED or PED course.		

**Semester IV**

SPE-121 Fundamentals of Public Speaking	3	
_____ GE Humanities Elective	3	

Choose one course designated in the course descriptions as General Education Humanities ([GE HUM](#)).

OR

_____ GE Social Science Elective	3	
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Choose one course designated in the course descriptions as General Education Social Science ([GE SS](#)).

_____ Technical Elective	3-4	
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Technical Electives may be selected from any of the following areas: Accounting (ACC), Business (BUS), Computer Science (CSC), or Engineering Technologies (CIT, CMT, ELT, MCT, MEC) for which they have the appropriate academic prerequisites.

**Program Note**

Transfer Credit for Technical Courses - ACE Approved Courses 25 Maximum

Technical Studies credits will be awarded for military or apprenticeship training programs in the Building and Construction trades, based upon the American Council on Education (ACE) review and evaluation of the program and their recommendations for awarding academic credit for successful completion of those programs. These credits will be placed on the student's transcript when documentation of satisfactory completion is presented by an official of the apprenticeship program and after the student matriculates into the Technical Studies Program, and has completed 25 credits of course work at Middlesex County College. From 3 to 25 transfer credits may be awarded for successful completion of the apprenticeship program, and will be awarded based upon ACE review and recommendations. Students with fewer than 25 ACE approved transfer credits are required to select classes from the accepted technical electives listed above.

**IMPORTANT - Read the Program Information and FAQs Below for Additional Details****TECHNICAL STUDIES  
ENGINEERING TECHNOLOGIES DEPARTMENT**

Under New Jersey Pathways Leading Apprentices to a College Education (NJ Place), community colleges, organized labor and several state agencies have developed a program to award college credit for registered apprenticeships in the construction trades. Through a unique blend of coursework, specialized training and hands-on-work experience, students will acquire the knowledge and skills to succeed in their chosen profession and earn an associate degree.

**Why major in Technical Studies?**

The Associate in Applied Science Degree in Technical Studies provides an opportunity for students to earn credits for apprenticeship training programs in the building and construction trades, based upon the American Council on Education (ACE) review and evaluation of the program. The earned credits will be applied to the degree. For further information about how apprenticeship credits may be applied to an A.A.S. degree, visit: [www.njplace.com](http://www.njplace.com).

**Can students who major in Technical Studies transfer to a four-year college or university?**

The major is job-oriented and designed for entrance into the workplace. However, students can transfer to a four-year college and apply the courses taken at MCC towards a bachelor's degree.

**Are there any special requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the college's placement test or by completing the appropriate class.

**How long will it take to complete this degree?**

Once students complete developmental coursework, if needed, and complete the apprenticeship requirements, the degree can be completed in two years of full-time study.

**Are there any special requirements once the student is admitted to the major?**

Students will submit satisfactory completion of the apprenticeship program to be eligible for credits. A maximum of 25 credits will be awarded.

<https://applyto.middlesexcc.edu/application/login.php>

**Fine Arts - Theatre Option****Fine Arts - Theatre Option - THE.AFA (Associate in Fine Arts Degree)**

Credits: 61-65 Credits Required

Description: Below are required courses and recommended course groupings and sequences for program completion. Courses may have prerequisites and corequisite requirements. Check course descriptions for details.

Department:

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

Courses	Credits	Requisites / Comments
<b>Communications (9 credits)</b>		
ENG-121 English Composition I	3	A passing score on the College placement test or a grade of "C" or better in ENG 010
ENG-122 English Composition II	3	A grade of "C" or better in ENG 121
SPE-121 Fundamentals of Public Speaking	3	
HIS-121 History of Western Civilization I	3	
HIS-122 History of Western Civilization II	3	
_____ GE Social Science Elective	3	
Choose three credits from courses designated in the course descriptions as <a href="#">GE SS</a> from the following: African-American Studies, Anthropology, Economics, Political Science, Psychology and Sociology.		
_____ GE Humanities Elective	6	

Choose six credits in sequence of the same modern language from FRE, GER, ITA, SPA. If students completed at least two years of high school study in one modern language, the level of language will be determined by a placement test excluding SPA 242.

____ GE Humanities Elective	3	
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Choose three credits in humanities from courses designated as [GE HUM](#) from the following: African-American Studies, Art, Dance, English, History, Modern Language, Music, Philosophy, Speech, and Theatre.

____ GE Mathematics or Science Elective	6-8	
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Choose any math and/or science courses with the [GE MST](#) designation numbered 101 or above that when combined will total 6-8 credits.

____ GE Diversity Elective	3	
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Choose a minimum of three credits from courses designated as [GE DIV](#). If the course is also designated as [GE HUM](#), [GE SS](#), or [GE MST](#), it may also be used to satisfy an additional graduation requirement.

CSC-105 Computer Applications and Systems	3	
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____ Physical/Health Education Elective	1-3	
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Students may satisfy this requirement with any HED or PED course.

____ Elective	3	
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#### Required Courses

THE-123 Theatre History	3	
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OR

THE-152 American Musical Theatre	3	
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THE-124 Contemporary Theatre	3	
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THE-131 Acting I	3	
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THE-145 Stagecraft	3	
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THE-146 Play Production	3	
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____ Elective	3	
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Plus additional 3 credits in theatre or a course selected from the following:

Modern Drama, Shakespeare, Oral Interpretation of Literature, Music History, Music Fundamentals or any dance course

#### IMPORTANT - Read the Program Information and FAQs Below for Additional Details

#### FINE ARTS

#### VISUAL, PERFORMING, AND MEDIA ARTS DEPARTMENT

The Associate in Fine Arts (A.F.A.) offers the first two years of concentrated study in studio courses for students planning to transfer to a visual arts, theatre, or music baccalaureate program. As a fine arts major, the student may choose to concentrate in either theater, art or music.

**Related Programs - You may also be interested in one of the following programs:**

ART.AFA - Fine Arts - Art Option - Credits 66

MUS.AFA - Fine Arts - Music Option - Credits 64-68

#### What will students learn if they study Fine Arts?

Fine arts will provide a strong foundation in the creative field of choice as well as a well-rounded education with a generous range of liberal arts courses required by baccalaureate fine arts programs. Students create a body of work or enhance skills in a chosen field in ways that will assist them in being accepted into a competitive fine arts program at a four-year institution.

#### Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

#### How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### Questions?

Contact Name: Assistant Professor Nadine Heller, department chair

Contact Phone: 732.906.2589

Contact Email: [NHeller@middlesexcc.edu](mailto:NHeller@middlesexcc.edu)

Department Web: <http://www2.middlesexcc.edu/academics/academic-departments/visual-performing-and-media-arts.html>

<https://applyto.middlesexcc.edu/application/login.php>

## Course Description

### ACC-101 - Financial Accounting

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Description: Covers the accounting cycle from the recording and analyzing

### ACC-102 - Managerial Accounting

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 101

procedures through the summarizing procedures and preparation of general purpose, financial statements; the introduction of accounting for corporations with emphasis on the capital structure of the corporation.

### **ACC-108 - Accounting Practices for Hotels, Restaurants and Institutions**

**Credits: 4**

Lecture Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Basic concepts and techniques of accounting principles as applied to the public hospitality industry. Emphasizes internal control departmental reports and operating statistics.

### **ACC-206 - Tax Accounting**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 102

Description: Federal income tax laws, rules, and regulations with particular emphasis on their application to individuals. Instruction and practice in the preparation of tax returns of individuals and research and reporting tax problems.

### **ACC-208 - Accounting Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 102 and written permission of the department chair and the director of Cooperative Education and Internships

Description: A cooperative work experience program whereby students are employed in an accounting position to gain the practical experience necessary for success in accounting. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to establish learning objectives related to their position in order to effect the attainment of specific job competencies. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours a semester. Individuals must be recommended by the faculty of the department.

### **ACC-212 - Intermediate Accounting II**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 211

Description: A continuation of ACC 211. Concludes the theoretical study of the major accounts on the financial statements. Emphasizes the analytical process relevant to comparative analysis, application of funds, income tax allocation and price-level impact on financial statements.

### **ACC-222 - Fraud Data Analysis**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 221 Co-requisites: ACC 223

Description: The study of computer-aided analysis techniques for detecting and investigating fraud cases, issues related to the collection and use of digital evidence and collection of data from electronic devices.

### **ACC-224 - Advanced Fraud Examination**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 221, ACC 222 and ACC 223

Description: Advanced Fraud Examination includes an integrative capstone experience using case presentations and projects over the course of the semester. In order to complete the assignments in this course, students must

Description: Covers the statement of cash flows; financial statement analysis, the nature of Managerial Accounting, job order cost systems, process cost systems, cost allocation and activity-based costing; analyses for managerial decision making; budgeting, standard cost systems, accounting for decentralized operations and transfer pricing.

### **ACC-202 - Cost Accounting**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 102

Description: Instruction in the principles of cost accounting and the keeping of cost records. Job order, process, standard cost systems and a survey of other costing techniques and applications.

### **ACC-207 - Auditing**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 212 or permission of the department chair

Description: Designed to acquaint the student with current concepts in auditing, the coverage of Generally Accepted Auditing Standards, accounting concepts and procedures, and the preparation and interpretation of the audit report.

### **ACC-211 - Intermediate Accounting I**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 102

Description: A review of the accounting cycle for a manufacturing and for a merchandise operation. Emphasizes the capital structure of the corporation and the theory and concepts underlying accounts such as cash, receivables, inventories and investments.

### **ACC-221 - Fraud Examination**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 207 or CSC 105 or CSC 106

Description: Fraud examination will examine types of fraud, sources of evidence and analysis of internal and external fraud schemes with an emphasis on the skills needed to identify and investigate fraud.

### **ACC-223 - Fraud and the Law**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 221 Co-requisites: ACC 222

Description: Sociological and psychological theories of criminal behavior, laws, rules of evidence, the rights of persons under investigation, interrogation and interviewing, report writing, and ethics, as these topics relate to forensic accounting and fraud examination.

### **AFS-121 - Introduction to African-American Studies**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Introduction to the foundations and approaches of African-American studies. Examines historical, sociological, psychological, religious and philosophical perspectives of the African-American experience.

integrate and draw upon the knowledge and skills developed in the other courses in the Forensic Accounting and Fraud Examination curriculum.

### **AFS-123 - Introduction to African Civilizations** [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The historical development of African civilizations from earliest times to the present. Focuses on the cultural, political, social and economic factors which shaped Africa and its people.

### **AGD-212 - Advertising Design**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: AGD 213 and AGD 219

Description: This course is designed to give the student the feel of working in teams on a professional advertising campaign. Two presentations are required: First, a researched exposition of the product or service, and second, the team presentation of the final advertising campaign, along with portfolios of their individual contributions. Typical elements required are: corporate identity, magazine or trade journal ads, billboards or posters, direct mail pieces, sample packaging, storyboards for video ads etc. This final presentation is videotaped.

### **AGD-214 - Print Production**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: All MAD courses and AGD 219

Description: Students learn the steps to produce mechanicals for print applications. The history of printing and conventional as well as digital printing processes, are explored. Production problems such as screens, ink limits, proofing and cost control are addressed. Pre-press workflow is covered including: color systems, file formats, image resolution, separations, trapping, paper selection and preflighting. Emphasis is on producing trouble-free files for commercial print. Students submit a complete portfolio of work at the end of the semester.

### **AGD-222 - Media Art and Design Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Visual, Performing and Media Arts

Prerequisites: Completion of all MAD courses, and three AGD courses for the Advertising Graphic Design option or three courses for the Professional Commercial Photography option and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby students are provided with a job that will enhance their competency by getting practical hands-on experience on state-of-the-art technology utilized by commercial designers and photographers. Students are assigned to work on a one-to-one basis with a professional designer or photographer using the latest techniques and equipment. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. Open to students recommended by the faculty of the department. Career interest and goals are taken into account. Marketing Art and Design Field Experience is not a graduation requirement.

### **ART-104 - History of Photography** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: An exploration of the history, technology and art of photography. The course stresses the visual literacy components of photography through time and across cultures, from Chinese Magic Mirrors through traditional silver processes to current electronic and digital imaging. Students will become familiar with practitioners and artists who use the medium as their tool of communication.

### **AFS-231 - African-American History** [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course surveys the history of the African Americans in the United States from African origin to the present. Special attention will be given to the social, political, economic experiences and events that have helped shape the African-American community.

### **AGD-213 - Typography**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: All MAD courses

Description: Students become versed in fundamentals of layout and typographic design. Topics include history, letter form drawing, type anatomy, fonts, white space usage and the use of grid systems for layouts. Through a series of design problems, students will learn to use type as an effective visual element relevant to layout and content. Historical and contemporary models of layout and type usage will be explored through both traditional hand and digital means. The course covers layout and typographic standards of many types of publication, both print and electronic. Students submit a complete portfolio at the end of the semester.

### **AGD-219 - Digital Graphics**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: All MAD courses

Description: Students will examine technical and aesthetic imaging problems in print and advertising. Conceptual and analytical thinking will be stressed in creating original visual statements. In-depth Illustrator and Photoshop methods will be covered in the development and editing of CMYK artwork. As the complexity of the projects increases, advanced material, such as color spaces, masking, layers and filters will be addressed. Topics covered will include input and output methods, image editing, color standards and corrections, photo collage, conceptual illustration and special effects.

### **AGD-280 - Portfolio**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: All MAD courses and 6 credits of AGD courses Co-requisites: The remaining six AGD credits

Description: Students learn about job discovery and search, resume creation, both paper and electronic, employment letter writing and interviewing techniques. This is in addition to the primary goal of producing a professional level portfolio, both on paper and in digital/electronic formats. They will also be guided in discovering their professional strengths and goals through an individual self-evaluation process. Field trips are taken. Purchase of portfolio materials will be required.

### **ART-105 - Introduction to Art** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A combination lecture and studio course designed to increase appreciation of art through experimentation with materials in a variety of media. Includes exploration of elementary two- and three- dimensional problems in design. Field trips required.

**ART-109 - Drawing****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A workshop and lecture course exploring media, concepts and techniques of drawing. Skill in representing objects, landscape, human and imaginative form is approached through practice and the examination of the works of previous and present day artists. Individual criticism aimed at personal growth of artistic ability and insight. Outside assignments to be reviewed by instructor. Field trips required.

**ART-115 - Survey of Non-Western Art** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A survey of the visual expressions, traditions, philosophies, materials and aesthetics of art created in Africa, Asia and the Americas. Development from ancient times to the present, as well as diverse cultural influences on Western artists will be explored. Slide presentations, films and field trips to museums and art galleries are included.

**ART-123 - Art History: Ancient to Renaissance** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Examines developments in painting, sculpture and architecture from prehistory to the High Renaissance in Western art. Significant periods emphasized through slides and films. Field trips required.

**ART-125 - Art History: Modern and Contemporary** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Examines developments in painting, sculpture and architecture in Western Art since the Industrial Revolution to the present day via major styles, movements and significant artists. Field trips required.

**ART-146 - Art Fundamentals: Three Dimensions****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: A studio course to explore three-dimensional design concepts and develop visual thinking in relation to various fine arts areas such as sculpture and ceramics. Mixed media - the interaction of two-and-three-dimensional concepts - is explored. Open to non-art majors as an elective. Required of art majors.

**ART-149 - Art Studio Seminar****Credits: 1**

Lecture Hours: 1

Department Description: Visual, Performing and Media Arts

Prerequisites: One or more three-credit studio art courses or written permission of the department chairperson and Counseling and Career Services Office

Description: Art studio issues are addressed as they relate to the artist in contemporary society. The motivations, relevance and the nature of art-making in American and global culture are investigated. The creation of subject matter for artistic expression that is personally meaningful is placed in a larger aesthetic context. The conceptual links among all the visual arts are explored. Field trip required.

**ART-201 - Ceramics: Hand-Building****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Experience in the various hand-building and decorating

**ART-110 - Figure Drawing****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Practice combining nature and the imagination is directed toward exploring form and developing the basic techniques of drawing the undraped figure. Field trips required.

**ART-120 - Survey of American Art** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A survey of American art from Native American art to the present day. The course will concentrate on the evolution of the nation's art in its historical, social, political, cultural and geographical context. The focus will be on the major trends in painting, sculpture, architecture and photography. Slide presentations, films and field trips to museums and art galleries are included.

**ART-124 - Art History: Renaissance to Modern** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Examines developments in painting, sculpture and architecture from the High Renaissance to the twentieth century in Western art. Significant artists and their contributions to techniques. Field trips required.

**ART-145 - Art Fundamentals: Two Dimensions****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: A studio course to explore two-dimensional concepts and develop visual thinking in relation to various fine arts areas such as drawing and painting. Open to non-art majors as an elective. Required of art majors.

**ART-148 - Art Portfolio Workshop****Credits: 1**

Lecture Hours: 1

Department Description: Visual, Performing and Media Arts

Prerequisites: One or more three-credit studio art courses or written permission of the department chairperson

Description: Student art work is developed and expanded into a coherent portfolio. The course focuses on the preparation of a body of work for presentation in a professional manner and for effective transfer to senior institutions. Issues of quality, range of style and techniques, and methods of representing work in a critical setting are addressed. Field trip required.

**ART-150 - Introduction to Mixed Media****Credits: 3**

Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Description: This introduction to mixed media explores the techniques and concepts of collage making and involves composing images using a variety of materials including papers, fabrics and found objects. The emphasis is on the pictorial applications of collage, but some experience is given to its three-dimensional extension, assemblage. A survey of the medium's relevance in modern and contemporary art is explored, along with its connections to the other visual arts. Field trip required.

**ART-202 - Ceramics: Wheel-Throwing****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Basic skill is developed in the use of the potter's wheel. Study of



techniques as well as some experience in the process of stacking and firing the kiln. Field trips required.

### ART-205 - Advanced Ceramics Workshop

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: ART 202 or demonstrated throwing ability

Description: Advanced throwing techniques and surface treatments, including englobe decoration, wax resist, lusters and glazes. Thrown forms are used to experiment with various techniques. Slides, lectures and a museum visit will supplement the weekly demonstrations. Critiques will enable students to develop both their work and critical facilities.

### ART-219 - Graphic Arts: Traditional

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Introductory Graphic Arts is explored through the practice of two traditional and evolving graphic techniques, including the processes of mono-printing, collography (collage graphics) and the similar methods of woodcutting and linocutting. Technical control, basic pictorial concepts and an awareness of the cultural application of the mono-print and the basic relief print are emphasized. A materials fee and a field trip are required.

### ART-221 - Painting: Traditional

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: The language and materials of painting are explored through still life, landscape and live model. Practice of easel techniques are enhanced by the examination of traditional paintings past and present. A materials fee and a field trip are required. Students will provide some of their own supplies.

### ART-223 - Sculpture: Traditional

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Explores the language and materials of sculpture in relief. Develops skill and understanding of the basic elements of sculptural form through modeling, carving and casting in relief. Examines the work of sculptors through slides, films, books and field trips. A materials fee is assessed to cover the cost of materials required for the course.

### ASL-121 - American Sign Language I [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: This course will cover a general introduction to American Sign Language, its structure, grammatical rules and vocabulary. These areas include topics such as the manual alphabet, basic words, sentences, numbers, phonology, morphology, the use of the space, classifier verbs, adjectives, nouns, pronouns, non-manual, cues and finger spelling. It will also cover issues related to deaf culture and history. There will be assignments outside of the classroom. This course is taught primarily in American Sign Language.

### AUT-108 - Automotive Technology Work Experience I

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Engineering Technologies

Prerequisites: AUT 122, AUT 124 and AUT 126 and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program employing students in a

### ART-208 - Art Seminar and Co-Op Education Work Experience

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Visual, Performing and Media Arts

Prerequisites: Written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby students are employed in a visual arts position in order to gain some of the practical experience necessary for success in various aspects of visual arts: artistic, technical and/or administrative. The College provides supervision of this departmentally approved position through on-the-job visits and individual progress sessions. Students are required to establish learning objectives related to their positions in order to effect the attainment of specific job competencies. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. Individuals must be recommended by the chairperson of the Visual Arts Department and register with the Counseling and Career Services Office.

### ART-220 - Graphic Arts: Contemporary

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Introductory graphic arts are explored through the practice of two evolving, graphic techniques: screen-printing and intaglio - a method from which multiples may be printed. Technical control, basic pictorial concepts and an awareness of the cultural application of the screen-print and the intaglio print are emphasized. A materials fee and a field trip are required.

### ART-222 - Painting: Contemporary

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Objective and imaginative form in painting is explored through traditional and experimental techniques incorporating individual interpretation on guided projects. Study of modern art movements and contemporary artists are combined with studio assignments. A materials fee and a field trip are required. Students will provide some of their own supplies.

### ART-224 - Sculpture: Contemporary

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Explores the language and materials of sculpture. Develops skill and understanding of the basic elements of sculptural form through guided projects using the traditional tools and techniques for sculpture in the round. Examines previous and contemporary sculptors and styles through slides, films, books and field trips. A materials fee is assessed to cover the cost of materials required for the course.

### ASL-122 - American Sign Language II [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ASL 121

Description: This course is a continuation of American Sign Language I designed to improve expressive and receptive skills and to expand on vocabulary and grammatical rules. Students will focus on non-manual markers and facial grammar. There will be assignments outside the classroom. This class is taught primarily in American Sign Language.

### AUT-111 - Minor Automotive Services

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Description: Introduces shop operations, customer relations, flat rate manuals, safety, organizational design, pay structure, equipment, tools and basic

technical position in order to gain practical experience necessary for success in the automotive service industry. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. Students must register with the Counseling and Career Services Office.

### **AUT-115 - Automotive Brake Systems**

**Credits: 2**

Lab Hours: 5

Department Description: Engineering Technologies

Description: Covers diagnosis and repair of both drum and disc brake systems, power brake boosters, master cylinders, wheel cylinders and related component parts.

### **AUT-122 - Analysis and Tune-Up**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 111 Co-requisites: AUT 124 and AUT 126

Description: Covers techniques for diagnosing the automobile engine and other areas. Stresses electronics and conventional ignition systems. Introduces carburetion and injection systems. Complete tune-up procedures, using the latest test equipment, are studied to ensure the proper application to the automobile.

### **AUT-126 - Alignment, Suspension and Steering Systems**

**Credits: 2**

Lab Hours: 5

Department Description: Engineering Technologies

Prerequisites: AUT 111

Description: A study of the proper techniques and procedures for complete front-end service, wheel alignment, replacement of worn parts, balancing wheels and related front-end and steering mechanisms.

### **AUT-211 - Standard Transmission and Drive Train**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 108

Description: A study of the operating principles, construction and maintenance of the manual transmission and related drive train components.

### **AUT-216 - Fuel and Emission Systems**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 108 Co-requisites: AUT 217

Description: A study of the principles and functions of the automotive fuel system including the carburetor, fuel pump, gas tank and emission control systems. Stresses the diagnosis and repair and adjustment of the carburetor, fuel injection and their components.

### **AUT-226 - Automatic Transmission II**

**Credits: 2**

Lab Hours: 5

Department Description: Engineering Technologies

Prerequisites: AUT 208 and AUT 213

Description: A continuation of Automatic Transmission I. Transmission rebuilding is continued with emphasis on in-service automotive repair.

### **AUT-229 - Automotive Electricity and Electronics**

operational theories. Includes service procedures of lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service.

### **AUT-117 - Automotive Electrical Systems**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Description: Covers the automobile electrical system including batteries, wiring, lighting, alternators, generators, starters and voltage regulators. Includes the use of electrical test equipment and schematics. Stresses the proper care and use of tools.

### **AUT-124 - Automotive HVAC Systems**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 111

Description: Focuses on the principles of operation and service techniques applied to automobile air conditioning systems. Topics include components familiarization, testing, diagnosing, charging and repair practices.

### **AUT-208 - Automotive Technology Work Experience II**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Engineering Technologies

Prerequisites: AUT 211, AUT 213, AUT 216 and AUT 217

Description: A cooperative work experience program employing students in a technical position in order to gain practical experience necessary for success in the automotive service industry. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work for a minimum of 180 hours per semester. Students must register with the Counseling and Career Services Office.

### **AUT-213 - Automatic Transmission I**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 208 Co-requisites: AUT 211

Description: A study of the theory, operation and diagnosis of automatic transmissions. Rebuilding of automatic transmissions is introduced.

### **AUT-217 - Engine Diagnostics and Repair I**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 108 Co-requisites: AUT 216

Description: A study of the operational theory of the internal combustion engine. Engine rebuilding, mechanical diagnosis and failure analysis are introduced. Emphasis is on the proper use of hand tools, measuring instruments and equipment.

### **AUT-228 - Engine Diagnostics and Repair II**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 208 and AUT 217

Description: A continuation of Engine Diagnostics and Repair I. Engine rebuilding is continued with emphasis on the proper use of hand tools, measuring instruments and equipment.

### **BIO-010 - Basic Biology**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: AUT 208 Co-requisites: AUT 226 and AUT 228

Description: An introduction to electrical/electronic principles and applications to automotive systems. Covers DC and AC circuit fundamentals, wiring diagrams, electronic devices, use of test equipment and troubleshooting techniques.

**BIO-103 - Plants, People and Culture** [GE MST](#)**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: This is a general one-semester introductory survey course in plant biology. Some topics to be included are basic plant structures and functions, medicinal and poisonous plants, origins of agriculture and the green revolution. Lab exercises, using the scientific method, will investigate various plant physiological processes. Plants and their impact on society from both a contemporary and historical perspective will be critically examined using Internet research and current readings. Recommended for non-science majors.

**BIO-105 - Heredity, Evolution and Society** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or a three-credit college level science course with a grade of "C" or better

Description: This course is an introductory survey that demonstrates how and why evolutionary theory is the unifying principle of modern biology. The course also examines the biological disciplines of classical and population genetics, molecular genetics, cell biology, human evolution and origins of life research. The impact of evolutionary theory and applications of genetic technologies on society are assessed. Labs include computer simulations, lab activities (non-dissection) and use of various audio-visual materials. Recommended for non-science majors.

**BIO-108 - Essentials of Human Anatomy and Physiology** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010

Description: A one semester survey of the cells, tissues and systems of the human body. Structural, functional and biochemical features of the integumentary, skeletal, muscular, nervous, endocrine, special senses, digestive, respiratory, lymphatic, urinary and reproductive systems in health and disease are studied and examined. Recommended for non-science majors. This course fulfills the science requirement for Dietetic Technology students.

**BIO-112 - Human Anatomy and Physiology II** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 111 with a minimum grade of "C"

Description: A continuation of BIO 111. A study of the structure and function of the body is continued by examining the endocrine, reproductive, circulatory, digestive, respiratory and excretory systems.

**BIO-118 - Biology II** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Co-requisites: Appropriate score on the College placement test or MAT 013

Description: An introduction equivalent to one year of high school biology. The basic principles and terminology of biological sciences. Recommended for students with insufficient background in biology to prepare them for college level biology courses. A grade of 'C' is the minimum acceptable grade for movement from one developmental level to another and for completion of development requirements.

**BIO-104 - Mysteries of the Microbial World** [GE MST](#)**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: This course, designed for the non-major, uses scientific principles to investigate the diversity of microbial life. Laboratory-based modules use the scientific method to explore the cellular, ecological, epidemiological and commercial roles of microorganisms. The interdependence of microorganisms to life on Earth is examined. Laboratory exercises introduce students to principles of light microscopy, aseptic methods of handling and cultivating microorganisms, fermentation and DNA isolation. The historical and social impact of infectious diseases is explored using case studies, current events and web quests to encourage critical thinking skills. Examination of contemporary topics, including the development of antibiotic resistance, bioterrorism and genetic engineering are designed to foster scientific literacy. A research paper is required.

**BIO-106 - Human Biology, Biomedical Issues and Society** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or a three-credit college level science course with a grade of "C" or better

Description: An introduction to the functioning of the human body; a survey of selected body systems in health and disease. There will be discussions and written assignments concerning human biological issues from both historical and current perspectives. Laboratory exercises (without dissection), audio-visual materials, computer simulations and current readings are included. Recommended for non-science majors.

**BIO-111 - Human Anatomy and Physiology I** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013

Description: A study of cellular transport mechanisms and tissues as they relate to organs and systems. Structural and functional features of the skeletal, muscular and nervous systems and special senses are examined. Recommended for students in the health sciences.

**BIO-117 - Biology I** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: Appropriate score on the College placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010

Description: A general study of the physical and chemical properties of living material, cell organelles, cell transport, cell division, energy transformations in photosynthesis and cellular respiration, plant and animal tissues, the classification of organisms and genetics.

**BIO-123 - General Biology I** [GE MST](#)**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 117

Description: A continuation of Biology 117. Emphasis is on supporting life processes, animal systems, evolution, ecosystems and communities.

### **BIO-124 - General Biology II** [GE MST](#)

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 123

Description: A survey of plant and animal taxonomy, anatomy and physiology; evolutionary theory and principles of ecology. Laboratory sessions include dissections.

### **BIO-132 - Introduction to Biotechnology: Concepts and Issues**

**Credits: 1**

Lecture Hours: 2

Department Description: Natural Sciences

Prerequisites: BIO 123

Description: This course is a seminar survey of biotechnology methods and techniques that raise ethical or moral questions. Topics include issues pertaining to basic and applied research in human health, agriculture, and the environment. Students will research, present and lead weekly roundtable discussions on bioethical topics.

### **BIO-205 - Methods in DNA Technology**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 120, CHM 118 or CHM 122, CHM 126 and MAT 108

Description: This is a laboratory course which emphasizes application and mastery of general skills learned in previous semesters as well as specific skills relating to recombinant DNA technology such as restriction digestion, gel electrophoresis, transformation, plasmid preparations, PCR (polymerase chain reaction) and Southern transfers. Students will gain extensive hands-on experience in nucleic acid techniques and manipulations.

### **BIO-211 - Principles of Microbiology** [GE MST](#)

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory biology or BIO 010, and one year of high school laboratory chemistry or CHM 010, and appropriate score on the College placement test or MAT 013

Description: An introductory study of the microbial world with emphasis on the nature and behavior of microorganisms, the interrelationships that operate between microbes and the human host in health and disease and the principles of prevention and control of infectious disease. Laboratory experience develops techniques in the proper handling, observation and identification of microbial cultures. Recommended for students in the health sciences.

### **BIO-224 - Applied Microbiology**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 221 with a minimal grade of "C"

Description: Topics include: microbial ecology, aquatic microbiology, including water and wastewater treatment; microbiology of air, soil and food; dairy microbiology; industrial microbiology. In the laboratory, students learn standard methods of analysis for microorganisms in the environment.

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 020 passed with a "C" or higher. Also, appropriate score on the College placement test or MAT 013.

Description: A study of the basic principles and origins of life; the chemistry of living things; cell structure, function and reproduction; cell metabolic process including cellular respiration and photosynthesis; Mendelian genetics and modern genetics principles. Required for science transfer students in the biology option and biology pre-professional option and biotechnology.

### **BIO-131 - Human Structure and Function** [GE MST](#)

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: One year of high school biology or BIO 010, and one year of high school chemistry or CHM 010, and appropriate score on the College placement test or MAT 013

Description: A one semester survey of the cells, tissues, organs and systems of the human body designed to establish a basic knowledge in human anatomy and physiology. The structural and functional features of the integumentary, skeletal, muscular, nervous, endocrine, sensory, digestive, cardiovascular, lymphatic, respiratory, urinary and reproductive systems will be studied and examined.

### **BIO-140 - Biodiversity and Issues in Ecology** [GE MST](#)

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: A survey of the major ecosystem types of New Jersey including hardwood forests, pinelands, swamps, marshes, dunes and seashore. Students will observe representative organisms from each ecosystem, explain their ecological interrelationships, determine the chemical and physical factors that influence their survival and recognize the historical and current impact of human activities on these ecosystems. Students will also evaluate the applications of the scientific method to conservation efforts that promote biodiversity in New Jersey.

### **BIO-206 - Protein Purification and Tissue Culture Techniques**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 205 Co-requisites: CHM 220

Description: This course is designed to be a continuation of BIO 205. Students will develop new skills in protein manipulation, separation techniques and plant/animal tissue culture techniques. They will apply the skills they acquired throughout the Biotechnology curriculum to complete a capstone project.

### **BIO-221 - Microbiology**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 118, BIO 120 or BIO 124, CHM 118 or CHM 122 and CHM 126

Description: A comprehensive study of microorganisms with emphasis on bacteria. Topics include: cellular and viral structure and function, taxonomy, microbial metabolism and genetics, physical and chemical methods of controlling microorganisms and concepts of pathogenicity and immunology. The laboratory exercises emphasize practical skills in manipulating, observing, controlling and identifying microbes.

### **BIO-226 - Biological Technology Cooperative Education**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Natural Sciences

Prerequisites: Written permission of the department chairperson and Counseling and Career Services Office.

Description: A cooperative work experience program whereby students are employed in a technical position in order to gain some of the practical experience necessary for success in biological technology. Supervision of this

departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. Individuals must be recommended by the faculty of the department and registered with the Counseling and Career Services Office.

### BIO-228 - Genetics

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 124, CHM 122 and CHM 126 or written permission of the department chairperson

Description: Mendelian and molecular concepts of heredity and their relationship to cell function, development and evolution. Topics include structure, function of genes, patterns of inheritance, nature and causes of mutations, mechanisms of gene regulation. Lab includes genetics of fruit flies, fungi, bacteria, human pedigree analysis and modern molecular techniques.

### BIO-240 - Research in Biology

**Credits: 4**

Lab Hours: 8

Department Description: Natural Sciences

Prerequisites: BIO 124, CHM 122, CHM 126 and ENG 121

Description: Students will engage in a scientific investigation under the guidance of a research scientist in an academic institution. A faculty member of the Middlesex County College Biology Department will monitor the project. The research scientist and the MCC Biology faculty will jointly assess the student's work. The assessment includes between 180-220 hours of lab work, library work, data analysis, a written report and oral presentation. This course can be used to fulfill the SCI/MAT elective or Biology Elective but not both, for the Science Transfer Biology Program. Students are expected to provide their own transportation.

### BIO-252 - Introduction to Biomolecules and Molecular Biology - Lab

**Credits: 1**

Lab Hours: 3

Department Description: Natural Sciences

Co-requisites: BIO 251

Description: This course introduces the students to biochemical and molecular techniques used for studying carbohydrates, lipids, proteins and nucleic acid. Students will gain hands-on experience on a variety of experimental techniques used in biological research.

### BUS-115 - Mathematics of Finance

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: Passing score on the College placement test or successful completion of MAT 013

Description: A study of the mathematics and terminology related to buying and selling, time value of money using simple and compound interest, basic statistics with charts and graphs and fundamentals of investing.

### BUS-202 - Business Law II

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 201

Description: Detailed study of the substantive law of commercial paper, agency and employment, security devices, bankruptcy, partnerships and corporations and real property. Decedents' estates, wills and trusts as well as insurance law are surveyed. (In applicable areas, the Uniform Commercial Code is covered as well as the common law principles.)

### BUS-213 - Law for Event Planning Management

**Credits: 3**

### BIO-229 - Cell Biology

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 124, CHM 121 and CHM 125 Co-requisites: CHM 122 and CHM 126

Description: This course is a study of biology at cellular and sub-cellular levels. It introduces students to the structure, function and organization of cellular components of living organisms. Integration of structure and function at the cellular and molecular levels is emphasized. Students will apply the concepts of cell biology to disease processes such as cancer. Students will gain hands-on experience in a variety of experimental techniques used in biological research.

### BIO-251 - Introduction to Biomolecules and Molecular Biology - Lecture

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 221, CHM 227, BIO 123 and BIO 124 Co-requisites: CHM 222, CHM 228 and BIO 252

Description: This course introduces the students to structure, functions, synthesis and degradation of biologically important macromolecules of the cell such as carbohydrates, proteins, lipids and nucleic acids. Bioenergetics and regulation of metabolic pathways will be discussed. The interrelationship between the metabolic pathways and genetic defects will be emphasized. The course will focus on molecular biology, including the metabolism of DNA and RNA and regulation of gene expression.

### BUS-101 - Business Organization and Management

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: The planning, supervision, control and performance of activities involved in the production of goods and services. The problems of human relations and labor-management and the functions of human resources, marketing, purchasing, production and finance are explored from the standpoint of effectively carrying on business that relates positively to the society of which it is a part.

### BUS-201 - Business Law I

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Brief surveys of the American legal system, procedural law, crimes and torts, administrative agencies, consumer, environmental and planning law. Detailed study of the substantive law of contracts, personal property and bailments and sales law. (In applicable areas, the Uniform Commercial Code is covered as well as the common law principles.)

### BUS-210 - Introduction to Event Planning

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101 or SBM 120 or HRI 101

Description: This course introduces the special skills required for the planning of meetings, expositions, events and conventions, which are normally expensive and often one-time occasions. Students will learn how to design, plan, market and stage an event; including dealing with staffing problems, ensuring the safety of all involved as well as legal compliance, risk management, financial control and evaluation of the event.

### BUS-239 - Field Experience in Event Planning Management

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: This course is designed for students in event planning. As professionals making decisions every day based on their own interpretation of the law, they have a great need to understand how they can act in ways to ensure that they are managing legally in the industry, the basic foundations and principles of the laws affecting the industry as well as guidelines and techniques that show students how to implement preventive management and apply practical legal awareness to their actions.

**BUS-240 - Business Communication****Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ENG 122 or permission of department chair

Description: The course focuses on oral and written communication theory and practice appropriate for a variety of business situations. Students generate and examine routine and special business correspondence, strategic electronic communication, and informational and analytical business reports; conduct business research; refine team-oriented skills; and design/deliver oral presentations. The following concepts are emphasized: the nature of audience; business communication forms/formats; tone, style and diction; purpose; clarity and complexity; and other relevant rhetorical issues. This course is cross-listed in the English and Business departments. Students may not earn credit for both BUS 240 and ENG 240.

**CHM-010 - Basic Chemistry for Health Science Students****Credits: 4**

Lecture Hours: 4 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test

Description: An introduction to the fundamental principles of chemical structure and reactions. Includes applications in related laboratory work. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

**CHM-107 - Principles of General, Organic and Biochemistry [GE](#) [MST](#)****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory chemistry or CHM 010

Description: An introduction to basic concepts of inorganic, organic and biochemistry. Topics include the metric system, ionic and covalent bonding, acids, bases and salts, radioactivity, solutions, colloids, emulsions, gases and important organic compound classes such as alcohols, ethers, esters, carbohydrates, proteins, lipids and enzymes. This course is required for students in Dental Hygiene, Pharmacy Assistant and Respiratory Care.

**CHM-118 - Chemistry II [GE](#) [MST](#)****Credits: 4**

Lecture Hours: 4 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 117

Description: A continuation of CHM 117. Topics include qualitative and quantitative solution chemistry, acid-base theory, chemical equilibria, oxidation reductions and basic electrochemistry. Laboratory experiences cover qualitative analysis and volumetric methods of analysis. The volumetric techniques include acid-base and redox titrations and spectrophotometric analysis. The computer is used to analyze data.

**CHM-122 - General Chemistry II - Lecture [GE](#) [MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 121 with a grade of "C" or better

Description: A continuation of CHM 121, concentrating on properties of liquids, solids and solutions, kinetics, equilibrium, properties of acids and bases, acid-base and solubility equilibria, thermodynamics and electrochemistry.

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: Completion of half the courses required in the Event Planning Management curricula and written permission of department chairperson

Description: Integration of classroom study with specific planned period of learning through work experience, co-op or internship based. The course utilizes a seminar approach with performance-based human relations activities and individual student objectives that are job related and employer evaluated.

**BUS-250 - Seminar in Event Planning Management****Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 210, BUS 213, BUS 239, BUS 240, HRI 206, HRI 250 and SBM 110

Description: This is the capstone course for Event Planning Management. It covers a variety of topics to test theories and practices learned in the major. Case studies and presentations are key to the course. The "team concept" is employed and group dynamics are developed.

**CHM-020 - Basic Chemistry for Science Transfers****Credits: 4**

Lecture Hours: 4 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 014 or appropriate score on the College placement test

Description: An introduction to chemistry and chemical theory. This course is designed for students intending to enroll in general chemistry. The emphasis is on atomic structure, electron configuration and the periodic table. In addition, chemical reactions, balancing equations and stoichiometry will be stressed.

**CHM-117 - Chemistry I [GE](#) [MST](#)****Credits: 4**

Lecture Hours: 4 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test and one year of high school laboratory science or departmental approval

Description: A foundation course involving a study of the metric system, bonding, the periodic table, chemical equations, mole-related concepts, stoichiometry and gas law. Laboratory experiences stress proper lab technique, use of equipment, treatment of data and safety.

**CHM-121 - General Chemistry I - Lecture [GE](#) [MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020

Description: A theoretical treatment of principles and laws underlying atomic structure, chemical reactions, enthalpy changes, bonding and states of matter integrated with descriptive material and quantitative calculations.

**CHM-125 - General Chemistry I - Lab [GE](#) [MST](#)****Credits: 1**

Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: Two years of high school algebra and geometry or MAT 014 and one year of high school chemistry or CHM 020 Co-requisites: CHM 121

Description: Introduction to the general chemistry laboratory; includes the conduct of inorganic reactions and general laboratory techniques. An appreciation and understanding of safety and environmental aspects of the general chemistry laboratory is developed. General chemistry laboratory

techniques such as separation and titration and inorganic multistep synthesis are carried out. A variety of chemical reactions are performed, redox reactions and titrations are carried out, a stock solution and a series of dilute solutions are prepared from the stock, the enthalpy of reaction using Hess's Law is determined, and the MW of a volatile liquid is determined using the Ideal Gas Law.

### CHM-126 - General Chemistry II - Lab [GE MST](#)

**Credits: 1**

Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 121, CHM 125 with a grade of "C" or better Co-requisites: CHM 122

Description: The laboratory course associated with CHM 122, General Chemistry II. The labs are related to the lecture topics and are meant to reinforce them. Computers are used for data acquisition and data handling using Microsoft EXCEL.

### CHM-202 - Biochemistry [GE MST](#)

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 201

Description: An introduction to the chemistry of compounds present in living systems. Topics include the structure and properties of carbohydrates, lipids, proteins and nucleic acids and the metabolism of these substances in the body. Laboratory experiments include the qualitative and quantitative analysis of these compounds. A one-semester course.

### CHM-220 - Methods of Chromatographic Separation

**Credits: 4**

Lecture Hours: 3 Lab Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 201, CHM 219 or equivalent

Description: An overview of the theory and equipment of modern instrumentation in the chemistry laboratory. These include Infrared UV/Visible, Nuclear Magnetic Resonance and Mass Spectrometry. The course also explores different techniques of separation including gas, high performance liquid and thin layer chromatography.

### CHM-222 - Organic Chemistry II - Lecture [GE MST](#)

**Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 221 Lecture with a grade of "C" or better, CHM 227 Lab

Description: A mechanistic study of the preparation and chemical reactivity of aromatic compounds, alcohols, phenols, ethers, aldehydes, ketones, amines, carboxylic acids, and carboxylic acid derivatives.

### CHM-228 - Organic Chemistry II - Lab [GE MST](#)

**Credits: 1**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 221, CHM 227 with a grade of "C" or better Co-requisites: CHM 222

Description: Laboratory experience includes the characterization and identification of organic compounds using modern spectroscopic techniques: IR, <sup>1</sup>H-NMR-, <sup>13</sup>C-NMR, and Mass Spectrometry (MS). Introduction to basic techniques of chromatography (GC, HPLC) are also included.

### CHM-240 - Research in Chemistry

**Credits: 4**

Lab Hours: 8

Department Description: Natural Sciences

### CHM-201 - Principles of Organic Chemistry [GE MST](#)

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 118, CHM 122, CHM 126 or equivalent

Description: An introduction to the basic concepts of organic chemistry in a non-mechanistic approach. Laboratory experiences include the basic techniques of organic synthesis and the related techniques used in the isolation and purification of organic compounds.

### CHM-219 - Classical Volumetric and Spectrophotometric Analysis

**Credits: 5**

Lecture Hours: 4 Lab Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 118 and MAT 014 or equivalent

Description: Covers the theory relating to the quantitative techniques of volumetric, gravimetric and spectrophotometric analysis. Topics include evaluation of measurements, concentration calculations, acid-base and precipitation equilibria. Laboratory experiments cover classical volumetric and gravimetric analysis and use of visible spectrometers.

### CHM-221 - Organic Chemistry I - Lecture [GE MST](#)

**Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 122 with a grade of "C" or better

Description: A mechanistic study of the preparation and chemical reactivity of alkanes, alkenes, and alkynes. Conformational analysis and stereochemistry of organic compounds.

### CHM-227 - Organic Chemistry I - Lab [GE MST](#)

**Credits: 1**

Lab Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 122, CHM 126 with a grade of "C" or better Co-requisites: CHM 221

Description: Introduction to the organic chemistry laboratory, performing organic reactions and notebook keeping. An appreciation and understanding of safety and environmental aspects of the organic laboratory. Introduction to organic chemistry laboratory techniques for the purification, isolation and identification of organic compounds - melting point, boiling point, recrystallization, distillation, IR spectroscopy and aspects of chromatography.

### CHM-230 - Analytical Chemistry

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Natural Sciences

Prerequisites: CHM 122, CHM 126 with a grade of "C" or better

Description: Covers the theory relating to the quantitative techniques of volumetric, gravimetric, spectrophotometric, and chromatographic analysis. Topics include evaluation of measurements, concentration calculations, acid-base and precipitation equilibria, and the principles of chromatography. Laboratory experiments cover classical volumetric analysis, the use of visible spectrometers, and chemical separations.

### CIT-104 - Construction Surveying I

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: BIO 124, CHM 122, CHM 126 and ENG 121

Description: Students will engage in a scientific investigation under the guidance of a research scientist in an academic institution. A faculty member of the Middlesex County College Chemistry/Physics Department will monitor the project. The research scientist and the MCC Chemistry faculty will jointly assess the student's work. The assessment includes between 180-220 hours of lab work, library work, data analysis, a written report and oral presentation. This course can be used to fulfill the SCI/MAT elective or Chemistry Elective but not both, for the Science Transfer Chemistry Program. Students are expected to provide their own transportation.

### CIT-105 - Statics for Technicians

**Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: MCT 101, MAT 129 or MAT 129A

Description: Practical study of statics for the engineering technology student. Topics include: force system resultants, force system equilibrium, load analysis of structural trusses and frames, cross-sectional area properties, centroid, moment of inertia, radius of gyration and polar moment of inertia. Use of the TI-86 calculator or approved equivalent is required for the solution of several types of problems.

### CIT-126 - Advanced Civil Drawing/CAD-II

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Engineering Technologies

Prerequisites: MEC 123

Description: A study and execution of drawings encountered in civil and construction engineering. Topics include: structural steel fabrication, reinforced concrete drawings, plot plans and customization of the AutoCAD menu system. Drawings will be generated using surveyor's notes and calculations associated with horizontal and vertical control survey plans, deed plans and topographical plans. All drawings are developed using AutoCAD software. Students will use Land Development CAD and the Architectural Desktop to facilitate creating these drawings. The completion of a comprehensive final project is required.

### CIT-203 - Strength of Materials

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: CIT 105

Description: The study of strength of materials with emphasis on practical applications. Topics include: axial stress and strain, material properties, torsion stress and strain, shear and moment diagrams, bending shear stresses, beam design, theoretical and specification column analysis and design, connection analysis and combined stresses using Mohr's Circle. Weekly laboratory experiments and formal written reports are used to reinforce lecture material. Students are required to present one oral presentation during the semester. Graphical calculator required.

### CIT-212 - Water Resources Technology

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: CIT 105 and MAT 129B or MAT 129

Description: Study of hydrology and hydraulics as they relate to storm water generation and collection; wastewater collection and treatment and water treatment and distribution systems. Lectures include: hydrology and runoff; groundwater; pipeline hydraulics; open channel hydraulics; wastewater treatment; pump selection; reservoir and detention design; drainage structures; water pollution and flood control. Laboratory exercises consist of design projects such as storm water collection system, sanitary sewer list station, culvert, drainage channel, detention pond, backwater curves and water distribution system. Computer software is available to aid in the design calculations.

Prerequisites: MAT 129 or MAT 129A

Description: Introduction to surveying, measurement theory, field and office procedures and error analysis. Lectures emphasize the concepts, computations, analysis and adjustments of leveling, angle observation, distance measure and control traverses. Field exercises stress the techniques of distance measure from rough pacing to use of the Electronic Distance Measure instrument, as well as the correct procedures for horizontal and vertical angle observations. Students prepare drawings and maps from their field notes.

### CIT-125 - Construction Estimating

**Credits: 2**

Lab Hours: 4

Department Description: Engineering Technologies

Description: An introduction to drawing and quantity takeoff with related material and labor costs used in the construction industry. Students will examine and interpret construction drawings to determine quantities and related costs of materials and labor. Topics will include: area and volume calculations, use of engineering scales, material costs, labor costs, overhead and profit. Laboratory projects reinforce the lecture material and emphasize proper estimating procedures and format. The students will be exposed to Microsoft Excel in preparation of the material and cost summaries. Students will prepare a quantity estimate for a small construction project. Basic discussions will be presented for cost estimating of residential and commercial construction projects. Unit cost estimating will be incorporated in the proposed estimate. Specifications and specification standards will be reviewed as set forth by the CSI.

### CIT-151 - Urban and Suburban Development

**Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: CIT 205

Description: Land use planning, zoning and planning boards, general building codes, local control surveys, land data systems, subdivision design, professional land planning systems.

### CIT-205 - Construction Surveying II

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: CIT 104

Description: A continuation of Construction Surveying I with emphasis on the methods of layout construction projects. Topics include: traverse computations and adjustment; control surveys for topography, N.J. State Plane Coordinates: horizontal and vertical curve calculations and stakeout methods, radial stakeouts; pipeline and utility stakeouts, road and street stakeouts; building stakeouts, earthwork calculations and Right of Way acquisition computations. Laboratory exercises demonstrate and reinforce these topics. Computer software is available to aid in the computations.

### CIT-216 - Soil Mechanics

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: CIT 105

Description: Basic study of soils as a material in building construction and environmental projects. Topics include: index properties, soil classification, soil moisture, shear strength, stress analysis, lateral earth pressure, compaction and stabilization and settlement and consolidation. The laboratory will provide sieve analysis, shear strength of soils, relative density, proctor compaction and consolidation and complete testing of concrete cylinders.



**CIT-217 - Structural Design****Credits: 4**

Department Description: Engineering Technologies

Prerequisites: CIT 203

Description: Practical Applications of strength of materials using the American Institute of Steel Construction (AISC) manual in allowable stress design and American Concrete Institute (ACI) manual for reinforced concrete design. Topics include: Principles of structural design for steel and reinforced concrete; steel framing analysis and design; reinforced concrete beam, girder, column and footing design.

**CIT-219 - Reinforced Concrete Design****Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: CIT 203

Description: Practical application of concrete design using the strength design procedure as governed by the American Concrete Institute. Topics include: principles of structural design using reinforced concrete as the material and concrete framing systems using beams, frames, girders and footings as the primary structural elements.

**CIT-253 - Mechanics of Materials****Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: MEC 221

Description: An engineering science level course discussing the basics of strength of materials. This is a lecture-oriented course dealing with the determination of stress resultants, analysis of stress vs. strain, analysis of statically determinate and indeterminate structures, trusses, columns and connections. Introduction to stress and deformation analysis of basic structural elements subjected to axial, torsional, bending, and pressure loads. Additional topics include area moments, conjugate beam method, deflection due to shear, bending of unsymmetrical beams, curved beams, shear flow, shear center, stresses in open sections, theories of failure, plastic stress-strain relations, plastic deformation, limit analysis, and energy methods.

**CJU-123 - Criminal Justice I****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Examines both the substantive and procedural criminal law with a special focus on the administration of justice. Particular attention will be given to the role of the police, courts and correctional systems and how each separate entity must function with the framework of Constitutional law. Special emphasis will be on New Jersey statutory law and court rules.

**COM-105 - Introduction to Communication Study****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Surveys the field of communication studies, including the production, transmission and reception of messages among persons, groups, organizations and cultures.

**COM-115 - Intercultural Communication [GE DIV](#)****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: This course provides a general orientation to and overview of the communication between cultures. The emphasis will be upon offering insight into how cultural differences and similarities impact upon the relationship between culture and communication. The focus will deal with the challenges

**CIT-218 - Steel Design****Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: CIT 203

Description: Practical application of steel design using the LRFD (Load and Resistance Factor Design) procedure as governed by the American Institute of Steel Construction. Topics include principles of structural design and analysis using steel as the primary building material. Analysis and design of steel members, such as beams, girders, columns and connections is studied using the principles of statics. A study of framing and load analysis will be done for various loading conditions.

**CIT-252 - Boundary Law****Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Description: An introductory course which analyzes elements of boundary law, consisting of legal research, evidence, procedures and the synthesis needed for the surveying of land.

**CIT-260 - Civil/Construction Design Project****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: CIT 125, CIT 203 and CIT 205 Co-requisites: CIT 212, CIT 217

Description: Students working in teams integrate their knowledge of theoretical concepts and practical applications of estimating, surveying, hydrology, hydraulics and structural design to complete a comprehensive design project. Oral presentation and a technical report are required.

**CJU-124 - Criminal Justice II****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123

Description: A continuation of Criminal Justice I. Particular emphasis on the New Jersey court system including detailed discussions of the role of prosecutors versus defense attorneys; pretrial, trial and post-trial functions and the constant influence of ethical considerations.

**COM-110 - Interpersonal Communication****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: COM 105

Description: This course explores the ways people interact verbally and nonverbally and introduces the basic theories and modes of interpersonal communication as well as relationship development. Interpersonal contexts will be examined including initial encounters, friendships, marriage, family and professional settings. Activities include participation in groups, pairs and interactive communication situations.

**COM-120 - Introduction to Public Relations****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: ENG 121

Description: This introductory course explores the field of public relations, emphasizing the evolution, role, function and scope of public relations in American society. The course will include organizing programs and using the

of communication in a culturally diverse society and offer techniques for improving communication between members of different cultures.

### COM-121 - Mass Communication Study

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: COM 105

Description: A survey of the institutions, history and technology of the mass communication media, concentrating on radio, television, film and other electronic and print media forms. Topics include the growth of print and electronic media and the relationship among government, media and the public, including the social responsibility and ethics of mass communication.

### COM-208 - Communication Seminar and Field Experience

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Visual, Performing and Media Arts

Prerequisites: Written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative program whereby the student may gain experience in a communication-related position in radio, television or public relations in order to gain some of the practical experience necessary for growth and success. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review related to the position in order to effect the attainment of specific competencies. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester.

### COR-201 - Introduction to Correction Administration

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123 Co-requisites: CJU 123

Description: Examines the vast spectrum of systems, processes and people involved in the correctional field. Emphasizes the legal impact of the correctional process as well as correctional management theories and applications. Particular attention will be given to the massive changes of modern correctional facilities and emerging prison issues such as overcrowding, drugs and the AIDS problem.

### COR-280 - Corrections Externship

**Credits: 3**

Lecture Hours: 2 Lab Hours: 6

Department Description: History and Social Science

Prerequisites: COR 201 or COR 207 Co-requisites: COR 201 or COR 207

Description: A cooperative work experience program in which students enhance their skills by getting hands-on experience in county or state correctional facilities. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a biweekly, two-hour seminar on campus and work a minimum of 180 hours a semester.

### CPT-100 - Introduction to Chemical Process Technology

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Description: This course serves as an introduction to the process industries - chemical, petrochemical, pharmaceutical and food. The course focuses on technician duties, responsibilities and expectations; process terminology, plant organization and a general overview of process equipment, systems and operations. Plant tours will be conducted.

### CPT-206 - Process Technology Equipment

**Credits: 4**

print and electronic media to implement such programs. Students will be exposed to staple writing activities such as news releases, brochures and pitch letters.

### COM-131 - Introduction to Broadcasting

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: COM 105

Description: A comprehensive introduction to the historical development and regulatory policies of radio and television broadcasting. Emphasizes the social, economic and ethical impact of radio and television on society and its citizens.

### COM-210 - Radio Broadcasting Production

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Classroom and studio practice in the preparation and presentation of radio materials including writing, announcing, news casting, interviewing, musical and dramatic programming. Practical concerns involve studio recording techniques, editing of audio tapes and program organization and management. The emphasis is on effective communication and ethical and aesthetic values in a production setting. Hands-on experience with equipment conducted in the campus radio studio, WMCC.

### COR-207 - Correctional Institutions

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123 Co-requisites: CJU 123

Description: Provides a thorough examination of the major issues that correctional institutions must deal with daily as well as the long term effects of decision and policy making. Particular attention given to treatment programs, their uses and limitations. Provides an overview of the past and current status of penal servitude. Explains the lifestyle of the offender in correctional facilities and evaluates efforts to integrate the institutional experience with the post-release life of the inmates.

### CPS-041 - Strategies for Success

**Credits: 3**

Lecture Hours: 3

Department Description: Counseling and Career Services

Description: First course in a two-semester sequence for students in Project Connections. (The second course is SSD 101.) Provides an opportunity for students to learn strategies for academic success and to plan for successful transitions in career and education. Focuses on a better understanding of LD issues and self-advocacy, to become familiar with the Adaptive Lab equipment, to set career and educational goals and design strategies to accomplish them.

### CPT-205 - Process Technology Instrumentation

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: CHM 117 and CPT 100

Description: This course will introduce the student to all aspects of instrumentation used in the process industry. Students will be introduced to a variety of common terms, relationships between process variables and pertinent concepts and definitions. Students will learn about process instruments that control pressure, temperature, flow and level. The concept of control loops and how each component of a control loop acts individually and together to sense, measure, compare and control or convert signals between the various components will be examined.

### CPT-210 - Process Technology Systems

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: CHM 117 and CPT 100

Description: The purpose of this hands-on course is to introduce students to practical fluid, heat and mass transfer theory as evident in typical industrial processes. The course will introduce the student to all aspects of equipment used in the process industry. Students will learn about the operation of processing equipment such as: reactors, dryers, filters, motors, pumps, valves, gauges, transmitters, utilities, piping, tubing and computers. A simple pilot plant will be designed, built and tested.

### CPT-212 - Process Technology Operations

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: CPT 100

Description: To provide an overview or introduction into the field of operations within the process industry. Students will use existing knowledge of equipment, systems and instrumentation to understand the operation of an entire unit. Students study concepts related to commissioning, normal setup, normal operations, normal shutdown, turnarounds and abnormal situations, as well as the process technician's role in performing the tasks associated with these concepts within an operating unit.

### CPT-226 - Process Technology Cooperative Education

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Natural Sciences

Prerequisites: CPT 100, CPT 205 and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby students are employed in technical positions to gain practical experience necessary for success in process technology. Supervision of this departmentally approved position is provided by the College through either the Chemistry/Physics department or the Counseling and Career Services Office through on-the-job visits and individual progress review sessions. Students are required to establish learning objectives related to their position in order to effect the attainment of specific job competencies. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. Individuals must be recommended by the faculty of the department and register with the Counseling and Career Services Office.

### CSC-106 - Intermediate PC Applications with Programming [GE MST](#)

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Computer Science and Information Technology

Prerequisites: CSC 105 or CSC 107 or one year of high school computer applications or programming course and MAT 014 or appropriate score on the College placement test

Description: This course introduces students to a problem solving approach to computer applications through the use of spreadsheets, database, presentation manager, a programming language and Internet skills. It emphasizes Visual Basic and Microsoft Excel, in addition to surveying fundamental computer concepts and is designed for students who already possess a familiarity with computer applications. It is recommended for students planning to transfer to an upper division college that has a computer programming requirement in its computer literacy course. This course is suitable for liberal arts, science transfer and business transfer students who wish to transfer to a university and complete their bachelor's degree.

### CSC-108 - Introduction to Internet Applications

**Credits: 2**

Lecture Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 105 or CSC 106 or CSC 107

Description: Develops the skills needed to effectively use and configure modern Internet applications including electronic mail user agents, web browsers, web search engines, HTML editors and other applications through hands on exercises. An introduction to client/server architecture and the TCP/IP protocol suite is also included. This course develops the skills a student needs for working at a computer help desk, for taking an online course, or for using the Internet effectively.

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: CPT 100

Description: The interrelation of process equipment and process systems. Specifically, students will be able to arrange process equipment into basic systems; explain how factors affecting process systems are controlled under normal conditions; and recognize abnormal process conditions. In addition, students are also introduced to the concept of system and plant economics.

### CPT-214 - Process Technology Troubleshooting

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: CPT 100

Description: This course will provide an overview of the field of quality within the process industry. Students will learn about many process industry-related quality concepts including operating consistency, continuous improvement, plant economics, team skills and statistical process control. Methods to ensure operating consistency, process variables, waste issues and techniques used to prevent process safety incidents will also be covered in the course.

### CSC-105 - Computer Applications and Systems [GE MST](#)

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Description: This course defines computers and computer applications and their use in business, industry and government. Students completing this course will be computer fluent. Students will understand the capabilities and limitations of computers and know how to use them. In addition, students will understand computers and their ethical, legal and societal implications. Topics include the history of computers, hardware devices, software programs, terminology, privacy of information, ethical behavior and the influence of computers on people and society. Hands-on experience includes: using a Windows operating system, a word processor, designing and implementing spreadsheets and producing presentations. This course is recommended for anyone who will be involved with computers and the use of computer application software.

### CSC-107 - Computers in Health Technologies

**Credits: 1**

Lab Hours: 2

Department Description: Computer Science and Information Technology

Description: Presents a survey of computer applications and their use in the health technology fields. Discusses the major components of a computer, instructs in the use of software application packages including word processing and database and exposes a student to a personal computer operating system. Students gain experience using Microsoft Office.

### CSC-110 - Microcomputer Operating Systems and Architecture

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 105 or CSC 106

Description: This course will teach students the role of microcomputer operating systems and how the operating systems interact with the computer. The course covers the structure and function of hardware including input/output devices, memory, central processing unit, storage devices, communications devices and buses. The commonly used microcomputer operating systems Windows and DOS will be discussed and emphasized with hands-on exercises covering topics including: disk maintenance, directory and

file management, batch files, interaction of graphical user interface and utilities. Configuration and optimization of standard hardware and system software will also be discussed. Upon successful completion of this course, the student will be prepared to take the associated A+ test.

### **CSC-116 - Introduction to Information Systems Security**

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 105 or CSC 106

Description: Introduces the student to the field of information security. The managerial, legal, ethical and technical aspects of information security are covered. Students will learn about the need for information security, planning for security and risk management. The function of firewalls, virtual private networks, intrusion detection systems, cryptography and access control mechanisms will be discussed. Physical security and the role of personnel in properly executing security standards and controls are also covered.

### **CSC-126 - Help Desk Customer Service**

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: ENG 121 and CSC 105 or CSC 106

Description: This course covers essential customer service skills needed by a computer help desk attendant in a hands-on setting. The roles, processes and events in the field of customer service are practiced. An overview of customer service is included, as well as specific skills including telephone, writing and conflict resolution.

### **CSC-130 - Computers, Society and Ethics**

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: ENG 121

Description: No invention in history has had as much impact on the fabric of society as the computer and no one technological device is so pervasive within all job structures in industry. Because of the growing ubiquity of computers and the relative ease with which one individual can affect massive number of people, it is extremely important that everyone understand the impact of computers on society and be able to make ethical decisions with respect to the use and deployment of information with respect to software, hardware and various types of computer systems.

### **CSC-134 - Object-Oriented Programming Using C++**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 133 and MAT 116 or MAT 129 or MAT 129A

Description: This course builds on the C++ foundation developed in CSC 133 and is the second core course required for students in the Computer Information Systems General Option program. It discusses the software engineering principles of encapsulation and reuse, and how they lead to abstract data types. The object oriented programming features of classes, inheritance, polymorphism and composition are covered, along with the C++ features of constructors and operator overloading. Students implement programs using these features in the C++ programming language.

### **CSC-162 - Object-Oriented Programming Using Java**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 161 and MAT 129 or MAT 129A

Description: This course builds on the Java foundation developed in CSC 161 and is the second core course required for students in the Computer Science Transfer program. It investigates the software engineering principles of encapsulation, information hiding and code reuse, and discusses how these concepts are used to build abstract data types. The object oriented

### **CSC-125 - Web Markup Languages**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 106 and MAT 014

Description: Focuses on using the markup languages HTML and XML to create Web documents. HTML will be used to produce Web Pages and XML will be used to produce documents that are in a portable form, suitable for electronic data exchange. Other extensions and supplements to these languages such as Cascading Style Sheets (CSS), XHTML, schema languages (DTD and XML schema) and translating tools (XSL) will be covered.

### **CSC-127 - Help Desk Operation**

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 126

Description: This course introduces students to the computer help desk field and the concepts and procedures needed to run a successful computer help desk. Experience is gained in help desk roles, processes, tools, performance measures and settings through hands on exercises. Computer help desk careers, certifications and resources are also presented. Students will use a technical knowledge base.

### **CSC-133 - Introduction to Computer Science Using C++**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1 Studio Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: MAT 014 or appropriate score on the College placement test

Description: This course presents an introduction to programming and problem solving using an object-oriented programming language C++. Algorithm development and basic problem solving techniques are introduced. Fundamental topics of computer programming including sequence, selection, repetition, input/output, functions, parameter passing, scope, lifetime and arrays are discussed in detail. This is the first major course in Computer Science and is required of all students pursuing a degree in any of the three options offered by the department. The course is also recommended for students in other programs seeking a rigorous introduction to computer programming.

### **CSC-161 - Introduction to Computer Science Using Java**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: MAT 014 or appropriate score on the College placement test

Description: This course presents an introduction to programming and problem solving using Java. Algorithm development and basic procedural and object-oriented problem solving techniques are introduced. Fundamental topics of computer programming including sequence, selection, repetition, input/output, methods, parameter passing, scope, lifetime, and arrays are discussed in detail. Basic concepts of object-oriented programming such as objects, classes and class methods are introduced. This course is required of all Computer Science transfer students. The course is also recommended for students in other programs seeking a rigorous introduction to computer programming.

### **CSC-166 - C++ Programming**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Description: This is an introductory programming course using the C++ programming language. Students are introduced to algorithm development and problem solving techniques. Fundamental topics of computer programming are discussed, including: data types, operators, input/output, arrays, and control structure (such as: selection, repetition and functions). No previous programming experience is required. This course is required for

programming features of classes, inheritance, polymorphism and composition are studied, along with constructors and method overloading. Students implement Java programs incorporating features from the Java programming language.

### CSC-200 - Networking Technologies

#### Credits: 3

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 110

Description: This course will provide the student with a thorough understanding of the basic concepts of data communications, networking and connectivity. This includes the topics covered in the Novell Networking Technologies course and the topics covered in the Microsoft Networking Essentials course. Upon successful completion of this course, the student will be prepared to take the associated A+ certification test.

### CSC-206 - Computer Science Work Experience II

#### Credits: 3

Lecture Hours: 1 Lab Hours: 12

Department Description: Computer Science and Information Technology

Prerequisites: CSC 205 and written permission of the department chairperson and Counseling and Career Services Office

Description: Continuation of CSC 205 to include practical experience in the organization and operation of Information Technology departments. A term project is required that discusses the working experiences and learning objectives of the students and is presented to the class.

### CSC-211 - Programming in JAVA

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 134 or CSC 162

Description: Students will learn to design, write, compile, test and execute Java programs. Students will create both stand alone and client/server applications using the Java programming language. Enhancement of website functionality and embedding Java Applets in HTML code will be taught. Platform independent graphical user interfaces will be built using Java's Abstract Windowing Toolkit (AWT).

### CSC-233 - Computer Architecture and Assembly Language I

#### Credits: 4

Lecture Hours: 3 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 133 or CSC 161

Description: This course teaches the fundamentals of computer architecture and assembly language programming. Topics include data representation, binary arithmetic, program flow, indexing, addressing and subprogram development. Programs will be developed and run in an assembly language.

### CSC-235 - Data Structures

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 134 and MAT 116 or MAT 129 or MAT 129B

Description: This course teaches different techniques of storing, accessing and processing data as utilized in the development of programs and algorithms.

engineering technology students. Computer science majors may not take this course.

### CSC-205 - Computer Science Work Experience I

#### Credits: 3

Lecture Hours: 1 Lab Hours: 12

Department Description: Computer Science and Information Technology

Prerequisites: Completion of all courses in first year of CIS or Network Administration option and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby the student is employed in a computing/information systems position in order to gain some of the practical experience necessary for success in the computing field. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours per semester. The individual must be selected by the cooperating employer and recommended by the chairperson of the Computer Science Department.

### CSC-208 - Visual BASIC Programming

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 106 or CSC 133 or CSC 161

Description: This course studies the Visual BASIC programming language, presenting top-down structured programming, visual interface design and implementation, functions, procedures, arrays, data file access methods, graphics programming and database access programming. Hands-on experience with event-driven programming for an interactive Graphical User Interface under Windows will be introduced. The creation and customizing of forms, controls (menu bars, scrolling list boxes, buttons, arrays of controls), their properties and their underlying BASIC programs (methods) will be studied. Error-handling routines and advanced debugging techniques will be used to produce reliable programs.

### CSC-225 - Systems Analysis

#### Credits: 3

Lecture Hours: 2 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 134 or CSC 162

Description: Students plan an application project and produce a complete specification using structured analysis techniques. On-line applications are surveyed in both large (IBM) and small (UNIX) environments.

### CSC-234 - Computer Architecture and Assembly Language II

#### Credits: 4

Lecture Hours: 3 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 233

Description: This is a continuation of CSC 233, including a systems view of linking programs, the functions of operating system modules (the linkage editor, loaders, control program, interrupt handlers device drivers, etc.), virtual storage concepts and command languages. Programs are written in IBM Assembly language. The computer organization topics include an overview of computer systems organization (processor, memory, I/O and interrupt handling), the digital logic level, the machine level and the operating system level.

### CSC-236 - Data Structures in Java

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 162 and MAT 129 or MAT 129B or written permission of the department chairperson

Description: This course teaches different techniques of storing, accessing and

Topics include linked lists, stacks, queues, trees, recursion and graphs. Algorithms for applications such as sorting, searching and merging will be analyzed and implemented. Solutions are designed using object-oriented techniques and implemented in the C++ programming language. This course is the third course in the C++ programming sequence and is a required course for students in the Computer Information Systems General Option.

### CSC-239 - Database Concepts

#### Credits: 3

Lecture Hours: 2 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 133 or CSC 161

Description: This course will provide the student with a thorough understanding of what a database is and how it is used. Emphasis will be placed on the relationship and use of a database for the effective storage and retrieval of user data. The use of structured query language (SQL) will be presented. Hands-on laboratory experience will provide the student with practical applications in the use of databases.

### CSC-243 - Advanced Programming in

#### Credits: 3

Lecture Hours: 2 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 165

Description: Covers advanced topics in program design, testing and modular integration. Presents "C" programming language and its use to implement programs of moderate difficulty in a UNIX\* environment. Topics include data types, control structures, functions, pointers, arrays, structures, UNIX\* system interface, readability, efficiency, portability and tools for software development.

### CSC-245 - UNIX and Shell Programming

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 133 or CSC 161

Description: This course introduces the basic concepts of the UNIX operating system including the UNIX file system, shell programming and process management. Features of the UNIX shell are explored, including: input and output redirection, pipes, variable and filename substitution, and shell and environmental variables. Regular expressions are covered. Students learn a POSIX compliant shell and develop the ability to use shell utilities and editors and create shell programs of moderate difficulty.

### CSC-248 - PC Service and Support

#### Credits: 3

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 110 and CSC 200

Description: This course will provide students with the knowledge necessary to support and service a PC. Cabling, network interfaces, storage devices, and other network hardware components will be studied. Hardware and software installation, troubleshooting, and the use of network diagnostic and repair utilities will also be examined. Students conduct research on hardware and software issues using the Web. Students learn to debug printing problems. Upon successful completion of this course, the student will be prepared to take the associated certification test, such as Microsoft Certified Professional or A+ Hardware.

### CSC-252 - Windows Server Administration

#### Credits: 3

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 251

Description: Provides a foundation for systems administration of servers in a

processing data as utilized in the development of programs and algorithms.

Topics include linked lists, stacks, queues, trees, recursion and graphs. Algorithms for applications such as sorting, searching and merging will be analyzed and implemented. Solutions are designed using object-oriented techniques and implemented in the Java programming language. This course is the third course in the Java programming sequence and is a required course for students in the Computer Science Transfer Option.

### CSC-241 - Web Programming

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 134 or CSC 162

Description: This course will provide students with the information necessary to develop web sites using HTML, CSS, JavaScript, CGI and Perl. Client side processing in JavaScript and server side processing in Perl and CGI will be used in hands-on projects to create dynamic web pages and process form data. Students will also develop web pages with links, images, tables, forms and stylesheets.

### CSC-244 - C++ For C Programmers

#### Credits: 4

Lecture Hours: 3 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 243

Description: Introduces the concepts underlying object-oriented programming. Topics include abstract data types, classes and objects, inheritance, polymorphism and operator overloading. Students use these features in programs implemented using the C++ programming language. Students also learn how to use existing class libraries provided with the C++ compiler as basic building blocks to create more complex programs. Designed for students who have a strong background in "C" programming.

### CSC-246 - UNIX and Web Server Administration

#### Credits: 3

Lecture Hours: 2 Lab Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 245

Description: Builds on the basic understanding of UNIX and shell programming developed in CSC 245. UNIX is the dominant operating system of Internet routers and Web servers. This course covers the essential elements of designing a client/server UNIX configuration, installing it, and keeping it running in an effective fashion. Local Area Networks (LANs), Wide Area Networks (WANs) and the TCP/IP protocol suite are a fundamental part of the UNIX client-server configuration and are fully covered. The installation of UNIX applications is also covered, with electronic mail tools and Web browsers as primary examples of these applications. The emphasis is on serving UNIX client/server needs on a global basis as occurs in a modern multinational corporation.

### CSC-251 - Windows Workstation Administration

#### Credits: 3

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 200

Description: Provides students with the knowledge and skills necessary to perform day-to-day administration in a Windows-based network. Topics include creating and administering user and group accounts and policies, profiles and synchronization, managing resources, auditing, setting up and maintaining the printing environment, internet connection firewall, remote desktop protocol, remote installation, security zones, and wireless and mobile computing. Hands-on exercises will enable the student to implement the tasks necessary to become a Windows administrator in a Microsoft Active Directory environment. Upon successful completion of this course the student will be prepared to take the associated Microsoft certification test.

### CSC-258 - Computer Forensics

#### Credits: 3

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 116 and CSC 245 or written permission of the department chairperson

Windows Server-based network. Topics include the network architecture, server installation and configuration, physical and logical storage devices, active directory and domain management of users, groups, and computer accounts, resource security, remote administration systems monitoring and performance, network printing, Internet web services and disaster recovery implementation. Hands-on exercises are provided to allow the student to perform the above-mentioned tasks. Successful completion of this course will prepare the student to take the associated certification test.

### CSC-261 - Information Technology Management

**Credits: 3**

Lecture Hours: 3

Department Description: Computer Science and Information Technology

Prerequisites: CSC 133 or CSC 161 and CSC 200 and ENG 121

Description: This course covers the technical and managerial issues involved in managing the information technology environment of an organization including: computer and network architecture, telecommunications, databases, operations, systems development and strategic planning. Students will investigate a broad range of managerial issues as well as the relationship between technical and managerial strategies.

### CSC-264 - Computer Organization and Architecture II

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 263

Description: This course presents an introduction to the organization and architecture of computer systems, including the Von Neumann model, data representation, assembly language organization, memory and input/output methodologies. The architecture of the central processing unit, arithmetic and logic unit, and microprogram controller are examined in sequence. The basic architecture and function of operating systems is also covered.

### CSC-267 - Advanced C#.NET Programming

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Computer Science and Information Technology

Prerequisites: CSC 266

Description: This course investigates the software engineering principles of encapsulation, information hiding and code reuse, and discusses how these concepts are used to build abstract data types. The object oriented programming features of classes, inheritance, polymorphism and composition are studied, along with constructors and method overloading. Students are also exposed to the C#.NET programming concepts of exception handling, collections, and generics. In addition, students will query in-memory data by using LINQ and integrate code written in other languages into a C# application. This course is not designed for transfer.

### CSC-269 - ADO.NET Programming

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Computer Science and Information Technology

Prerequisites: CSC 267

Description: This course provides students with the knowledge and skills to access and modify data stored in relational database systems and to access data in relational sources. In addition, this course explores the various ways one can employ the ADO.NET entity framework and LINQ to develop and optimize data applications. This course is not designed for transfer.

### DAN-132 - Dance Appreciation [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: Designed to inform the student about dance as a performing art, through the critical evaluations of the various dance styles. An examination of dance in world cultures will also be included; especially the cross-cultural

Description: This course introduces students to the field of computer forensics. Students will learn the procedures and tools of the computer forensics field as related to corporate, civil and criminal investigations, including EnCase, DriveSpy and freeware. Data acquisition, analysis and preservation techniques will be covered. Both corporate and criminal case studies will be discussed. Linux, DOS and Windows operating system environments will be covered.

### CSC-263 - Computer Organization and Architecture I

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Computer Science and Information Technology

Prerequisites: CSC 161

Description: This course presents the fundamentals of computer architecture, emphasizing RISC architecture and assembly language. Topics include binary arithmetic, Boolean algebra, gates and simple circuits, data representation, RISC architecture, RISC vs. CISC principles, and the development of RISC assembler programs.

### CSC-266 - C#.NET Programming

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Computer Science and Information Technology

Prerequisites: CSC161 and CSC239 or equivalent

Description: This course presents an introduction to programming and problem solving using C#.NET and the Microsoft Visual Studio development environment. Algorithm development and basic procedural and object-oriented problem solving techniques are introduced. Fundamental topics of computer programming including sequence, selection, repetition, input/output, methods, parameter passing, scope, lifetime and arrays are discussed in detail. Basic concepts of object-oriented programming such as objects, classes and class methods are introduced. This course is not designed for transfer.

### CSC-268 - ASP.NET Programming

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Computer Science and Information Technology

Prerequisites: CSC 267

Description: This course provides students with all the information required to build web applications using ASP.NET and the .NET Framework. This course includes learning how to use ASP.NET and Web Forms, Server Controls, Classes, modules, and many other new features of the .NET Framework that apply to ASP.NET. This course will also cover in detail Web application architecture, leveraging User controls, and managing session and application state. This course is not designed for transfer.

### DAN-131 - Elements of Dance

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: Provides fundamental movement skills and body awareness in modern dance, basic training at the elementary level of ballet technique, introduction to a cross section of jazz technique, movement styles and rhythms, theory and practical application in the principles of dance forms. Additional focus will be on the ethnicity (African roots) in jazz, modern dance as the American dance form and ballet based on European (French, Russian, Italian) techniques. Emphasizes placement, strength, flexibility, coordination, musicality within the different dance idioms; the exploration of space, time and energy as the raw materials in dance; the specific vocabulary relating to the different dance techniques and the creative experience of short movement patterns.

### DAN-201 - Methods and Modern Techniques in Dance

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Prerequisites:

Description: Provides development in Modern Dance through theory and practical application. Emphasizes the practice of composition skills, clarity of

contribution of dance. Discusses the role and collaboration of performers/dancers, choreographers, artistic advisors, composers, technicians and the audience. Includes lectures, lecture-demos, discussions, selected readings, films, video tapes, slides, live performances and experimental dance/movement sessions. Attendance at recommended dance performances is required. Written reports are required.

### **DAN-202 - Improvisation and Composition**

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: A comprehensive approach, introducing the creative and theoretical aspects of contemporary dance, with focus on improvisation toward composition. Dance studies will be designed through problem-solving experiences, exploration of resources, use of ideas, knowledge of forms, development of craft. Emphasizes the excitement of making choices and taking chances. Studies will be performed as works in progress at the end of semester (informal showing, individual or group). Class sessions will include lectures, films, discussion, selected readings on theory, philosophy, current trends of dance and experimental dance/movements.

### **DHY-105 - Oral Anatomy and Histology**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 4

Department Description: Dental Auxiliaries Education

Description: Detailed anatomical and histological study of the oral cavity. Emphasis on the teeth and related bones, muscles, nerves, glands and blood vessels. Didactic materials are supplemented by laboratory exercises.

### **DHY-108 - Preventive Oral Health Services II**

**Credits: 5**

Lecture Hours: 2 Lab Hours: 13

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 102, DHY 105 and DHY 107 and current CPR certification

Description: Clinical practice on patients of selected difficulty, encompassing the areas of oral inspection, extra and intra oral radiology, prophylaxis and patient education. Lecture material covers clinic related skills as well as a general reference to the entire scope of practice of this profession. May not be audited.

### **DHY-115 - Periodontology**

**Credits: 2**

Lecture Hours: 2

Department Description: Dental Auxiliaries Education

Prerequisites: BIO 211, DHY 102, DHY 105 and DHY 107

Description: A detailed study of the periodontium in both the healthy and diseased states. Includes the etiology, histopathology, description and treatment of periodontal disease and emphasizes the dental hygienist's role in initial periodontal therapy.

### **DHY-204 - Dental Materials**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 3

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 102, DHY 105 and DHY 107

Description: A study of the chemical and physical properties of materials most commonly used in dental practice. Includes demonstration and performance of basic laboratory and operator procedures as related to these materials. Student performance of basic laboratory and operator procedures related to general dentistry and expanded functions for auxiliaries is an integral part of the course.

### **DHY-208 - Pharmacology**

**Credits: 2**

Lecture Hours: 2

movement, initiation, body articulation and dynamics of performance.

Focuses on the development of small group work and solos, including form and structure. Attendance is required at two professional dance productions. Written reports must be submitted.

### **DHY-102 - Dental Radiology**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Dental Auxiliaries Education

Description: The nature, production and utilization of x-rays as theoretical and technically related to dentistry. Exposure, processing and mounting techniques as well as film interpretation. Introduction to hazards and safeguards.

### **DHY-107 - Preventive Oral Health Services I**

**Credits: 4**

Lecture Hours: 2 Lab Hours: 6

Department Description: Dental Auxiliaries Education

Description: Introduction to primary dental hygiene services. The basic sciences are related to the performance of such services as taking the medical and dental history oral inspection, scaling and polishing teeth and patient education. Didactic materials are supplemented by laboratory and clinical exercises. May not be audited.

### **DHY-111 - Nutrition and Oral Health**

**Credits: 2**

Lecture Hours: 2

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 102, DHY 105 and DHY 107

Description: This course is designed to provide the dental hygiene student with an understanding of basic nutrition as it applies to general and oral health. Topics covered include the fundamental biochemical principles of nutrients, nutrient requirements, food sources and related diseases. Students are taught nutritional concepts as they apply to preventive dentistry, emphasizing dietary analysis and counseling for caries susceptible and periodontally involved dental patients. Students are introduced to the evaluation and use of nutritional references and educational materials to enhance patient treatment.

### **DHY-203 - General and Oral Pathology**

**Credits: 2**

Lecture Hours: 2

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 108, DHY 111, DHY 204 and DHY 205 Co-requisites: DHY 208

Description: An introduction to the basic principles of pathology. A consideration of common diseases affecting the human body and knowledge of how to correlate basic principles of general pathology to oral diseases and lesions. Special attention focused on abnormal conditions of the oral cavity.

### **DHY-207 - Dental Health Education**

**Credits: 2**

Lecture Hours: 2

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 108, DHY 110, DHY 204 and DHY 205

Description: Introduces educational concepts, objectives and methodology in dental health instruction at various levels. The materials and methods used in individual and group teaching of dental health are included, preparing the student to teach in a classroom setting, in professional groups and in a variety of community situations.

### **DHY-210 - Community Health**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 3



Department Description: Dental Auxiliaries Education

Prerequisites: CHM 107 Co-requisites: BIO 112, DHY 203, DHY 207, DHY 211, DHY 215

Description: Designed to acquaint the dental hygienist with pharmacology as it relates to the dental office. The classification use and action of drugs will be emphasized. Prescription writing, the importance of the patient's health history and emergency care of adverse reaction will also be included.

### DHY-211 - Preventive Oral Health Services III

**Credits: 5**

Lecture Hours: 1 Lab Hours: 17

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 108, DHY 110, DHY 204, DHY 205 and current CPR certification

Description: Continuation of DHY 108 emphasizing more challenging clinical skills and detailed patient assessment. An understanding of medical conditions and complications related to dental treatment is covered in lecture. May not be audited.

### DHY-215 - Advanced Periodontology

**Credits: 1**

Lecture Hours: 1 Lab Hours: 1

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 108, DHY 110, DHY 204 and DHY 205 Co-requisites: DHY 208

Description: An expanded study of the principles and concepts of, and current research on, periodontal disease. In this advanced course the evaluation and monitoring of the periodontal disease process; the latest concepts in treatment; immunology; the relationship of periodontics to other dental specialties; and critique of related literature will be discussed. Various guest lecturers will share their expertise with the students.

### DHY-224 - Dental Hygiene Seminar

**Credits: 1**

Lab Hours: 3

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 107, DHY 108, DHY 211 Co-requisites: DHY 212

Description: An interdisciplinary capstone course which integrates and synthesizes concepts and skills from preceding dental hygiene courses. Emphasis is on the development and presentation of a clinical case study and preparation for entry into the profession of dental hygiene. Topics include preparation for national and state licensing examinations, development of career portfolios and the discussion of current issues in the practice of dental hygiene and related dental professions.

### DMA-219 - Typography for Web Design

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 113 and MAD 118

Description: This course offers a general overview of typography with a particular emphasis on use of typography in web publishing. Topics include type history, type anatomy, font identification, readability, grid systems, hierarchy, spacing and scaling, and type as image. While based on traditional typographic principles, web typography differs in software tools used and in strategies for organization and usability consistent across browser platforms. Typographic principles are stressed in terms of screen readability, navigation, organization, and editability. A variety of web development tools are used to apply the principles covered in this class, including basic HTML and CSS coding for text formatting.

### DTC-102 - Tools and Techniques of the Nutrition Care Process

**Credits: 1**

Lecture Hours: 1

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: DTC 101; HRI 103 and HRI 105. Students must have earned a grade of "C" or better in all prerequisites. Co-requisites: HRI 108 and HRI

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 203, DHY 207, DHY 211 and DHY 215

Description: A basic course in the concept, scope and administration of public health programs. Emphasis on the needs of the population and the role of the dental hygienist within public health practice. Opportunity provided for field experience in analysis and planning of public health education projects.

### DHY-212 - Preventive Oral Health Services IV

**Credits: 5**

Lecture Hours: 1 Lab Hours: 17

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 203, DHY 207, DHY 211, DHY 215 and current CPR certification

Description: Continuation of DHY 211 with emphasis on improving clinical skills on patients of higher level of difficulty. Prepares students for successful completion of board examinations and employment. May not be audited.

### DHY-218 - Local Anesthesia and Pain Control

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Dental Auxiliaries Education

Prerequisites: DHY 105, DHY 208, DHY 211 Co-requisites: DHY 212

Description: This course is designed to prepare the student to administer local anesthesia to patients for pain management during the course of dental treatment. Instruction includes the anatomy of the head and neck, pharmacology of anesthetic and analgesic agents, patient preevaluation, injection techniques, recognition of adverse patient reactions and management of emergency procedures. The laboratory component includes the administrations of local anesthesia to laboratory partners. Successful course completion prepares the student for the North East Regional Board examination on the administration of local anesthesia and eligibility to apply for a New Jersey Board of Dentistry local anesthesia permit.

### DMA-218 - Graphics for Web Design

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 113 and MAD 118

Description: This course focuses on developing and preparing graphics for websites and web applications. Emphasis is on image manipulation and generating original graphics. Students learn image acquisition through photography, scanning, and stock images. Copyright issues are addressed; RGB color, color systems and palettes, graphic file formats, resolution, image quality and compression are covered as they pertain to web use. Advanced tools in industry standard software, such as Illustrator and Photoshop are used to create and edit images. Basic 3D illustration using Maya is also introduced. Files are exported for web use and published on an interactive website.

### DTC-101 - Introduction to Dietetic Technology

**Credits: 1**

Lecture Hours: 1

Department Description: Hospitality, Culinary Arts and Dietetics

Description: An introduction to the organization of food service in health care facilities and the role of the dietetic technician.

### DTC-208 - Supervised Field Experience: Nutrition Care

**Credits: 3**

Lab Hours: 9

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: DTC 101 and HRI 105 both with a grade of "C" or better Co-requisites: DTC 102, HRI 108 and HRI 210

210

Description: An introduction to the total organization of health care facilities, departmental functions and responsibilities, as well as professional and paraprofessional interrelationships.

### **DTC-209 - Supervised Field Experience: Foodservice Systems Management**

**Credits: 4**

Lecture Hours: 1 Lab Hours: 9

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: DTC 208 and HRI 210 both with a grade of "C" or better Co-requisites: HRI 203 and HRI 213

Description: A foodservice systems management experience in a health care facility designed to give students an opportunity to apply classroom theory to quantity food production, patient and employee foodservice and personnel management.

### **DTC-220 - Seminar in Dietetic Technology**

**Credits: 1**

Lecture Hours: 1

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: DTC 209 with a grade of "C" or better Co-requisites: DTC 210, HRI 205 and HRI 218

Description: Explores the expanding dimensions of the dietetic technician's role in health care, business and industry, school food service, public health, foodservice and research and prepares the student for entry-level positions.

### **ECO-202 - Principles of Economics II [GE SS](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ECO 201 or written permission of the department chairperson

Description: Microeconomics: includes such topics as the price system, allocation of resources, distribution of income and the prospects for economic change. International trade is also studied.

### **EDU-207 - Introduction to Early Childhood Education**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The physical and mental health needs of young children are considered, as well as curriculum, equipment and learning procedures appropriate for early school years. Studies of current trends and issues in early childhood education are examined with emphasis on established and innovative programs in the field.

### **EDU-210 - Education of Exceptional Children**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: An introduction to the educational programs for exceptional and special learners. Current as well as historical specialized programs and issues. Recent research of special students' needs. Rationale-based strategies and instructional techniques to use with the exceptional population.

### **ELT-105 - Foundations of Electrical and Electronics Technology**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: MAT 013 or appropriate score on College placement test Co-requisites: MAT 014 or higher level

Description: Study of electrical and electronic devices and circuits. Topics include: current and voltage, energy and power, AC/DC and elementary electronic circuits, electrical safety, wiring and electric motors. Computers are

Description: A clinical experience designed to introduce students to the organization of food service in a specific health care facility and to provide an integrated approach to the nutritional care of patients.

### **DTC-210 - Supervised Field Experience: Clinical, Community, Foodservice**

**Credits: 4**

Lab Hours: 12

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: DTC 209 and HRI 213 with a grade of "C" or better Co-requisites: DTC 220, HRI 205 and HRI 218

Description: A clinical experience in acute care, long-term care, school food service and community based nutrition programs designed to emphasize the managerial functions of planning and control in relation to food procurement, inventory management, cost accounting and nutritional management of patients; a culminating experience.

### **ECO-201 - Principles of Economics I [GE SS](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: A passing score on the algebra portion of the College placement test or MAT 013

Description: Introduces the foundations of economic analysis and explores the problems of macroeconomics, including national income, equilibrium analysis and fiscal and monetary policy. The public sector of the national economy is also stressed.

### **EDU-121 - Introduction to Education**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Analyzes the interaction of culture and education, develops from a historical perspective the evolution of modern education and examines contemporary issues and problems in American education. Students are required to complete a 25-hour volunteer assignment working in a teaching/learning setting.

### **EDU-208 - Creative Activities for Young Children**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: An examination of the significance of creative play in the education of young children. Students learn to understand, use and direct activities in art, music and science for preschoolers. Selection and use of audiovisual materials are considered. How young children learn and when they are ready to learn are concepts that this course develops. These concepts provide the rationale for planning creative activity programs.

### **EDU-280 - Education Field Experience**

**Credits: 3**

Lecture Hours: 3 Lab Hours: 6

Department Description: History and Social Science

Prerequisites: PSY 226; ENG 122 and approval of department chairperson

Description: Observation and analysis of the teaching/learning experience in settings from preschool to high school. Includes observation, research and application of current practices in light of psychological, philosophical and historical theories of education. Requires a research paper and 90 field work hours.

### **ELT-109 - Programming for Technicians and Engineers**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: MCT 101

Description: An introductory course for using a computer to solve engineering problems. The course will introduce the concepts on interfacing computers to sensors and output devices and using the computer to control the output functions using feedback from the input sensors. The course will introduce the

used for simulation and analysis of electric circuits. Theory is supplemented by laboratory experimentation.

### ELT-110 - Electrical/Electronics Devices and Circuits

**Credits: 4**

Department Description: Engineering Technologies

Prerequisites: ELT 105 Co-requisites: MAT 129A

Description: Continuation of ELT 105. Topics include: Electric circuits theorems, capacitance and inductance type devices, operational amplifier and transistor circuits. Computers are used in the analysis of electric circuits. Theory is supplemented by laboratory experimentation.

### ELT-210 - Electronic Circuits and Systems

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: ELT 110 Co-requisites: MAT 129A

Description: Continuation of ELT 110. Study of time-domain and frequency-domain concepts as it relates to passive and active circuits and systems. Additional topics such as power supply applications, power control and power amplifier circuits are studied. Computers are used for simulation and analysis of electronic circuits. Laboratory experiments are used to supplement the studies of electronic circuits and to verify analytical results.

### ELT-222 - Electric Circuits II

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: ELT 221

Description: A continuation of ELT 221. A study of the phasor concept, AC power, complex frequency, resonance, Fourier analysis techniques, Laplace transforms, polyphase circuits and two port networks. Laboratory experiments supplement theoretical topics.

### ELT-224 - Communication Electronics

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: ELT 110

Description: A study of Electronic Communication Systems. An introduction to signal processing methods, analog and digital modulation techniques, radio receivers, transmitters and microwave principles and antennas.

### ELT-239 - Digital/Data Communications and Networking

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: ELT 111

Description: A study of various types of data communication systems including WANS and LANS, system components, network structures and interface techniques are examined. Transmission codes and multiplexing methods are emphasized. Extensive laboratory work includes use of protocol analyzers, installation of networks, hardware and software troubleshooting

### EMP-110 - Introduction to Bioterrorism

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Description: This course will elucidate information regarding the impact of domestic and international bioterrorism on people's lives and describe the historical, psychosocial, political and scientific aspects of this mechanism of fear. Emphasis will be placed on understanding the various biological

students to the graphical language LabVIEW and the data acquisition equipment that uses this language. The second half of the course will use Program Logic Controllers programmed in traditional ladder logic and programmed in a mnemonic language and interfaced to switch devices for inputs and output devices such as relays, motor starters and solenoid valves.

### ELT-111 - Digital Electronics

**Credits: 3**

Department Description: Engineering Technologies

Co-requisites: MAT 013

Description: A study of a digital electronic circuits and systems. Introduces number system and Boolean Algebra topics. Digital electronic circuits and systems are analyzed and designed. Topics covered are: logic gates, Flip-Flops, registers, counters, arithmetic logic circuits, memories and various logic families.

### ELT-221 - Electric Circuits I

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Co-requisites: MAT 132

Description: An introduction to electric circuit theory. Topics include: the mathematical development, current voltage, resistance, power, passive electrical components, laws of electricity and network theorems. Stresses analysis techniques. Theory is supplemented by laboratory work. Recommended for engineering students.

### ELT-223 - Electronic Design and Manufacturing

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: ELT 221 and ELT 226

Description: Capstone project course where students will work in teams to design, build, test and present a working prototype project using electronics and embedded computer technology. Students will use schematic capture and printed circuit board layout software. Students will develop concepts and specifications, select component, analyze costs, do scheduling and planning, fabricate and assemble printed circuit boards and prepare a written report and oral presentation.

### ELT-226 - Microcomputers

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: ELT 111

Description: A study of the hardware, software, interfacing and programming of a contemporary microcomputer. Students demonstrate the application of the microcomputer through laboratory projects. For Electrical Engineering Technology students.

### EMP-100 - Introduction to Emergency Management

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Description: This course will present a broad overview of the emergency management system. The principles of emergency management, including preparedness, response, mitigation, recovery and associated strategies will be covered. The role of federal, state and local governments as well as private agencies responsible for emergency management will be explored.

### ENG-009 - Writing Skills for College I

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: English

Description: For students whose college placement test scores show they need intensive work to improve their writing abilities. Objectives are designed to develop the ability to write in Standard American English. Instruction is provided in sentence structure, punctuation and usage; students regularly

organisms that may be used as weapons of mass destruction, the clinical symptoms of disease, mechanisms of weaponization and public health control measures. The scientific principles presented in the course, governmental response mechanisms, family personal preparedness and effective risk communications will provide the basis for effective personal and family decision making.

### ENG-010 - Writing Skills for College II

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: Appropriate score on the College placement test or a grade of "C" or better in ENG 009

Description: Designed to improve fundamental skills of Standard American English through the writing of effective sentences, paragraphs and essays and to build confidence in beginning writers. Correct spelling, punctuation and grammar are stressed. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ENG-090 - ENG 010 Bridge

**Credits: 1**

Lecture Hours: 2

Department Description: English

Prerequisites: Essay score of 5 on WritePlacer

Description: This two-week course provides an opportunity for those students who do not pass the WritePlacer Essay Test to refresh their skills before attempting to retake the test.

### ENG-122 - English Composition II [GE COM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: A grade of "C" or better in ENG 121

Description: Through writings, reading of essays, short stories and poems and speaking, the student will continue to learn and to practice the skills of clear, correct, effective English. Through a variety of writing projects, requiring techniques such as cause and effect, analysis, evaluation, classification, argumentation and persuasion, as well as through a formal research (library) paper, students will write between 7,000 and 10,000 words, including drafts and revisions.

### ENG-206 - Journalism II

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 205 or written permission of the department chairperson

Description: An advanced course in journalism emphasizing the development of editorial skills and actual newspaper production. Membership on the school newspaper is required.

### ENG-214 - Journalism/Writing Field Experience

**Credits: 3**

Lecture Hours: 3 Lab Hours: 6

Department Description: English

Prerequisites: BUS 205 or ENG 205 or ENG 235 and written permission of the department chairperson and Counseling and Career Services Office Co-requisites: ENG 206

practice writing effective sentences, paragraphs and short essays. Students may have to enroll in ENG 010 after successfully completing ENG 009. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ENG-080 - English Workshop

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: English

Prerequisites: Appropriate Score on the College Placement Test

Description: For students whose college placement test scores show they need intensive work to improve their writing abilities. Objectives are designed to develop the ability to write in Standard American English. Instruction is provided in sentence structure, punctuation, and usage; students regularly practice writing effective sentences, paragraphs and short essays. Designed to improve fundamental skills of Standard American English through the writing of effective sentences, paragraphs and essays and to build confidence in beginning writers. Correct spelling, punctuation and grammar are stressed.

### ENG-121 - English Composition I [GE COM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: A passing score on the College placement test or a grade of "C" or better in ENG 010

Description: Through a variety of writing projects requiring description, characterization, narration, illustration, process analysis, comparison and contrast and definition, as well as through a documented essay, students develop competence writing clear, correct, effective English prose. Extensive reading materials serve as structural models and as the basis for discussion and for the writing of essays involving response, analysis and synthesis. During the course, the student will write between 7,000 and 10,000 words, including drafts and revisions.

### ENG-205 - Introduction to Journalism

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Introduces the prospective reporter to the various forms of journalistic writing, including news and feature stories, editorials and opinion columns. Students learn to recognize, weigh, gather, report and edit the news as they learn to develop, organize and publish their work as professional reporters working on the staff of the College newspaper. In addition, they are introduced to the major historical trends in journalism as well as the ethical and moral issues that journalists face each day as they perform their jobs.

### ENG-212 - Children's Literature

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 121

Description: Children's literature from around the globe is read and discussed through some of the classic folktales, myths, fables, fantasies, and poems. Students read and study literature from diverse cultures and traditions, such as the European, African, Asian, Meso-American and Native-American. Students analyze, research, and write about the literature they read. The literary works are also studied from a variety of critical perspectives, including the literary, cultural, psychological, historical, religious, sociological, and anthropological. Attention is also given to the relevance of children's literature to contemporary educational theories and practices. It is strongly recommended that all degree students complete ENG 122 before registering for this course.

### ENG-215 - Science Fiction

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Significant works of science fiction like those of Shelley, Verne,

Description: A cooperative work experience through which students are employed in a professional writing or journalism position to gain the practical experience necessary for success in the field. Supervision of this departmentally approved position is provided by the College through the instructor's on-the-job visits and individual progress reviews. Students are required to describe their objectives and attain specific job skills. They attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours during the semester.

### ENG-220 - Detective Fiction

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A study of the 'Who Done It?' as it evolved in America and spread through the world as a popular genre. Students read, analyze and write about crime/mystery fiction with emphasis on the development of the character of the detective. Writers include but are not limited to Poe, Conan Doyle, Hammett, Chandler, Chesterton, Freeman, Bramah, Futrelle, Ross MacDonald, McBain, Christie, Ibarquengoita, Sayers, P.D. James, Robert Parker, Simeon, Sjewall and Wahloo, Rendell, Stribling, Togawa and Vander Wetering.

### ENG-222 - English Literature II [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Works by major authors in English literature from 1789 to the present are read and analyzed. Authors studied include Wordsworth, Shelley, Keats, Tennyson, Browning, Yeats, Joyce and Eliot.

### ENG-226 - World Literature II [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An introduction to masterpieces of world literature from 1500. A variety of cultural, intellectual, historical and literary perspectives are explored in selections by authors from Asia, Africa, Continental Europe and Latin America. Students complete reading, writing and research assignments designed to develop the skills of literary interpretation and analysis.

### ENG-228 - Modern British and American Poetry [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: British and American poets from the time of Dickinson through the 20th century are read and analyzed. Poets studied could include Dickinson, Whitman, Yeats, Frost, Stevens, Eliot, Hughes, Auden, Brooks, Ginsberg, Sexton, Rich and Plath.

### ENG-234 - Introduction to Shakespeare [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An introduction to Shakespeare's dramas. Students read, discuss and write about selected histories, comedies and tragedies. Included is a discussion of the Elizabethan theater.

### ENG-236 - Creative Writing II

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A continuation of ENG 235. Various literary forms are discussed

Wells, Huxley, Asimov, Heinlein and Bradbury are read and analyzed. Major topics include science fiction as a literary genre, the advance of technology and its effects on society and the individual and the scientist as evil genius.

### ENG-221 - English Literature I [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Works by major authors in English literature from the Anglo-Saxon period through 1789 are read and analyzed. Authors studied include the Beowulf poet, Chaucer, Shakespeare, Milton, the metaphysical poets, Swift and Blake.

### ENG-225 - World Literature I [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An introduction to masterpieces of world literature to 1500. A variety of cultural, intellectual, historical and literary perspectives are explored in selections by authors from Asia, Africa and Continental Europe. Students complete reading, writing and research assignments designed to develop the skills of literary interpretation and analysis.

### ENG-227 - Literature of Black America [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: The literature of the Black American from African and Pre-Civil War songs and tales to the writers of the Reconstruction, the early 1900's, the Harlem Renaissance, the WPA Writers-Workshop and the new Black writers of the 1990's.

### ENG-233 - Introduction to the Novel [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: The novel from its earliest forms to the present. Authors include Fielding, Austen, Dickens, Melville, James, Flaubert, Dostoevsky, Joyce and Faulkner. Works are analyzed in terms of genre, point of view, structure, characterization and theme.

### ENG-235 - Creative Writing I

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A basic course in creative and imaginative writing. Various literary forms are discussed and undertaken by the students. Student manuscripts are extensively analyzed and criticized.

### ENG-237 - Advanced Writing Workshop

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An advanced writing course in which students continue to

and undertaken. Student manuscripts are extensively analyzed and criticized by both students and instructor. Students focus on one major writing project. Various forms, techniques and styles of imaginative writing are discussed via an investigation of professional as well as student writing.

### ENG-238 - Technical Writing

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An advanced writing course designed especially for the students majoring in the various A.S. and A.A.S. curricula (with the exception of business majors). Enhances students' skills for technology communication projects with particular emphasis on informal and formal report writing. It emphasizes clarity, conciseness, objectivity and practicality of style.

### ENG-240 - Business Communication

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122

Description: The course focuses on oral and written communication theory and practice appropriate for a variety of business situations. Students generate and examine routine and special business correspondence, strategic electronic communication and informational and analytical business reports; conduct business research; refine team-oriented skills; and design/deliver oral presentations. The following concepts are emphasized: the nature of audience; business communication forms/formats; tone, style and diction; purpose; clarity and complexity; and other relevant rhetorical issues.

### ENG-243 - Literature of the U.S.: Beginnings to 1880 [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A survey of works illustrating the literary experience in the United States from colonial times to 1880. Various cultural, intellectual, historical and literary perspectives are explored. Students complete reading, writing and research assignments to develop the skills of literary interpretation and analysis.

### ENG-245 - Literature of the U.S.: World War II to Present [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A survey of works illustrating the literary experience in the United States from World War II to the present. Students complete reading, writing and research assignments about contemporary American authors such as Albee, Angelou, Baldwin, Brooks, Heller, Oates, O'Connor and Updike, whose works provide perspectives on the social, moral and political changes taking place in contemporary society.

### ENG-248 - Introduction to Short Fiction [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Students read short fiction by various authors of the 19th and 20th centuries and discover ways of talking and writing about it. Concepts such as point of view, character and plot are introduced. Students learn how to read with greater appreciation and skill and to see literature as a means to understand themselves and their world.

### ENG-250 - Gay and Lesbian Literature [GE DIV](#)

**Credits: 3**

improve composition skills by interacting with both instructor and peers (including students from various curricula) to form a community of writers. Students are required to undertake sustained reading of books, periodicals and monographs in their fields and to complete research and other writing projects on topics related to their majors and fields of interest.

### ENG-239 - Women in Literature [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Writers who have shaped woman as a literary image and spoken with a woman's voice in novels, short stories and poems.

### ENG-241 - Feature Writing

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This course introduces the craft of rich, descriptive style writing for newspaper and magazine style publications. Students write movie reviews, restaurant reviews, columns, people or subject profiles and human-interest stories.

### ENG-244 - Literature of the U.S.: 1880 to 1945 [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: A survey of works illustrating the literary experience in the United States from 1880 to 1945. Various cultural, intellectual, historical and literary perspectives are explored. Students complete reading, writing and research assignments to develop the skills of literary interpretation and analysis.

### ENG-247 - Principles of Literary Study: Introduction to Poetry [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Introduces students to the principles of studying and analyzing different poetic forms. While reading, listening to, discussing and writing about various kinds of poems by such poets as Shakespeare, Milton, Keats, Frost, Plath and others, students learn to evaluate and appreciate poetry by understanding such concepts as figurative language, poetic speaker and situation, meter, sound, form and rhyme. Students are required to write a number of literary analyses.

### ENG-249 - Biography and Autobiography [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An examination through letters, memoirs, journals, autobiography and biography of some of the seminal figures of our time. Through discussion and written response, the impact of cultural, ethnic, economic and political factors on the individual and the expression of such influences as they emerge in the writings are analyzed. The readings focus on individuals who represent the following: artists (art, dance, music, film), authors/playwrights/poets, scientists, politicians/statesmen, religious/philosophical figures.

### ENG-253 - Mythology in Literature [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Students read works which have either homosexuality as a prominent theme or prominent homosexual characters. Writers include, but are not limited to, Sappho, Catullus, Walt Whitman, Gertrude Stein, Virginia Woolf, Allen Ginsberg, Martin Duberman, Rita Mae Brown, Audre Lorde, Susan Sontag, Adrienne Rich, Minnie Bruce Pratt and Paul Monette. Old world and new world cultures, as well as a variety of genres, will be discussed in this course.

### ENG-254 - Literature and Film [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Works by writers such as Steinbeck, Bronte, Warren, Shakespeare and Dickens and their transfer to film by such directors as Ford, Wyler, Rossen, Olivier and Lean are studied. A study of the literary and cinematic approaches taken by each is included.

### ENG-257 - The Literature of Evil

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Works by writers such as Euripides, Shakespeare, Machiavelli, Marlowe, Milton, Hawthorne, Poe, Shelley, Blatty, Tryon and O'Connor are studied. Students discuss various genres and types of evil characters as well as dominant motifs in the literature of evil.

### ENG-260 - Scriptwriting

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Scriptwriting is designed for the student who needs a course in generating story ideas, dialogue and presentational information for marketing, educational, industrial and/or entertainment arenas as well as for playwriting. During the course, students analyze the components of a script and review numerous published scripts with the intention of creating their own viable scripts. Also, students will write and work with dialogue, plot, scene development, storyboarding and distinctive script formats required for various media.

### ENG-262 - Cinema History [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This course surveys the chronological development of motion pictures since their inception to the present, with an emphasis on key artistic principles and technical advancements. The course focuses on film as a changing, dynamic art form, a commercial industry, a world-wide cultural phenomenon, and a reflection of and influence on people's experiences, values and lives and changing standards of artistic taste. Students view numerous examples of classic films from various historical decades and genres as well as complete reading, writing and research assignments.

### ENG-264 - Survey of World Cinema [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: Myths of ancient cultures from around the globe are read and discussed through some of their great epics, plays, poems, folktales and histories. Students study myths from diverse cultures and traditions, such as Greco-Roman, Judeo-Christian, Mesopotamian, Egyptian, African, Hindu, Buddhist, Taoist, Nordic, Meso-American and Native American. Students analyze research and write about the myths they read. Moreover, they examine the manipulation of myth by one culture to promote its own values over those of another. Myths are also studied from a variety of critical perspectives, including the literary, cultural, psychological, historical, religious, sociological, and anthropological. As part of their analysis, students explore the way myth can formulate ethical dilemmas, such as religious faith vs. reason; blood vengeance vs. trial by jury; pacifism vs. war & imperialism; women's rights vs. male hegemony; individual vs. community rights; family obligation vs. civic duty, etc. Attention is also given to the relevance of myths to contemporary cultural beliefs and practices.

### ENG-255 - Introduction to Film [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This course centers on the rudiments of film in order to understand the stylistic conventions, the business behind movie making and the ways movies reflect and change perceptions of language and life.

### ENG-258 - Modern Dramatic Literature [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: An introductory study of modern dramatic literature, including plays by Ibsen, Shaw, Chekhov, Brecht, Beckett, Williams, Miller and O'Neill. Major works are analyzed for literary style, form and content; discussions touch on topics such as alienation, theatre of the absurd, existentialism in drama, tragicomedy, dramatic irony, and tragedy of the common man, and the playwright as social agitator.

### ENG-261 - Copy Editing

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 121 Co-requisites: ENG 122

Description: The course stresses copy editing, proofreading, and desktop publishing skills and practices to be applied in the newspaper, magazine and publishing industries. Areas in copy editing and proofreading include clarity, conciseness, punctuation, grammar and syntax. Areas to be covered in desktop publishing include headline writing, caption writing and use of page design software. The course is recommended for persons employed in or seeking entry-level employment in copy editing or page design positions in newspapers, magazines, or publishing.

### ENG-263 - Survey of American Cinema [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This course surveys the masterpieces of major genres of American cinema, focusing on the elements and visual styles of Hollywood storytelling through genres, including but not limited to Western, Film noir, war, romance, comedy, horror, musical and science fiction, which entertain audiences as well as mirror American attitudes and values. Students view various examples of classic American motion pictures and analyze them from a variety of cultural, historical, and intellectual perspectives, with an emphasis on key artistic principles and technical advancements. As well, students complete reading, writing and research assignments.

### ENG-265 - Survey of Great Cinema Directors

**Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This course surveys the major masterpieces of international cinema. Students view films from various countries, including but not limited to Russia, Germany, Sweden, France, Italy, England, Japan, India and more, and analyze motion pictures from a variety of cultural, historical, and intellectual perspectives, with an emphasis on key artistic principles and technical advancements. Students view numerous examples of classic films from various historical decades as well as complete reading, writing and research assignments.

### ENR-106 - Introduction to Solving Engineering Problems Using Computers

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: MAT 129A and MAT 129B or MAT 129

Description: This is an introductory course using computers to solve engineering problems and will explore the use of computers for data acquisition and process control. Students will use MAT LAB for engineering analysis and exploring solutions to typical engineering applications.

### ESL-061 - Phonology-Intensive Level I

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Co-requisites: ESL 060 and ESL 062

Description: Pronunciation at the beginning level. Students learn the vowel and consonant sounds of English and the ability to produce them correctly. Students practice transferring this knowledge to dialogues and short conversations. Methods of self monitoring and correction are taught. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-063 - Structure-Intensive Level I

**Credits: 4**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Co-requisites: ESL 064

Description: A basic course in English structure in the context of listening, speaking, reading and writing. Approximately 1,000 vocabulary items are presented. Students are required to attend one hour of individualized work in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-071 - Phonology-Intensive Level II

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 061 or written permission of the department chairperson Co-requisites: ESL 072

Description: An intermediate course in pronunciation. Students review the vowel and consonant sounds and intensive practice done on contrasting the different vowel sounds. Accented and unaccented syllables are addressed and practice starts on intonation. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-073 - Structure-Intensive Level II

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 063 or written permission of the department

Lecture Hours: 3

Department Description: English

Prerequisites: ENG 122 or written permission of the department chairperson

Description: This study of the director-the basis and explanations of his/her creative process-offers a critical approach to studying the relationship between the personal, theoretical, social and historical elements in creating art, specifically motion pictures. This course surveys the great cinema directors, whose body of work has elevated film to the level of art, affording them the title of "auteur". Each has made a noteworthy, enduring and influential contribution to the development of film and the film industry. Each has directed a consistent body of work with a number of great movies, displays his/her own original style that has influenced other directors, and displays his/her own personal stamp that cuts across films, genres and decades.

### ESL-060 - Listening-Intensive Level I

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Co-requisites: ESL 061 and ESL 062

Description: A beginning level listening course to help students comprehend basic interaction in a variety of contexts. Students acquire new vocabulary in addition to aural comprehension through classroom activities using tapes, workbook exercises, dictations and participation in group communication activities. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-062 - Discussion-Intensive Level I

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Co-requisites: ESL 060 and ESL 061

Description: Oral communication at the beginning level. Students participate in social conversations and acquire basic vocabulary in order to communicate better. Appropriate cultural behavior will be discussed in the context of social interaction. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-064 - Writing Intensive Level I

**Credits: 4**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Co-requisites: ESL 063

Description: A basic course in writing. Students learn to write grammatically correct simple sentences. More complex sentences will be practiced later and guided writing will be done based upon pictures, personal experience and other stimuli. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-072 - Discussion/Cultural Orientation-Intensive Level II

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 062 or written permission of the department chairperson Co-requisites: ESL 071

Description: A course in oral communication at the intermediate level. Attention paid to conversation techniques and strategies in different situations. Addresses the cultural conventions of communicating in American English. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-074 - Writing-Intensive Level II

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 064 Co-requisites: ESL 071, ESL 072, ESL 073 and ESL



chairperson Co-requisites: ESL 071, ESL 072, ESL 074 and ESL 075

Description: A review of the basic structures in ESL 063 and an introduction to more advanced verb tenses and more complex and advanced structural items. Students required to attend a one hour of individualized work in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-075 - Reading/Vocabulary-Intensive Level II

**Credits: 3**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 063 Co-requisites: ESL 071, ESL 072, ESL 073 and ESL 074

Description: Introduces students to reading. Vocabulary development is an integral part of this course. Emphasizes comprehension and vocabulary through context clues. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-084 - Writing-Intensive Level III

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 074 or written permission of the department chairperson Co-requisites: ESL 083, ESL 085 and ESL 086

Description: A continuation of ESL 074. Emphasizes expanding paragraph development. Attention paid to more advanced, complex grammar in the context of writing. Students are required to attend one hour of individualized work in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-086 - Phonology/Discussion-Intensive Level III

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 071 and ESL 072 or written permission of the department chairperson Co-requisites: ESL 083, ESL 084 and ESL 085

Description: Advanced review of all the sounds of English and work on syllables, stress and intonation. Addresses listening skills. Students have the opportunity to learn different conventions of communication through discussions. An oral presentation is required. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-092 - ESL Advanced Structure Level IV

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 083 or written permission of the department chairperson Co-requisites: ESL 086, ESL 091, ESL 093, ESL 094 and ESL 099

Description: An advanced structure course that will review verb tenses included in ESL 083. Advanced structures such as gerunds, infinitives, participial phrases and various types of clauses will be introduced. Students will practice these structures in the context of writing. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-094 - ESL Advanced Reading/Vocabulary Level IV

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

075

Description: Develops skills in written structures at the intermediate level. Students review how to form a good sentence and then learn to combine these sentences to form a good paragraph. Students are required to attend one hour of individualized work in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-083 - Structure-Intensive Level III

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 073 or written permission of the department chairperson Co-requisites: ESL 084, ESL 085 and ESL 086

Description: A continuation of ESL 073 introducing additional structural items. Students will review verb tenses and question forms, and learn advanced verb tenses and modal auxiliaries to have a good functional knowledge of American English grammar. Students will be required to attend a one hour individualized work session in the ESL Lab in addition to their class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-085 - Reading/Vocabulary-Intensive III

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 075 or written permission of the department chairperson Co-requisites: ESL 083, ESL 084 and ESL 086

Description: Students practice reading longer passages than in previous courses. Emphasizes vocabulary development, comprehension, context clues and increased reading speed. Introduces specific reading attack skills for specific types of reading. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-091 - Advanced Phonology/Discussion Level IV

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ESL 086 or written permission of the department chairperson Co-requisites: ESL 092, ESL 093, ESL 094 and ESL 099

Description: Designed to facilitate the ESL student transition to subject matter classrooms and the workplace. The focus of the course is understanding and participating fully in the American College classroom and the workplace. Students will develop discussion skills required in the classroom and the workplace. The emphasis will be placed on aural comprehension and oral presentation. Advanced topics in American English phonology including contrastive intonation will be addressed. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-093 - ESL Advanced Writing Level IV

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 084 or written permission of the department chairperson

Description: An advanced structure/writing course reviewing all of the structures covered in previous courses. Special attention made to the advanced structures necessary for good composition. Paragraph practice with an introduction to the various types of expository writing. Individualized work is required in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### ESL-099 - ESL Reading/Writing Level V

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Prerequisites: ESL 085 or written permission of the department chairperson

Description: Review and utilize all of the skills developed in previous courses. Continued emphasis upon comprehension, advanced vocabulary development and increased reading speed. Students read and interpret advanced reading passages. Individualized work is required in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### **EST-009 - English as a Second Language Transition**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: ESL/Languages and Culture

Description: For former ESL students whose test scores show they need intensive work to improve their writing abilities. Develops the ability to write in Standard American English. Provides instruction in sentence structure, punctuation and usage, taking into consideration the needs of second language learners; students regularly practice writing effective sentences, paragraphs and short essays. This course is in place of ENG 009 and students may have to enroll in ENG 010 after successfully completing EST 009. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### **FMR-201 - Fashion Merchandise Information**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Co-requisites: BUS 101

Description: Corequisite: BUS 101, The fashion and technical characteristics of various, textiles and nontextiles and how students can use this, information in developing a good sales presentation.

### **FMR-204 - Retail Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101, FMR 201, FMR 202, FMR 207, MKT 143 and MKT 201 Co-requisites: FMR 206

Description: The management principles and practices used in stores with emphasis on organization, operations and customer relations.

### **FMR-207 - Retail Advertising, Sales Promotion and Display**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Accounting, Business and Legal Studies

Description: Techniques of advertising, sales promotion and display to promote sales. Topics include: policies and procedures used in planning and preparing advertisements, evaluation and selection of media, planning and coordinating advertising, sales promotion and display.

### **FRE-122 - Elementary French II [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 121

Description: Continuation of FRE 121. For students with only the first semester (French 121) of Elementary French, or for students who have been placed through test results. This course continues the systematic training in speaking, understanding, reading and writing simple French. Laboratory work is required.

Department Description: ESL/Languages and Culture

Prerequisites: ESL 093 or written permission of the department chairperson

Description: Advanced course in reading/writing to improve composition skills through interpretation of reading passages. Students analyze readings and develop good expository essays in response to the readings. Individualized work is required in the ESL Learning Center in addition to class hours. A "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

### **FIN-113 - Personal Finance**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 115

Description: This is a practical course designed to prepare students to manage their present and future financial affairs. Topics to be covered include: goal setting, saving and using credit, budgeting, tax planning, housing (renting vs. buying), health, disability and life insurance, investment planning, as well as retirement planning, wills and estates.

### **FMR-202 - Retail Buying and Merchandising**

**Credits: 3**

Lecture Hours: 2

Department Description: Accounting, Business and Legal Studies

Description: The latest techniques employed in the merchandising division of a store. The functions of the buyer and buyer's problems are analyzed and discussed. The analysis and determination of consumer demand, when and how much to buy, sources of supply, formulation and merchandise plans for profit and planning and control of stock.

### **FMR-206 - Store Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: The student must have completed half the courses in the Fashion Merchandising and Retail program. Management and written permission of the department chairperson and Counseling and Career Services Office.

Description: A cooperative work experience program employing students in retail positions to gain practical work experience necessary for success in retailing. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to establish learning objectives related to their positions in order to effect the attainment of specific job competencies. Students attend a weekly, one-hour seminar on campus and work a minimum of 180 hours a semester. Students must also register with the Counseling and Career Services Office.

### **FRE-121 - Elementary French I [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: For students with no previous knowledge of French, or for those who have had less than two years of high school French. It includes systematic training in speaking, understanding, reading and writing simple French. Laboratory work is required.

### **FRE-221 - Intermediate French I [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 122 or two years of high school French

Description: Continuation of principles established during the first year: review of grammar, reading and conversation. Emphasis on conversational activities and original compositions. Laboratory work is required.

**FRE-222 - Intermediate French II** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 221 or written permission of the department chairperson

Description: Continuation of FRE 221. Intermediate French II is a continuation of principles established during the first semester of intermediate French. This fourth semester of French includes a review of grammar, reading, conversation and writing. During this semester special emphasis is placed on reading selected texts, conversations on reading and cultural materials. Importance is given to writing skills. A laboratory period is required.

**FRE-228 - French Civilization and Culture** [GE DIV](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 221

Description: Reading, analysis and discussion of French civilization and culture of major periods from prehistoric times to the present. Readings and discussions primarily in French. Concurrent major developments in other cultures will be considered. This course may be taken in lieu of FRE 222 to complete the modern language requirement for the A.A.

**FRE-232 - French Conversation and Composition II** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 231

Description: Continuation of FRE 231.

**FSC-204 - Building Construction****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Provides fire service personnel with an understanding of the basic principles of building construction and how design considerations and materials selection affect the life safety of both the building's occupants and firefighters. The five different types of construction will be covered in detail: wood frame, ordinary, non-combustible, and fire-resistive. Case studies of catastrophic fire losses will be examined from the building construction viewpoint and new construction materials and techniques will be explored.

**FSC-207 - Hazardous Materials****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Chemical characteristics related to storage, transportation and handling of hazardous materials, i.e., flammables, combustibles, oxidizers, explosives, compressed gasses. Emphasizes emergency response, mitigation and fire suppression. Students will also receive certification in the awareness and operational levels of hazmat responder requirements as per OSHA 1910.120. Provides an introduction to the technician and incident commander levels of hazmat responder requirements.

**FSC-210 - Fire and Arson Investigation****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Fire causes, natural and accidental; fire and police investigation; orientation and introduction to arson and incendiaryism; laws of arson; technical analysis of arson and fraud; collection and preservation of evidence;

**FRE-224 - Contemporary French Literature** [GE DIV](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 221 or FRE 222 or written permission of the department chairperson

Description: Reading, analysis and discussion of works of representative Francophone writers from the late 19th and 20th centuries. Readings and discussions are primarily in French with a strong emphasis on the analysis of short stories, plays, poems, modern era and excerpts of novels.

**FRE-231 - French Conversation and Composition I** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: FRE 222 or a minimum of three years of high school French

Description: An advanced course providing intensive training in speaking and writing colloquial French. Includes oral and written reports and discussions based on the reading of modern French literature.

**FSC-103 - Introduction to Fire Protection****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Description: Introduces the history and philosophy of fire protection including a review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection systems and extinguishing agents; firefighting strategy and tactics; fire department organization and equipment; legislative developments; and the discussion of current related problems and future needs related to fire protection, including the study of legal rights, duties, liability concerns and responsibilities of fire department organizations.

**FSC-206 - Fire Strategy and Tactics****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Principles of fire control through preplanning and fire ground decision making: the size-up emphasizes life safety of occupants and fire fighting personnel as well as effective utilization of manpower, apparatus, and equipment for preservation of life and confinement of fire. Case studies of fire ground decisions are reviewed.

**FSC-209 - Fire Suppression and Detection Systems****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Fundamentals of design and installation of fixed fire protection systems. Selection and application of fire suppression and detection systems as well as engineering principles are covered. Systems studied will include, but are not limited to: sprinkler, standpipe, dry chemical, foam, halon, carbon dioxide, smoke/heat/fire detection, evacuation/public address and explosion. Case studies address issues related to systems selection, installation and maintenance.

**FSC-212 - Fire Prevention and Inspection****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103 or written permission of the department chairperson

Description: Basic principles of fire prevention and inspection, emphasizing recognition of fire hazards and the protection systems minimizing and/or coping with these hazards; includes methods of building inspection,

photography, diagrams and notes; interviewing and detention of witnesses; records, reports, briefs and court procedures; arson prevention; processing of criminal evidence and pertinent procedures required by statute.

### **FSC-214 - Rescue Company Operations in the Fire Service**

**Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: FSC 103

Description: A study of the many operations of today's heavy rescue companies. Emphasis will be placed on the fire disciplines of rescue, rope rescue, confined space, trench rescue, motor vehicle extraction, and building collapse and shoring. The duties and responsibilities of the rescue companies on the fire ground will also be examined. There will be hands-on training activities as well.

### **GER-122 - Elementary German II [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 121

Description: Continuation of GER 121.

### **GER-222 - Intermediate German II [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 221 or equivalent

Description: Continuation of GER 221.

### **GER-228 - German Culture and Civilization [GE DIV](#), [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 221 or equivalent

Description: This survey course is a study of the historical, political, economic, social and cultural referents of German speaking countries from pre-historic times to the present. Video programs and slide-set modules serve to illustrate points of discussion. Readings and discussions will be frequently in German.

### **GER-232 - German Conversation and Composition II [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 231 or equivalent

Description: Continuation of GER 231.

### **HED-200 - Human Sexuality and Family Life [GE DIV](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: A survey course designed to enable students to understand the biological, physiological, psychological, social and cultural aspects of sexuality and human sexual behavior. An examination of multicultural influences is an integral part of the course. At the option of the professor, students are evaluated by quizzes, exams, a research paper and group work.

enforcement of applicable laws, codes and ordinances and consideration of practical test facilities.

### **GER-121 - Elementary German I [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: This course is for students beginning German or with less than two years of German in secondary school. Basic skills: listening, speaking, reading, writing. Supporting work is done in the language laboratory.

### **GER-221 - Intermediate German I [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 122 or two years of secondary school German

Description: Review and continued study of grammatical structures. Practice in listening and reading skills; emphasis on speaking and writing based on modern German short stories and cultural topics. Supporting work in the language laboratory.

### **GER-224 - Modern German Literature [GE DIV](#), [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 221 or equivalent

Description: This course introduces students to important German writers of the modern era; the emphasis is on short stories and poems by authors from Austria, East Germany, Switzerland and West Germany.

### **GER-231 - German Conversation and Composition I [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: GER 222 or placement test achievement

Description: Emphasis on speaking and writing skills; vocabulary buildings in contemporary cultural, social and literary contexts; expanded study of syntax, semantics and style through example and expression.

### **HED-150 - Contemporary Health Issues [GE DIV](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: The course examines health as a variable entity having physiological, psychological, social and multicultural dimensions. The course explores the relationship between cultural and health behavior as a means of increasing cultural sensitivity. The course employs an individualized participatory approach that includes assessing one's own health status and behavior as well as exploring a personal decision making process. Topics include but are not limited to: establishing a basis for wellness, understanding sexuality, making responsible decisions about substance use and abuse, maintaining fitness and protecting one's self against disease and environmental risk factors.

### **HED-205 - Nutrition for the Active Person**

**Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation & Dance

Description: All areas of nutrition, as it affects the active person. Emphasizes the essential dietary nutrients, the body's nutritional reaction to increased activity demands, meal planning, body weight and composition, and long and short-term effects of nutrition. A research paper is required.

**HED-209 - Child Health and Nutrition****Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Basic principles and research findings concerning health and nutrition of young children in group settings. Sensitivity to mental and physical health; planning nutrition programs and optimal physical care in child care centers.

**HIS-122 - History of Western Civilization II** [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Europe and the world since 1715. Emphasis is on the emerging nation-state political system, the Industrial Revolution of the nineteenth century, and intellectual history of the nineteenth and twentieth centuries, the rise of totalitarianism in the twentieth century and the world balance of power since 1914.

**HIS-124 - History of Civilization in the Third World** [GE DIV](#), [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course is designed to trace the social, economic, political and cultural forces that shaped the cultures of the Third World from ancient times to the present. Emphasis is on the cultural similarities and differences between ways of life in Pre-Columbian (Maya, Aztec, Inca) America, the Middle East and Africa and the civilization of the West. (For a similar study of East Asia see HIS 123).

**HIS-202 - Ancient Egypt's History: An Introduction****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Traces the genesis, rise and development of the high culture and dynastic civilization of pharaonic Egypt from the Predynastic Period through New Kingdom (approx. 3500 to 1000 B.C.) An interdisciplinary approach will be used that takes into account the effects that geography and topography had on Egypt's cultural development. Topics discussed will include language, religion, mummification, funerary architecture and art. Course will be illustrated with slides as well as with artifacts and artifact-facsimiles.

**HIS-222 - United States History II** [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Historical importance of Reconstruction, the rise of big business, the Progressive Movement, the World Wars, the New Deal and the Cold War. Understanding American institutions and values from the Civil War to the present.

**HIS-245 - History of Major World Religions** [GE DIV](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course is designed to explore the historical origins and evolution of the beliefs and contemporary practices of Judaism, Christianity, Islam, Hinduism, Buddhism, Taoism, Confucianism and Shintoism. Attention is given to the interaction of the specific religions and the cultures in which they are practiced.

**HIS-258 - History of Women** [GE DIV](#), [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course is designed to enable both women and men to understand the background of women in the Western World. Emphasis is placed upon the roles of women in various societies and upon the

**HIS-121 - History of Western Civilization I** [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The historical development of Western civilization from ancient times to approximately 1715 A.D. Emphasis is on the social, economic, political and cultural forces that helped to shape the West, beginning with the early Mediterranean civilizations and following through to the subsequent rise of European civilization.

**HIS-123 - History of Civilization in East Asia** [GE DIV](#), [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course is designed to trace the social, economic, political and cultural forces that shaped the cultures of the Far East from ancient times to the present. Emphasis is on the cultural similarities and differences between ways of life in India, China and Japan and the civilization of the West. (For a similar study of the Third World see HIS 124).

**HIS-130 - Health Care and Medicine in the Western World****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Examines the historical development of health and medical care in societies from the ancient Greek to the modern American. Emphasis on scientific and technological advancement, care of the ill, treatment of disease and training of health care practitioners. Discussion of the values of each historical period and the relationships between social values, ethics and prescribed health care.

**HIS-221 - United States History I** [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Historical importance of the Puritan heritage, the American Revolution, the Constitution, Jacksonian democracy, Manifest Destiny and the Civil War to understand pre-Civil War America.

**HIS-240 - Technology and Western Culture****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: An introduction to the historical significance of technological development on the structure of modern society. The development, usage and impact of selected technologies as they relate to the historical development of Western civilization.

**HIS-256 - History of the Twentieth Century** [GE HIS](#), [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Cultural and intellectual history, assessing the effect of historical events on the lives of individuals, as well as societies. Focus on increased government influence over the lives of its citizens, especially in the area of politics and economics.

**HIS-260 - Dimensions of Prejudice, Genocide and the Holocaust** [GE DIV](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Enhances students' understanding of global genocide and the Holocaust of World War II. A variety of studies will permit students to gain a

contributions made by women. Several women's movements will be studied in detail.

### **HRI-101 - Introduction to Hotel, Restaurant and Institution Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: An introduction to the lodging and feeding industry: its history and development, current trends, its organization, its challenges and opportunities for service.

### **HRI-105 - Basic Nutrition**

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Co-requisites: BIO 108

Description: Principles of nutrition including the various essential nutrients in foods and their functions in the human body.

### **HRI-108 - Quantity Food Production**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103

Description: The study and application of techniques, standards and principles of quantity cookery. Emphasis is on the flow of food production through the kitchen of foodservice operations and the development of skills in culinary arts.

### **HRI-110 - Supervisory Development in the Lodging and Foodservice Industry**

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: An introduction to the principles of effective supervision by today's hospitality managers. Supervisory skills that impact the working relationships between supervisors and employees. Industry certification.

### **HRI-114 - Garde Manger**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103

Description: Decorating foods and platters for a la carte and buffet production. Food specialties such as sculptures, aspics, pates, chaudfroids, terrines, galantines and sauces are prepared.

### **HRI-116 - Professional Pastry Techniques**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 107

Description: Building on skills developed in HRI 107: Baking Fundamentals, this course will provide students with a thorough understanding of advanced pastry techniques. The preparation of various doughs, custards, foams and frozen desserts will be taught with an emphasis on sauces, garnishes and restaurant plating techniques.

### **HRI-120 - Baking and Pastry Arts Externship**

**Credits: 3**

Lecture Hours: 1 Studio Hours: 12

Department Description: Hospitality, Culinary Arts and Dietetics

broader understanding of prejudice and racism, as well as to develop their insight and knowledge of human inhumanity. Comparisons of worldwide genocides will be traced throughout the 20th century, with special focus on the Nazi Holocaust. Attention will be given to major issues pertaining to conscience and moral responsibility regarding prejudice, genocide and the Holocaust.

### **HRI-103 - Principles of Food Selection and Preparation**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Description: A study of the classification, selection and preparation of foods. Emphasis on working techniques and the development of professional skills.

### **HRI-107 - Baking Fundamentals**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Practical baking fundamentals for quality and quantity production of sweet dough, breads, pies, cakes, pastries and specialty bakery and dessert products, including cake decorating.

### **HRI-109 - Professional Culinary Techniques**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103

Description: The study of professional cooking based on a knowledge of ingredients and procedures with an emphasis on classical culinary methods, menu planning and influences on modern American cuisine.

### **HRI-111 - Culinary Arts Externship**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 13

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103 and admission to the Culinary Arts Program

Description: A practicum designed to develop and refine professional food preparation and production skills through an approved on-site industry experience. Learning activities are planned, supervised and evaluated by qualified chefs and/or food production managers in coordination with the program coordinator.

### **HRI-115 - Foodservice Operations**

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Introduction to the restaurant and catering business including terminology, principles of foodservice management and elements of dining room service.

### **HRI-118 - Cakes, Decorating and Specialty Techniques**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 107

Description: The course presents the art and science of quality cake preparations to include sponges, icings, meringues and mousse. The course will also cover assembly and decoration of both classic and modern cakes, including wedding cakes. An introduction to tempered chocolate and basic candies is provided.

### **HRI-201 - Hotel-Motel Front Office Operations**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 116, HRI 118

Description: Students practice acquired skills in baking and pastry arts in approved externship sites under the supervision of professional bakers and pastry chefs. Note: Baking & Pastry Arts Certificate students only.

### HRI-202 - Facilities Layout and Design

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Study of physical property, selection, design, operation and maintenance of equipment essential for hotel, restaurant and institution operations.

### HRI-204 - Seminar and Cooperative Work Experience

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 101, HRI 103 and HRI 208 or written permission of the department chairperson and Counseling and Career Services Office

Description: A critical review and analysis of operations, materials and equipment based on current reports in trade journals and periodicals. Discussion of employment experiences in industry. The influence of menu and clientele on preparation and functions of management in the food and lodging industry. One lecture hour a week on campus and minimum of 180 hours a semester on related work experience.

### HRI-206 - Merchandising for the Hospitality Industry

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Principles and practices of public hospitality merchandising. Use of advertising and promotional media as related to internal and external sales. Laboratory practice in creating promotional materials.

### HRI-210 - Introduction to Medical Nutrition Therapy

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 105 with a grade of "C" or better

Description: Explores the nutritional management of disease. Application of nutrition principles to the nutritional care of patients/clients as a result of disease development.

### HRI-214 - Nutrition Fundamentals for Nursing

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: NRB 122, BIO 112

Description: The scientific study of nutrients including proteins, lipids, carbohydrates, vitamins and minerals as it relates to digestion, absorption and metabolism will be explored. An introduction to the nutrition care process, the assessment of nutrition status, interactions between drugs and nutrients, the relationship of disease to nutrition status and the principles of nutrition management of various diseases will be emphasized. Nursing students only.

### HRI-216 - Hospitality Property Management

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Property management including the care of guest rooms and public space, security, parking, laundry, recreation rooms and pools and other outdoor recreation facilities with emphasis on staffing, equipment, capital investment, rentals and renovations.

Prerequisites: CSC 105

Description: Theory and practice in front office management for small and large properties. Function and operation of systems and equipment used in the front office through the complete guest cycle. Practical applications of management concepts through lab exercises and computer simulation.

### HRI-203 - Banquet and Dining Room Management

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 108

Description: The application of management techniques through the experience of planning and managing luncheons catered by students in the curriculum. The course provides opportunities to apply principles of menu planning, food cost control, sanitation, food production, employee supervision, marketing and guest service.

### HRI-205 - Food and Beverage Controls and Purchasing

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103

Description: Principles and management of cost control systems for planning, controlling and analyzing costs related to food, labor and other expenses in food service operations. Principles and theories of food procurement, including management, safety and ethical considerations in the procurement process. Industry certification.

### HRI-208 - Foodservice Sanitation

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Techniques and procedures for employing safe practice in foodservice including food sanitation and microbiology, food spoilage and food-borne illnesses and education and training in sanitation of foodservice personnel. Industry certification. ation of foodservice personnel. Industry certification.

### HRI-213 - Food Service Systems Management in Dietetics

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: The study and application of concepts and theories in foodservice systems management including: human resources, labor laws, materials management, information technology, physical resources, financial management, quality improvement techniques and theories, marketing and menu planning.

### HRI-215 - Beverage Management

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Hospitality, Culinary Arts and Dietetics

Description: An introduction to planning, equipping, staffing, operating, marketing, regulations and terms of the trade as they relate to purchasing, control, merchandising and bar management. The identification, use and service of wines and other alcoholic beverages.

### HRI-217 - Supervisory Housekeeping

**Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: The fundamentals of housekeeping management. Management functions, tools and practices required in lodging and institutional housekeeping departments. Industry certification.

**HRI-218 - Nutrition Throughout the Life Span****Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 105 with a grade of "C" or better

Description: Explores the principles and impact of nutrition on preconception, pregnancy, lactation, infancy, childhood, adolescence, adulthood and aging. For every phase of life, investigates characteristics of normal growth and development, nutrition assessment, the most common nutritional deficiencies seen, nutrient needs and practical means of delivering nutrition. Practice in planning meals appropriate for each stage of life is included.

**HRI-240 - Food Science and Technology****Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Prerequisites: HRI 103, CHM 120 or CHM 201

Description: A study of scientific and sensory principles of food evaluation as it relates to food science, quality assurance and experimentation and application in food preparation. Emphasis is on the integration of theory and research studies combined with laboratory work.

**ITA-121 - Elementary Italian I [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: For students with no previous knowledge of Italian, or for those who have had less than two years of high school Italian. It includes systematic training in speaking, understanding, reading and writing simple Italian. Laboratory work is required.

**ITA-221 - Intermediate Italian I [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ITA 121 - ITA 122 or its equivalency

Description: For students who have successfully completed Italian 121-122 or its equivalency. General review of materials previously covered. Continuation and completion of presentation of basic grammar. Development of all forms of language communication.

**LNC-123 - Introduction to the Study of Human Language [GE DIV](#)****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: The course introduces and explores the areas of language acquisition, dialects, social variations of language, language and ethnicity, language and gender and cross-cultural and multi-cultural perspectives of language. The student will get a broad understanding of phonology, morphology, syntax, semantics and pragmatics in the context of English and its history.

**MAD-107 - Photography I****Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Description: This is a basic photography course with an introduction to black and white film. It also covers use of the digital darkroom for basic image correction, scanning, and inkjet printing. Students will be expected to expose and process black and white film in the traditional manner and to utilize the digital darkroom for making prints. Aspects of lighting, composition, contemporary and historical background of photography will be explored. Aspects of multimedia will be introduced such as slide shows, sound and online interactivity.

**MAD-113 - Two-Dimensional Design****Credits: 3**

Lecture Hours: 2 Lab Hours: 3

**HRI-220 - Training Development of Hospitality Management****Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: Training needs in the hospitality industry. The systematic design of instruction, the evaluation of training programs and management of the training function. Industry certification.

**HRI-250 - Law for Hospitality Operations****Credits: 3**

Lecture Hours: 3

Department Description: Hospitality, Culinary Arts and Dietetics

Description: A basic course in hotel, motel and restaurant law. Introduces fundamental laws, rules and regulations applicable to the hospitality industry.

**ITA-122 - Elementary Italian II [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ITA 121

Description: For students with no previous knowledge of Italian, or for those who have had less than two years of high school Italian. It includes systematic training in speaking, understanding, reading and writing simple Italian. Laboratory work is required.

**ITA-222 - Intermediate Italian II [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ITA 221

Description: For students who have successfully completed Italian 121-122 or its equivalency. General review of materials previously covered. Continuation and completion of presentation of basic grammar. Development of all forms of language communication.

**MAD-102 - Art in Industry and Commerce****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A study of the historical and current interrelationships of the visual arts with science and technology; and of both of their influence on, and their being influenced by, the historical development of business, commerce and industry. Areas of mutual interaction covered include: architecture, industrial design, packaging, corporate identity, advertising and marketing, fine arts, photography, computers, and film and video.

**MAD-108 - Photography II****Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD-107

Description: This course is an advanced study of basic photography. It includes both film and digital imaging basics. Students are expected to utilize a film camera and a digital camera. Traditional areas of digital imaging will be covered: color, composition, natural light, electronic flash, studio lighting basics and alternative imaging practices. The study of multimedia and its applications are explored using a variety of methods. Upon completion of the course, students will have an electronic and printed portfolio.

**MAD-114 - Three-Dimensional Design****Credits: 3**

Lecture Hours: 2 Lab Hours: 3



Department Description: Visual, Performing and Media Arts

Description: Introduction to principles and characteristics of light, color and design. The interaction of colors is stressed using student projects and computer interactivity. Two-dimensional surfaces and their compositional possibilities are studied and related to increasingly complex graphic concepts. Computer graphic design applications are introduced.

### MAD-117 - Freehand Drawing

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Students develop a firm foundation in the fundamentals of drawing for design. Visual awareness is developed through study of composition, line, form and value. Drawing is learned through careful observation when working from life and secondary sources such as photographs. Techniques for illustration are learned through the use of various media and discussed in terms of their application in the field of advertising. Materials studied include pencil, charcoal, markers and water media.

### MAT-009 - Basic Mathematics Alternative

**Credits: 1**

Lecture Hours: 1

Department Description: Mathematics

Prerequisites: Written permission of the department chairperson

Description: This course focuses on computational skills and problem solving. The topics covered are addition, subtraction, multiplication and division of whole numbers, fractions and decimals; ratio and proportion; percentage; measurement, areas and perimeters of common geometric figures, and basic descriptive statistics. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### MAT-010A - Basic Mathematics (Part A)

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Description: The first half of a two-semester course which focuses on computational skills and problem solving. Topics include addition, subtraction, multiplication and division of whole numbers, fractions and decimals. Applications are included as well. Students who successfully complete this course must pass MAT 010B in order to fulfill the MAT 010 requirement. Note: A "C" is the minimum acceptable grade for completion of the developmental level or movement to MAT 010B.

### MAT-013 - Algebra I

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 010 or appropriate score on the College placement test

Description: Covers topics in elementary algebra: integral and irrational numbers, techniques of graphing and solving linear equations, polynomials and their operations, special products and factoring, radical expressions and equations, quadratic equations and methods of solutions. Applications of linear and quadratic equations are included as well. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### MAT-013B - Algebra I (Part B)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: Grade of "C" or better in MAT 013A

Description: The second half of a two-semester course in elementary algebra designed to introduce and develop elementary algebraic concepts. Topics include: techniques of graphing, solving linear equations and linear systems,

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 113, MAD 117

Description: Students acquire an understanding of planes, volume, mass and space, as they apply to three-dimensional forms. Original structural concepts are developed from sketches to completion. Issues of color, decoration and texture are addressed through experimentation with a variety of materials. Hand skills such as measuring, cutting, folding and assembling are stressed throughout the semester.

### MAD-118 - Graphic Design Skills

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 113, MAD 117

Description: A general introduction to graphic design studio skills, this course lays the foundation for advanced design classes. Topics include the design ideation process, basic graphic design principles and use of professional design software. Students will be introduced to Illustrator, Photoshop, Indesign and QuarkXPress as they learn drawing, scanning, image editing and layout for print production. Correct setup of digital mechanicals and presentation skills are stressed.

### MAT-010 - Basic Mathematics

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Description: Focuses on computational skills and problem solving. Topics include addition, subtraction, multiplication and division of whole numbers, fractions and decimals, ratio and proportion, percent, measurement, areas and perimeters of geometric figures, Pythagorean Theorem, operations with integers, and basic descriptive statistics. Applications are included as well. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### MAT-010B - Basic Mathematics (Part B)

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: Grade of "C" or better in MAT 010A

Description: The second half of a two-semester course which focuses on computational skills and problem solving. Topics include ratio and proportion, percent, measurement, areas and perimeters of geometric figures, Pythagorean Theorem, operations with integers, and basic descriptive statistics. Applications are included as well. Students who successfully complete MAT 010A and MAT 010B will have fulfilled the MAT 010 requirement. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### MAT-013A - Algebra I (Part A)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 010 or appropriate score on the College placement test

Description: The first half of a two-semester course in elementary algebra designed to introduce and develop elementary algebra concepts. Topics include: Properties of real numbers, operations on real numbers, simplifying and evaluating algebraic expressions, solving linear equations, solving literal equations, verbal problems and an introduction to polynomials. Students must complete this course and MAT 013B to fulfill the MAT 013 requirement. Note: A "C" is the minimum acceptable grade for completion of the developmental level or movement to MAT 013B.

### MAT-014 - Algebra II

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 013, equivalent, or appropriate score on the College placement test

Description: Topics include: a review of elementary algebra, the coordinate plane and functions, linear equations and inequalities, properties of lines,

polynomials and their operations, special products and factoring, rational expressions and equations, an introduction to radical expressions, and solving quadratic equations by factoring. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### **MAT-014A - Algebra II (Part A)**

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: Grade of "C" or better in MAT 013, MAT 013B, or appropriate score on the College placement test

Description: The first half of a two-semester course in intermediate algebra designed to polish skills developed in Algebra I and elevate them to a higher level of mathematical sophistication through the use of lecture, group work and the calculator. Topics include: A review of elementary algebra, the coordinate plane and graphs of functions, functional notation, linear equations and inequalities, properties of lines, systems of linear equations and polynomials. TI83/84 graphing calculator is required. Students must complete this course and Mat 014B to fulfill the MAT 014 requirement. Note: A "C" is the minimum acceptable grade for completion of the developmental level or movement to MAT 014B.

### **MAT-020 - Geometry**

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 013 or equivalent

Description: A traditional high school geometry course for students who have successfully completed one year of high school algebra or equivalent. Includes an understanding of Euclidean geometry with topics such as basic proofs, congruent triangles, parallel and perpendicular lines, lines and planes in space, polygons, circles and the Pythagorean Theorem. Optional topics include logic and construction. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### **MAT-090 - Algebra II Alternative**

**Credits: 1**

Lecture Hours: 1

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test

Description: This is an intensive review course in Intermediate Algebra (Algebra II). Topics include: a review of elementary algebra, the coordinate plane and functions, linear equations and inequalities, properties of lines, systems of linear equation, polynomials, rational expressions and quadratic equations. TI83/84 graphing calculator is required. Note: A "C" is the minimum acceptable grade for completion of developmental requirements to qualify for credit courses.

### **MAT-102 - Freshman Mathematics II [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 101

Description: A continuation of MAT 101. The second half of a two-semester course designed primarily for liberal arts students and others planning a year's study of college level mathematics. Topics surveyed include probability, odds and expected value, statistics, graph theory and voting.

### **MAT-107 - Mathematics I [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test, MAT 013 or equivalent

Description: Basic mathematics with an emphasis on the technical, manipulative skills that are required in a technological society. Emphasis is on understanding concepts in each of the many application-oriented problems. Stresses the importance of precision, accuracy and the clear presentation of results. Topics include arithmetic operations, measurement, rounding,

systems of linear equations, polynomials, rational expressions and quadratic equations. The use of a graphing calculator is essential. TI83/84 graphing calculator is required. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### **MAT-014B - Algebra II (Part B)**

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: Grade of "C" or better in MAT 014A

Description: The second half of a two-semester course in intermediate algebra designed to polish skills developed in Algebra I and elevate them to a higher level of mathematical sophistication through the use of lecture, group work and the calculator. Topics include: quadratic equations, rational exponents, radical expressions, rational equations and complex fractions. TI83/84 graphing calculator is required. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### **MAT-080 - Algebra I Alternative**

**Credits: 1**

Lecture Hours: 1

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test

Description: An intensive course in algebra covering integral, rational and irrational numbers, techniques of graphing and solving linear equations, polynomials and their operations, special products and factoring, rational expressions and equations, and solving quadratic equations by factoring. Note: A minimum grade of "C" is required for movement from one developmental course to another and for completion of the developmental requirements to qualify for credit courses.

### **MAT-101 - Freshman Mathematics I [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test, MAT 013 or departmental approval

Description: The first half of a two-semester course designed primarily for liberal arts students and others planning a year's study of college level mathematics. Topics surveyed include inductive reasoning, problem solving, concepts of sets, Venn diagrams and applications, geometry, consumer mathematics, simple and compound interest, installment buying and mortgages.

### **MAT-104 - Mathematics in the Elementary School**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test or successful completion of MAT 013 or equivalent

Description: An introduction to basic mathematics for paraprofessionals. Includes the teaching of arithmetic operations in those number systems appropriate for the elementary school, problem-solving techniques for the development of mathematical concepts and the use of instructional aids.

### **MAT-108 - Mathematics II [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 107

Description: A continuation of MAT 107. This course stresses technical mathematical skills and applications. Topics include solving right triangles, logarithmic and exponential functions and radicals. Also includes the statistics topics of frequency distribution, presentation of statistical data (graphs, charts and tables), measures of central tendency and dispersion, the Normal distribution and introduction to probability theory.

conversions, fractions, decimals, percents, ratio, proportion, scientific notation, use of calculators, metric system, solving linear equations and systems of equations, and graphing linear equations. The first semester of a two-semester course. TI83/84 graphing calculator required.

### **MAT-113 - Mathematical Structures I**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 014 or appropriate score on the College Placement Test

Description: This is the first of a two semester sequence. This first course focuses on selected topics from numeration, mathematical systems, real numbers, and number theory. Designed to develop a deep understanding of the processes of mathematical reasoning, problem solving, and communication of mathematics effectively at different levels of formality, using a variety of representations of mathematical concepts and procedures. Develop a fundamental understanding relating to algebraic thinking and reasoning. Physical materials and models will be used to explore fundamental concepts of numeration, mathematical systems, real numbers, and number theory. This course is especially appropriate for those students preparing to be elementary, early childhood, or special education teachers.

### **MAT-116 - College Algebra [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 014, MAT 014A/MAT 014B, or equivalent

Description: This course is designed to prepare students for general education science and mathematics electives. Topics include concepts of algebra, algebraic functions and graphs, exponential and logarithmic functions and graphs, inequalities and systems of equations. Applications are emphasized.

### **MAT-124 - Statistics II [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 123

Description: Continues the study of hypothesis testing, including one and two sample testing, chi-square analysis, analysis of variance, non-parametric statistics and regression and curve fitting. Familiarizes the students with models and methods used in data analysis with a focus on databases and computer systems to aid in analysis. Students will plan an experiment and make inferences about a population based upon sample data collected.

### **MAT-129A - Precalculus I (Part A) [GE MST](#)**

**Credits: 2**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval

Description: This first half of a two-semester Precalculus course designed to give students extended enrichment to prepare for a first course in calculus. Emphasis is on algebra topics to develop skills properly and a thorough understanding of the concepts needed to proceed to Calculus. Topics include the study of algebraic functions and their graphs. Of special interest are polynomials and rational functions. TI83/84 graphing calculator is required.

### **MAT-131 - Analytic Geometry and Calculus I [GE MST](#)**

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 129, MAT 129A/MAT 129B or equivalent, or appropriate score on the College placement test or satisfactory score on the diagnostic examination, or departmental approval

Description: Presents fundamental ideas of calculus such as the derivative, integral and their applications. Topics include fundamentals of analytic geometry. The first course in a sequence of calculus courses intended for the

### **MAT-114 - Mathematical Structures II**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 113

Description: This is the second of a two semester sequence. This second course focuses on selected topics from geometry, measurement, data analysis, statistics, and probability. Designed to develop mathematical reasoning, problem solving, and communication of mathematics effectively at different levels of formality, using a variety of representations of mathematical concepts and procedures. Develop a fundamental understanding relating to algebraic thinking and reasoning. Physical materials and models will be used to explore fundamental concepts of geometry, measurement, data analysis, statistics, and probability. This course is especially appropriate for those students preparing to be elementary, early childhood, or special education teachers.

### **MAT-123 - Statistics I [GE MST](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 014, MAT 014A/MAT 014B, or appropriate score on the College placement test

Description: Familiarizes students with mathematical models that occur in more advanced courses and in the areas of business, science and the social sciences using exploratory data analysis and statistical methods. Topics include descriptive statistics linear regression, probability and probability distribution, confidence intervals, and an introduction to hypothesis testing.

### **MAT-129 - Precalculus I [GE MST](#)**

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: Appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, "B" or better in MAT 014 or MAT 014A/MAT 014B, or departmental approval

Description: Emphasis is on those topics from algebra and trigonometry that best prepare students for the first course in calculus. The areas of study are algebraic and transcendental functions and their graphs. Of special interest are polynomials, rational, exponential, logarithmic and trigonometric functions. Additional topics include vectors, polar coordinate systems, matrices and determinants. TI83/84 graphing calculator required.

### **MAT-129B - Precalculus I (Part B) [GE MST](#)**

**Credits: 2**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 129A or equivalent

Description: The second half of a two-semester Precalculus course designed to give students extended enrichment to prepare for a first course in calculus. Emphasis is on exponential, logarithmic and trigonometric functions and their properties to develop skills properly for a thorough standing of the concepts needed to go on to calculus. TI83/84 graphing calculator required.

### **MAT-131A - Analytic Geometry and Calculus I (Part A) [GE MST](#)**

**Credits: 2**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 129, MAT 129A/MAT 129B, or appropriate score on the College placement test and/or satisfactory score on the diagnostic examination, or departmental approval

Description: The first half of a two-semester sequence of analytic geometry and Calculus I. Presents fundamental ideas of calculus, such as the derivative and integral and their applications. Topics include fundamentals of analytic

student interested in mathematics, engineering and the natural, physical and social sciences. TI83/84 graphing calculator required.

### **MAT-131B - Analytic Geometry and Calculus I (Part B)** [GE MST](#)

**Credits: 2**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 131A or equivalent

Description: The second half a two-semester sequence of analytic geometry and Calculus I. Presents fundamental ideas of calculus, such as derivative and integral and their applications. Topics include fundamental of analytic geometry and transcendental functions. This is the first course in a sequence of calculus courses intended for the student interested in mathematics, engineering and the natural, physical and social sciences. TI83/84 graphing calculator is required.

### **MAT-206 - Introduction to Discrete Mathematics** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 132 or written permission of the department chairperson

Description: This is the first course in discrete mathematics. Topics include number theory, sets, functions and sequences, relations, recurrence relations, counting techniques, logic and techniques of proofs, graphs and algorithms. This course prepares students for further study in mathematics and computer science.

### **MAT-233 - Analytic Geometry and Calculus III** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 132 or equivalent

Description: Emphasis is on the study of analytic geometry and calculus in three dimensions. Topics include solid analytic geometry, partial derivatives, multiple integrals and topics in vector analysis such as Green's theorem, the divergence theorem, surface integrals and Stokes theorem. Recommended for students majoring in engineering, mathematics, computer science, social sciences and the science related fields of chemistry and physics.

### **MAT-257 - Selected Topics in Mathematics** [GE MST](#)

**Credits: 3**

Lecture Hours: 3

Department Description: Mathematics

Prerequisites: MAT 132 or departmental approval

Description: Introduces students to a branch of mathematics selected from one or more of the following areas: chaos and fractals, combinatorics, complex variables, graph theory, history of mathematics, logic, number theory, probability and topology. The course is recommended for students interested in learning more about theoretical mathematics.

### **MCT-101 - Introduction to Technology**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: MAT 013 or passing score on the College placement test Co-requisites: MAT 014

Description: Introduction to engineering practices through an integration of computer applications with electrical and mechanical components and systems. Activity based learning is accomplished through a variety of hands-on projects. This course is cross-listed in Mechanical Engineering Technology, Electronic/Computer Engineering and Civil/Construction Engineering Technology.

### **MEC-119 - Graphic Science**

**Credits: 2**

geometry and transcendental functions. The first course in a sequence of calculus courses intended for the student interested in mathematics, engineering, and the natural, physical and social sciences. TI83/84 graphing calculator required.

### **MAT-132 - Analytic Geometry and Calculus II** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 131 or equivalent

Description: Topics include trigonometric and hyperbolic functions, areas, centroids, techniques of integration, parametric curves and vectors, indeterminate forms, Taylor's formula, infinite series and topics in analytic geometry. Recommended for students majoring in engineering, mathematics, computer science, social sciences and the science related areas of chemistry and physics. TI83/84 graphing calculator is required.

### **MAT-210 - Linear Algebra** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 132

Description: Covers geometric vectors, vector spaces, systems of linear equations, determinants, linear transformations, matrix algebra and the applications of matrices to the engineering, social and management sciences. Advanced topics include linear product spaces, eigenvalues and vectors, canonical forms and computations via the computer. Applications include linear differential equations, linear programming, and stochastic processes. Students utilize computer software to solve real-life problems and to facilitate computations involving the mathematical operations listed above.

### **MAT-234 - Differential Equations** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 233 or written permission of the department chairperson

Description: An introduction to differential equations for students interested in mathematics, and the physical and social sciences. Covers first- and second-order differential equations and systems of first-order equations, both linear and non-linear. Quantitative and numerical analysis are emphasized along with analytic techniques, such as Laplace transform and matrix methods. Applications and modeling of real phenomena are discussed throughout the course.

### **MAT-285 - Basic Statistics for Business** [GE MST](#)

**Credits: 4**

Lecture Hours: 4

Department Description: Mathematics

Prerequisites: MAT 131 or equivalent calculus course

Description: An in-depth study of descriptive statistics, probability, theory, sampling distributions, principles of hypothesis testing, analysis of variance and regression analysis. The material is designed to give students the knowledge and skills for gathering, organizing and interpreting statistical data as relevant to business. This course will also provide a sound foundation for the study of more advanced topics.

### **MCT-220 - Introduction to Robotics and Control Systems**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Engineering Technologies

Prerequisites: MEC 123, MAT 129 or MAT 129B, ELT 105

Description: A study of the pneumatic, electrical and mechanical components and drives utilized in robotic and control systems. Topics include kinematics of robotics systems, analog and digital controllers, operations and applications of pneumatic, electrical and mechanical components. Students are required to complete a comprehensive robotic project to include an oral presentation and a technical report. This course is cross-listed in Mechanical Engineering Technology and Electronic/Computer Engineering Technology.

### **MEC-123 - Technical Graphics/CAD I**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 3

Department Description: Engineering Technologies

Description: A study of the graphical language specifically designed for the engineering science student. Emphasizes the interpretation of engineering drawings used to communicate ideas in the major engineering disciplines. Topics include: techniques of drafting and sketching and interpretation of chemical, civil, electrical, electronic, mechanical and welding engineering drawings. Laboratory time is divided between using (CAD), computer-aided drafting and sketching techniques to complete required drawings.

### **MEC-125 - Advanced Mechanical Drawing/CAD II**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Engineering Technologies

Prerequisites: MEC 123

Description: The study of mechanical working drawings including detail, assembly, piping and welding drawings. Also included are dimensioning techniques, geometric dimensioning and tolerancing, fits and tolerances of mating parts, threads, fasteners, and surface finish. Advanced use of CAD(Computer-Aided Drafting) software that includes creating template files, drawing layouts/paper space, blocks, attributes, external references, revision tables, notes and BOM (Bill of Material). Introduction to piping and welding drawings. Introduction to solid modeling, including part creation and orthographic and isometric drawing creation. The completion of a comprehensive final project is required.

### **MEC-204 - Fluid Mechanics**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 3

Department Description: Engineering Technologies

Prerequisites: CIT 105 and MAT 129 or MAT 129B

Description: A study of the basic principles of conservation of energy, continuity of flow, and fluid mechanics as related to fluid systems at rest and in motion. Laboratory experiments provide hands-on experience in the set-up, operation, analysis and design of fluid systems. Computer software is used in several analysis and design projects. Oral presentation required.

### **MEC-222 - Engineering Mechanics II**

**Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: MEC 221

Description: A continuation of MEC 221. Deals with the displacements, velocities, accelerations of bodies and the forces which cause the motion. Topics include kinematic and kinetic analysis of rectilinear, curvilinear, rotational and plane motion of bodies. Stresses engineering applications.

### **MEC-250 - Solid Modeling**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Prerequisites: MEC 123

Description: An introductory course to familiarize students with feature-based parametric parts modeling. Students will be involved with outline sketching and sketch profiling, constraining, dimensioning and viewing different viewports. Techniques such as profile extrusion, revolving and sweeping, feature editing, creating work axis, making active sketch planes and creating work planes and points. Students will also master controlling object visibility; cutting, joining and intersecting operations; fillets, chamfers, holes and arrays; dimension display and equations; and assigning design variables.

### **MED-101 - Introduction to the Medical Laboratory I**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Medical Laboratory Technology

Prerequisites: Admission to the Medical Laboratory Technology program required

Description: Understanding of basic medical laboratory terminology, safety, specimen collection, and manual procedures in hematology, hemostasis, body

Lab Hours: 6

Department Description: Engineering Technologies

Description: A study of the graphic language of engineering and technology to include linework, lettering, geometric construction, orthographic projection, pictorial, sectional and auxiliary views and dimensioning techniques. Laboratory time is divided between technical sketching and drawings produced using AutoCad software.

### **MEC-130 - Manufacturing Processes and Materials**

**Credits: 3**

Lab Hours: 6

Department Description: Engineering Technologies

Description: A study of materials (metallic and non-metallic), their engineering properties and the methods used to manufacturing to process these materials into useful products. Concurrent laboratory projects provide hands-on experience in areas of testing, modifying properties and the processes used in manufacturing to convert these materials into useful products.

### **MEC-221 - Engineering Mechanics I**

**Credits: 3**

Lecture Hours: 3

Department Description: Engineering Technologies

Prerequisites: MAT 131

Description: Basic concepts for the study of force systems and Newtonian mechanics, trusses, frames, torsion, bending, friction, centroids and moments of inertia. Engineering examples are stressed to develop understanding and application skills.

### **MEC-228 - Kinematics Design**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Engineering Technologies

Prerequisites: MEC 123 and MAT 129 or MAT 129B

Description: A study of the displacements, velocities and accelerations associated with the motion of mechanisms including four bar linkages, cams and gears. Also included is an examination of the dynamic forces generated by the mechanisms. Solutions to dynamics problems are obtained by making use of analytical techniques, using a programmable calculator, as well as appropriate computer software.

### **MEC-260 - Mechanical Design Project**

**Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: MEC 228 Co-requisites: MEC 204, MCT 220

Description: Students working in teams, integrate their knowledge of theoretical concepts and practical applications of kinematics, robotics, manufacturing, statics, fluids, electrical, electronics and graphics to complete a comprehensive design project. Emphasis will be in areas related to pharmaceutical, orthotics, medical devices and instruments, instrumentation, fluid transport, precision manufacturing and assembly. Oral presentation and a technical report are required.

### **MED-102 - Introduction to the Medical Laboratory II**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Medical Laboratory Technology

Prerequisites: BIO 117; CHM 117; ENG 121; MAT 107 and MED 101

Description: Continuation of MED 101. Emphasis on basic medical terminology, clinical chemistry, clinical microbiology and safety in the laboratory. Provides hands-on experience with those concepts and techniques

fluids, immunohematology and serology. Lectures are combined with laboratory experiences. Stresses medical ethics and HIPAA requirements.

### **MED-210 - Medical Laboratory Technology I**

**Credits: 6**

Lecture Hours: 3 Lab Hours: 12

Department Description: Medical Laboratory Technology

Prerequisites: BIO 118; CHM 118; ENG 122; MAT 108; MED 102 and written permission of the department chairperson

Description: Basic medical terminology, organization of hospital laboratories and rules of ethical behavior. Stresses the practical side of basic laboratory work in the areas of specimen collection, hematology, urinalysis, blood banking, serology, clinical chemistry, microbiology, quality control, etc. Includes on-the-job education in laboratory work. Students supervised by medical technologists and specialists. May not be audited. An eight week, 40 hours per week, summer clinical experience.

### **MED-212 - Medical Laboratory Technology III**

**Credits: 8**

Lecture Hours: 4 Lab Hours: 16

Department Description: Medical Laboratory Technology

Prerequisites: BIO 211 and MED 211

Description: Continuation of MED 211. Includes microbiology and parasitology and clinical chemistry. Clinical instruction and technique are obtained in affiliated hospitals. May not be audited. Requires 16 hours a week in a hospital laboratory, and four hours of lectures per week on campus.

### **MGT-205 - Principles of Labor Relations**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101 or MGT 220

Description: A survey course that evaluates union growth and structure. A study of the nature of the labor market, collective bargaining, labor legislation, wages, employment and productivity. An analysis of policies and techniques of employers, wage earners and government in trying to find solutions to the labor problems in American society.

### **MGT-210 - Concepts of Business Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101

Description: Theories, techniques and insights from the behavioral sciences of the major areas of management including planning, organizing, directing, controlling and administration. Concepts relating to all levels of management are studied.

### **MGT-216 - Seminar in Management Experiences**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ACC 102, ECO 202, ENG 122, MGT 205, MGT 210 and MGT 220 Co-requisites: MGT 214

Description: An interdisciplinary course which integrates and synthesizes concepts and information from preceding management courses. Emphasis is on establishing an environment to employ previously learned material, with the opportunity to practice decision-making and control techniques based on this material. Case studies are employed and supplemented with simulation

essential to medical laboratory technology students. Laboratory experiences include manual methods with principles on techniques and accuracy being stressed.

### **MED-211 - Medical Laboratory Technology II**

**Credits: 8**

Lecture Hours: 4 Lab Hours: 16

Department Description: Medical Laboratory Technology

Prerequisites: MED 210

Description: A study of the theoretical and practical aspects of hematology, coagulation, urinalysis, serology and blood banking. Clinical instruction and technique are obtained in affiliated hospitals under the supervision of medical technologists and specialists. May not be audited. Requires 16 hours a week in a hospital laboratory, and four hours of lectures per week on campus.

### **MGT-200 - Principles of Supervision**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Supervisory practices and principles with maximum opportunities for practical involvement in applying theory to real-life situations. Emphasizes first and middle-level supervisory positions. Stresses the aspects of job leadership and effective human relations. Includes procedures for dealing with interpersonal relationships among and between employees and management, quality circles, quality of work life, conflict management, cost benefit analysis, organization development, time management and stress management. Recommended for persons employed in or seeking entry-level employment in supervisory positions in business, industry or public service.

### **MGT-208 - Management Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: MGT 210 and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program employing students in a management position in order to gain some practical experience necessary for success in management. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly two-hour seminar on campus and work a minimum of 180 hours a semester. Individuals must be recommended by the faculty of the department and register with the Counseling and Career Services Office.

### **MGT-214 - Operations Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: MGT 210

Description: The development of an awareness of the tools a user/manager utilizes in the design modification and implementation of a manual or automated system. Students select a particular technique, apply it to a system and develop cost justification for implementation of the technique. A combination of lecture and workshop oriented sessions are used in developing the various management techniques. The various tools and management techniques for evaluating the operations functions of a business are examined.

### **MGT-220 - Human Resources Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: An analysis of the principles of organization for effective human resources management. Selection of personnel, delegation of responsibilities, the psychology of motivating and directing people, dealing with unions and other organized groups and training and maintaining morale.

techniques. Emphasis is given to subordinate supervisor interaction, with students participating individually and in teams.

### **MKT-143 - Salesmanship**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: The fundamentals of selling with particular stress on preparation, approach, demonstration, overcoming objections and closing sales. Developed through discussions and participation in sales situations.

### **MKT-202 - Marketing II**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: An advanced and interdisciplinary analysis of marketing planning, using the concept of strategic management, through the case history approach.

### **MKT-206 - Marketing Management Seminar**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: MKT 202 Co-requisites: ACC 102, BUS 201, ECO 201, ENG 122 and MKT 203

Description: Students integrate their knowledge of the major areas of marketing and management and test their theoretical concepts through marketing planning projects. Students' analyses of the class projects are directed at the managerial level.

### **MUS-107 - Introduction to Music [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Contemporary and classical music will be dealt with as integral parts of today's musical scene. Students listen, discuss, analyze and evaluate music in order to increase appreciation and understanding. Attendance at a minimum of two professional College performances required.

### **MUS-124 - Music History: Contemporary [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Understanding and appreciation of music from the historical point of view. Special emphasis on the music of Tchaikovsky, Debussy, Stravinsky and twentieth-century American music. Course fee and field trip are required. Required of music majors.

### **MUS-131 - Keyboard Studies I**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Students develop an appreciation and understanding of great keyboard composers, performers and literature by giving them the ability to read and play keyboard music. Fundamentals of technique, keyboard harmony and sight-reading. Attendance at two professional concerts required. Written concert reviews must be submitted. Students are responsible for concert fees. Required for music majors. Open to non-music majors.

### **MKT-201 - Marketing I**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101

Description: An overview of the field of marketing and the marketing concept. Students develop an understanding of the growing importance of the consumer, differences between industrial and consumer marketing, the impact of government and environment on marketing and the basic marketing functions of product planning, marketing channels, physical distribution, promotion, pricing and marketing research.

### **MKT-203 - Principles of Advertising**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101

Description: The principles of advertising and the role of advertising in the field of business. The course traces advertising through its various steps from the initial need to its implementation in the marketplace.

### **MKT-209 - Marketing Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: MKT 201

Description: A cooperative work experience program employing students in a marketing position in order to gain practical experience necessary for success in marketing. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly, two-hour seminar on campus and work a minimum of 180 hours a semester. MKT 209 Marketing Field Experience is offered as an alternative to BUS 202. Students must register with the Counseling and Career Services Office.

### **MUS-123 - Music History: Traditional [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Understanding and appreciation of music from the historical point of view. Major periods studied include the classical, the baroque and the romantic. Course fee and field trip are required. Required of music majors.

### **MUS-130 - Guitar I**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Guitar for the beginning student. Enables the beginner to read fundamental music notation and play guitar. Basics of technique, sight-reading and elementary literature. Students must supply their own instruments. Listening to great music. Attendance is required at two professional concerts. Written concert reviews must be submitted. Students are responsible for concert fees.

### **MUS-132 - Keyboard Studies II**

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: MUS 131

Description: A continuation of MUS 131 with further emphasis on great keyboard literature. Students are introduced to more difficult keyboard harmony, sight-reading and more advanced techniques. Listening to great keyboard literature. Attendance is required at two professional keyboard concerts. Written concert reviews must be submitted. Required for music majors. Open to non-music majors.

**MUS-133 - Applied Music Studio I****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: One hour private instruction weekly in piano, organ, voice or orchestral instruments. Credit to be determined through recital. To be arranged with the music faculty and the department chairperson. Students must have studied formally for a minimum of two years, or play on a two-year level. Fee is approximately \$50 per lesson.

**MUS-136 - Guitar II****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: MUS 130 or written permission of the instructor

Description: Intermediate guitar technique, including choral accompaniment and solos. Use of standard notation. Students must supply their own instrument. Listening to great music. Attendance at two professional concerts. Written reports must be submitted. Students are responsible for concert fees.

**MUS-145 - Music Appreciation: Jazz History [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Provides an understanding and appreciation of jazz history, performers and styles. The social, historical and multicultural forces that influenced the work of the jazz musician will be included. Improvisation will be studied while listening to representative selections of jazz compositions. Attendance at two professional concerts is required. Written concert reviews must be submitted. Course fee required.

**MUS-202 - Music Notation and Composition II****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: MUS 201

Description: Continuation of MUS 201. Students build musical skills in analysis, harmonic writing and ear training. Required of music majors.

**MUS-208 - Applied Music Studio IV****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: For course description, see MUS 133.

**MUS-134 - Applied Music Studio II****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: For course description and fee, see MUS 133.

**MUS-140 - Music Fundamentals****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: An introduction to the study of music theory. The course concentrates on the basic elements of pitch, rhythm, scales, intervals and triads. Notational skills will be developed and aural recognition of musical elements will be introduced. A working knowledge of the piano will be developed as theoretical concepts are related to the keyboard. No prior musical training required.

**MUS-201 - Music Notation and Composition I****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: MUS 140 or passing score on music theory placement test

Description: A practical approach to music encompassing analysis, basic harmonic writing and ear training. Designed for students with some previous musical background. Required of music majors.

**MUS-207 - Applied Music Studio III****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Visual, Performing and Media Arts

Description: For course description, see MUS 133.

**NRB-121 - Nursing Concepts in Health and Wellness****Credits: 7**

Lecture Hours: 4 Lab Hours: 3 Studio Hours: 6

Department Description: Nursing

Prerequisites: American Heart Association Basic Life Support (BLS) Certification for Health Care Providers Co-requisites: BIO 111, ENG 121, PSY 123

Description: This course explores the concepts of man, environment, health and nursing in a holistic approach to health and wellness. Nursing process, communication principles and techniques, physical assessment, teaching/learning theory, professional role and practice responsibilities, therapeutic modalities and nursing interventions are studied, as well as the life-style factors that may influence a client's health state. Faculty supervised learning laboratory and clinical practice provides students with opportunities to develop the cognitive and psychomotor skills related to clinical competencies: physical assessment, client safety, hygiene, activity, nutrition, fluid and electrolyte balance, comfort, rest and sleep, elimination, oxygenation as well as the therapeutic modalities of surgery and pharmacotherapy. Practicum experiences are provided in a variety of settings.

**NRB-122 - Nursing Concepts in Health Alterations I****Credits: 9**

Lecture Hours: 5 Lab Hours: 3 Studio Hours: 9

Department Description: Nursing

Prerequisites: NRB 121, BIO 111, PSY 123 Co-requisites: BIO 112, PSY 232

Description: This course builds on previous learning and develops clinical competencies in the role of provider of care and educator for the client and family experiencing the psychophysiological effects of acute and chronic phases of health alterations and their therapeutic modalities. The focus of this course is evidence-based nursing care using the nursing process and systematic nursing assessment to plan and implement nursing interventions

**NRB-221 - Nursing Concepts Applied to Families****Credits: 9**

Lecture Hours: 5 Lab Hours: 3 Studio Hours: 9

Department Description: Nursing

Prerequisites: NRB 122, PSY 232, BIO 112 Co-requisites: BIO 211, HRI 214

Description: The nursing process is used to plan and implement evidence based nursing interventions for members of a family unit experiencing developmental, physical and/or mental health changes or alterations. During childbearing and childrearing the promotion and maintenance of holistic health and wellness is emphasized. Health restoration is incorporated in discussion of reproductive issues, developmental tasks, psychosocial issues,



determined by the client's individualized health care needs. Faculty supervised clinical and laboratory experiences provide students the opportunity to plan and implement nursing care to clients experiencing health alterations in a variety of health care settings. Communication skills, professional nursing practice standards and behaviors, as well as implementation of teaching/learning theory are incorporated throughout the course.

### **NRB-222 - Nursing Concepts in Health Alterations II**

**Credits: 10**

Lecture Hours: 5 Lab Hours: 3 Studio Hours: 12

Department Description: Nursing

Prerequisites: NRB 221, BIO 112, BIO 211, HRI 214

Description: This course concentrates on clients and families dealing with mental health and/or physiological crisis. Current issues in health care and nursing care delivery systems, including management styles, leadership, delegation and conflict resolution are explored. Experiences in critical care nursing units and acute care facilities provide students the opportunity to practice clinical competencies appropriate to the role of provider of care, educator, counselor, patient advocate and manager. Communication skills, adherence to professional nursing practice standards and regulations and implementation of teaching/learning theory to clients and groups are incorporated throughout the course.

### **PCP-224 - Digital Imaging**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 107 and MAD 108

Description: This course provides an introduction to some essential techniques and tools for the professional photographer. These include image capture, manipulation, editing, organizing, printing and presenting digital files. Emerging technology such as Photoshop will be the primary tool for learning a variety of techniques like retouching, editing, manipulation, special effects, and preparing images for output. Visual thinking skills, multimedia literacy and photographic concepts will be explored.

### **PCP-226 - Professional Studio Photography**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 107 and MAD 108

Description: This course provides hands on instruction on the subject of studio lighting and portraiture. It covers photographing in the studio and on location. Professional lighting techniques, styles and a variety of equipment are utilized. Knowledge of the DSLR camera and uses for the professional photographer will be studied. Images in both color and black-and-white will be created and printed using inkjet printing techniques. Basic image correction and retouching will also be explored. Professional presentation of photographic images for print and for online viewing will be discussed and practiced. Students are expected to perform a minimum of two location shoots on or off campus during the day or evening hours.

### **PED-108 - Modern Dance**

**Credits: 1**

Lecture Hours: 2

Department Description: Health, Physical Education, Recreation & Dance

Description: Will include practical experiences and technical applications of several modern dance techniques. Students discover dance and its raw elements of space, time and energy. Choreography and improvisation exercises are also included to foster the progress of technical ability. An original dance work will be performed as a final examination.

### **PED-120 - Golf**

**Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation & Dance

Description: Basic instruction in the skills, rules and playing procedures. Students demonstrate appropriate shot-making abilities.

### **PED-127 - Tennis**

adaptive mechanisms as well as other factors influencing health. Faculty supervised clinical and laboratory experiences provide students the opportunity to practice clinical competencies appropriate to the role of provider of care, educator, counselor and patient advocate. Communication skills, professional nursing practice standards and behaviors, as well as implementation of teaching/learning theory are incorporated throughout the course.

### **PCP-221 - Color Photography**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 107 and MAD 108

Description: This course is an advanced study of digital photography using a DSLR camera and the digital darkroom. A variety of methods and techniques are explored for professional photographic imaging including exposure, image manipulation, correction, multimedia applications and printing of digital files. Basic digital asset management and archiving methods will be utilized. Fine art printing, large format printing and alternative processes will be studied. Students will create a printed and online portfolio of color photography.

### **PCP-225 - Commercial Photography**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 107 and MAD 108

Description: Course emphasizes the needs of commercial photographers with regard to technical expertise, creativity, and professional equipment. Technical aspects include film to digital transfer, lighting, digital image manipulation, alternative processes, large format camera work and stock photography. Creative exploration of subject matter, lighting, color theory and other psychological characteristics in the development of images are studied. A variety of photographic equipment is utilized for the studio and on location. Students are expected to create a portfolio of work for both print and electronic formats. Additional supplies will need to be purchased.

### **PCP-280 - Portfolio**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: MAD 107 and MAD 108 and a minimum of two PCP courses

Description: This course allows the student to concentrate on personal development as a professional photographer. This includes resume writing, developing a portfolio, marketing and self-promotion and business practices for photographers. The preparation and presentation of a portfolio for job employment and for acceptance into senior institutions is emphasized. Students will attend field trips.

### **PED-112 - Tennis and Volleyball**

**Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation & Dance

Description: Students perform the basic skills of the activities and apply the rules and playing procedures.

### **PED-122 - Volleyball**

**Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation & Dance

Description: Students will receive instruction in the skills, playing procedures and strategies of volleyball. Team play will be developed and stressed.

### **PED-132 - Backpacking**

**Credits: 1**

Lecture Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Students receive instruction in the beginning skills, playing procedures, etiquette and strategies of tennis.

**PED-139 - Exercise, Fitness and Conditioning****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Develops an awareness and understanding of the necessity for planned physical activity as it pertains to the enhancement of one's physical, mental and emotional well being. Students are required to participate in exercise programs defined by the instructor. Acquaints the student with proper nutrition. Briefly examines cardiovascular disease and its causes.

**PED-143 - Beginning Swimming****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Basic water skills including adjustment to the water, overcoming fear, treading water, beginner stroke, crawl stroke, floating and swimming on the back, artificial respiration and basic rescue techniques. American Red Cross guidelines are used. For the non-swimmer and the beginner swimmer.

**PED-146 - Step Aerobics****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Designed to acquaint the student with a lifetime (recreational) fitness activity that combines basic principles and techniques involved in step training. It is executed to music and provides enjoyment through progression in both aerobic capacity and motor skill level.

**PED-210 - Scientific Principles of Fitness****Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: The physiological basis of fitness. Students explore the areas of strength, muscular and cardiovascular endurance, flexibility and nutrition. Students demonstrate, design and implement correct programs in these areas.

**PED-245 - ARC Lifeguard Training, Cardiopulmonary Resuscitation and Standard First Aid****Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation &amp; Dance

Prerequisites: Students must be 15 years of age at the beginning of the course

Description: Swim 500 yards continuously, using each of the following strokes for at least 100 yards each: crawl stroke, breaststroke and sidestroke. Submerge to a minimum depth of 7 feet, retrieve a 10-pound object and return with it to the surface. There is no time requirement for this skill. Tread water for 2 minutes using legs only. Participants cross their arms across their chest and place their hands under their armpits. Provides the lifeguard candidates with the skills and knowledge necessary to keep patrons of aquatic facilities safe in and around the water. Upon successful completion of all course requirements students will receive the American Red Cross Lifeguarding/First-Aid Certificate and CPR for the Professional Rescuer Certificate. Students may take the course for college credit without becoming a certified lifeguard.

**PHI-122 - Logic [GE HUM](#)****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: The types of equipment, skills and procedures necessary to plan and undertake a safe backpacking experience. Trip planning and preparation, meeting basic needs and unexpected occurrences and low impact use of the environment. Six on-campus meetings and a weekend trip are required. Students are responsible for providing their own equipment, food and transportation for the weekend activity.

**PED-140 - Racquetball****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: The rules, basic strokes, shots and strategies of racquetball. Experience is provided in singles and doubles play.

**PED-144 - Intermediate Swimming****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: A second level course for students who successfully complete the beginning swimming course, PED 143, or demonstrate the ability to swim the crawl with head in the water using rhythmic breathing for at least 50 meters. A variety of strokes and skills including elementary backstroke, basic diving, sidestroke, breast stroke, underwater swimming, various kicks and personal safety skills. American Red Cross guidelines are used.

**PED-148 - Ballet****Credits: 1**

Lab Hours: 2

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: Classical ballet as an art form with emphasis on the technical movement, vocabulary, body alignment and aesthetics. Students will explore academic aspects of ballet as a profession, pertinent historical topics and artistic characteristics. A required full ballet movement study is part of the final examination.

**PED-225 - First Aid, CPR and Safety Education****Credits: 3**

Lecture Hours: 3

Department Description: Health, Physical Education, Recreation &amp; Dance

Description: The theory and practice of professional rescuer CPR and basic first aid skills. Topics covered include accident and disease prevention, body systems, respiratory and cardiac emergencies and sudden illnesses. The ability to recognize serious medical emergencies and the course of action are the basic components of this course. American Red Cross certification(s) will be presented to qualified students.

**PHI-121 - Philosophy [GE HUM](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Background, fundamental problems and developing types of philosophy as expressed in selected writings of major classical and modern philosophers of the Western tradition.

**PHI-123 - Ethics [GE HUM](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Elementary presentation of the basic tools of logic. The nature and purpose of definition, concepts of truth and the pitfalls of language. The modern methods of symbolic logic are employed throughout.

**PHY-010 - Basic Physics****Credits: 4**

Lecture Hours: 4 Lab Hours: 2

Department Description: Natural Sciences

Co-requisites: MAT 014 or equivalent

Description: A one-semester non-credit introductory physics course designed to give students sufficient background to enter into non-calculus physics courses.

**PHY-123 - General Physics I - Lecture [GE MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: MAT 129 or MAT 129A/MAT 129B

Description: Emphasizes theoretical models and basic physical principles. The course is precalculus based and uses some basic calculus in the development and applications of physical principles in a scientific environment. Students will use computers in the laboratory for developing programming skills for the analysis of experimental data. Topics include kinematics, dynamics, conservation of energy and momentum, waves, temperature and heat and thermodynamics. The first semester of a two-semester college-parallel sequence for liberal arts science and pre-professional students.

**PHY-125 - General Physics I - Lab [GE MST](#)****Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 129 or MAT 129A/MAT 129B

Description: This course is to be taken in conjunction with General Physics I and is the first semester of a two semester laboratory university-parallel sequence for liberal arts science and pre-professional students. Students will make measurements and develop an understanding of the errors in those measurements and the final result. The importance of maintaining a laboratory notebook is emphasized as well as accurate and concise reporting of the data and results; data interpretation is also emphasized. The computer is used of data acquisition and analysis. Laboratory safety is also discussed.

**PHY-133 - Analytical Physics I - Lecture [GE MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory physics Co-requisites: MAT 131 or equivalent

Description: A calculus-based general physics course. Topics include statics, kinematics, dynamics and the conservation of energy and momenta. Appropriate computer and laboratory experiences are included. The first course in a three-course series consisting of PHY 133, PHY 134 and PHY 236.

**PHY-135 - Analytical Physics I - Lab [GE MST](#)****Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory physics Co-requisites: MAT 131 or equivalent

Description: This course is to be taken in conjunction with Analytical Physics I and is the first semester of a three semester laboratory college-parallel sequence for engineering science and physics students. Students will make measurements and develop an understanding of the errors in those measurements and the final result. The importance of maintaining a laboratory notebook is emphasized as well as accurate and concise reporting of the data

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The philosophical foundations of Western moral/ethical theory, including natural law, social contract theory, Kantian duty and utilitarianism. These approaches are employed to consider solutions to such moral dilemmas as abortion, nuclear weaponry, poverty and euthanasia.

**PHY-101 - Principles of Physics [GE MST](#)****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 107 or equivalent

Description: Includes an introduction to Newtonian mechanics with application of the conservation laws to physical systems. Electromagnetism and geometrical optics are introduced at an elementary level. Topics in wave propagation, thermodynamics, atomic and nuclear physics.

**PHY-124 - General Physics II - Lecture [GE MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: PHY 123

Description: Emphasizes theoretical models and basic physical principles. The course is precalculus-based and uses some basic calculus in the development and applications of physical principles in a scientific environment. Students will use computers in the laboratory for developing programming skills and for the analysis of experimental data. Topics include electro-statics, direct current circuits, electromagnetism, alternating currents, electromagnetic waves, geometrical and physical optics, quantum theory, atomic physics and nuclear physics. The second semester of two-semester college-parallel sequence for liberal arts science and pre-professional students.

**PHY-126 - General Physics II - Lab [GE MST](#)****Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: PHY 125

Description: This course is to be taken in conjunction with General Physics II and is the second semester of a two semester laboratory university-parallel sequence for liberal arts science and pre-professional students. Students will make measurements and develop an understanding of the errors in those measurements and the final result. The importance of maintaining a laboratory notebook is emphasized as well as accurate and concise reporting of the data and results; data interpretation is also emphasized. The computer is used of data acquisition and analysis. Laboratory safety is also discussed.

**PHY-134 - Analytical Physics II - Lecture [GE MST](#)****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: PHY 133 Co-requisites: MAT 132 or equivalent

Description: A continuation of PHY 133. Topics include wave motion, special relativity, thermodynamics, electrostatics and DC circuits. Appropriate computer and laboratory experiences included. The second course in a three-course series consisting of PHY 133, PHY 134 and PHY 236.

**PHY-136 - Analytical Physics II - Lab [GE MST](#)****Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: PHY 135 Co-requisites: MAT 132 or equivalent

Description: This course is to be taken in conjunction with Analytical Physics II and is the second semester of a three semester laboratory college-parallel sequence for engineering science and physics students. Students will make measurements and develop an understanding of the errors in those measurements and the final result. The importance of maintaining a laboratory notebook is emphasized as well as accurate and concise reporting of the data and results. The importance of interpreting the data is emphasized. The

and results. The importance of interpreting the data is emphasized. The computer is used of data acquisition and analysis. Laboratory safety is also discussed.

### **PHY-236 - Analytical Physics III - Lecture** [GE MST](#)

**Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: MAT 132 and PHY 134

Description: Continuation of PHY 134. Topics include magnetism, AC circuits, electromagnetic waves, optics and atomic and nuclear physics. Appropriate computer and laboratory experiences included. The third course in a three-course series consisting of PHY 133, PHY 134 and PHY 236.

### **PLS-100 - Introduction to the Paralegal Profession**

**Credits: 2**

Lecture Hours: 2

Department Description: Accounting, Business and Legal Studies

Description: An introduction to the functions and duties of the paralegal. Students explore the regulation of paralegals, rules of ethics, privilege and ABA considerations. Students are introduced to the court system and law office routines.

### **PLS-104 - Property Transactions**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: Forms and procedures used in real and personal property transactions including the Real Estate Settlement Procedures Act.

### **PLS-106 - Wills and Estate Administration**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: A study of the substance and procedure of estate administration with respect to wills, estates, trusts, probate, life insurance, federal and state taxes.

### **PLS-109 - Criminal Law and Procedure**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113, PLS 121 Co-requisites: PLS 121

Description: A study of the elements of crime and the criminal procedure system including incidents before and after trial and an analysis of the impact of the Constitution on crimes and criminal procedure.

### **PLS-111 - Contracts and Uniform Commercial Code**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: A study of the substantive law of contracts, sales law and commercial paper. In applicable areas, the Uniform Commercial Code is covered as well as common law principles.

computer is used of data acquisition and analysis. Laboratory safety is also discussed.

### **PHY-239 - Analytical Physics III - Lab** [GE MST](#)

**Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 132 and PHY 136 or one year of integral and differential calculus.

Description: This course is to be taken in conjunction with Analytical Physics III and is the third semester of a three semester laboratory college-parallel sequence for engineering science and physics students. Students will make measurements and develop an understanding of the errors in those measurements and the final result. The importance of maintaining a laboratory notebook is emphasized as well as accurate and concise reporting of the data and results. The importance of interpreting the data is emphasized. The computer is used of data acquisition and analysis. Laboratory safety is also discussed.

### **PLS-101 - Legal Research**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: ENG 121, PLS 100 Co-requisites: ENG 121, PLS 100

Description: An introduction to the American legal system and the New Jersey court system. Students use the law library including encyclopedias, reporter systems, digests and administrative codes including updating sources. Students are introduced to the use of computer assisted research by use of Westlaw.

### **PLS-105 - Family Law**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: A study of the substantive and procedural aspects of family law in such areas as divorce, adoption, support and separation agreements, including domestic relations court procedures.

### **PLS-108 - Torts**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: A study of the principles of tort law, their application in commonly faced situations in law practice and the role of the paralegal in the preparation of a tort claim or defense.

### **PLS-110 - Litigation Procedure**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113 Prerequisite(s) or Corequisite(s): PLS 121 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121

Description: A study of the rules governing courts and litigation procedures including client interviews, complaints, motions, discovery and appeals.

### **PLS-112 - Business Organizations and Government Regulations**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113, PLS 101 Prerequisite(s) or Corequisite(s): PLS 121 and PLS 123 Co-requisites: Prerequisite(s) or Corequisite(s): PLS 121 and PLS 123

Description: Detailed study of the substantive law of agency and employment, security devices, bankruptcy, partnerships and corporations. (In applicable

areas the Uniform Commercial code is covered as well as common law principles.)

### PLS-113 - Legal Writing

**Credits: 2**

Lecture Hours: 2

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101 Co-requisites: PLS 100, PLS 101

Description: A writing course focusing on the tasks commonly encountered by paralegals. Topics covered include legal correspondence, opinion letters, briefs and memoranda, Emphasis will be placed on clarity and precision in the use of language.

### PLS-123 - Advanced Legal Writing

**Credits: 2**

Lecture Hours: 2

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113

Description: An independent study writing course focusing on the preparation of legal memoranda as well as citation form. Emphasis is placed on clarity and precision in the use of language.

### PLS-225 - Portfolio Project for Paralegals

**Credits: 1**

Lecture Hours: 1

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113, PLS 121, PLS 123, and 15 additional credits of paralegal courses (PLS Courses) and permission of the PLS program director or department chair.

Description: Students integrate their knowledge of theoretical concepts and practical application of legal research and substantive law through case analysis and the completion of the assigned project. Students review news and legal sources regarding the project. Students review news and legal sources regarding an issue pending before the Supreme Court, analyzing the issue and the positions of the parties and predicting the outcome of the case. Students also prepare resumes in proper business format.

### POL-202 - Police Operations

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123 Co-requisites: CJU 123

Description: Administration of police line operations, including patrol as the basic police function, investigation, juvenile, traffic and special operational units. Liaison between units, enforcement policy, manpower distribution and analysis of operations.

### POS-121 - Introductory Government and Politics [GE SS](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Surveys the field of political science including an analysis of the discipline as an academic pursuit and a profession. Themes are theory, behavior and public opinion, parties and interest groups, public administration, law, comparative government and international relations. Includes a case study of the most recent U.S. presidential election.

### POS-201 - United States State and Local Government [GE SS](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

### PLS-121 - Advanced Legal Research

**Credits: 2**

Lecture Hours: 2

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 113, CSC 105 or CSC 106 Co-requisites: PLS 100, PLS 101, PLS 113, CSC 105 or CSC 106

Description: A continuation of the study of legal research using online resources, with an emphasis on Westlaw and the Internet.

### PLS-208 - Paralegal Field Experience

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: PLS 100, PLS 101, PLS 110, PLS 113, PLS 121 and PLS 104 or PLS 108 or PLS 109 and permission of the program director

Description: A cooperative work experience program whereby students are employed in law-related positions to gain some of the practical experience necessary for success as paralegals. The College, through on-the-job visits and individual progress review sessions, provides supervision of these departmentally approved positions. Students are required to establish learning objectives related to their positions to attain specific job competencies. Students attend a class on campus and work approximately 20 hours a week for a minimum of 180 hours during the semester. Individuals must be recommended by the chair or assistant chair of the department.

### POL-201 - Police Administration

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123 Co-requisites: CJU 123

Description: The administrative and organizational structures and major functions of representative law enforcement agencies. Allocating responsibility, support functions, command coordination, recruitment and career advancement.

### POL-204 - Law Enforcement and the Community

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: CJU 123 Co-requisites: CJU 123

Description: The relationship between professional police officers and the community they serve with emphasis on ethical standards, human relations, civil rights and community service. The attitudes and actions of the police and the public that lead to both positive and negative relationships between them.

### POS-131 - Introduction to Public Administration

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: A survey of the practices and political relationships in Public Administration is explored. Factors such as leadership and managerial styles are examined as are techniques typically employed in the decision-making consensus of Public Policy development. Analysis of personnel recruitment and retention, budgetary analysis and compliance and the relationship of the bureaucracy and the elected official are examined. The interaction and devolution between and among all levels of government are considered in detail.

### POS-220 - United States National Government [GE SS](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: A comparative analysis of the state, county and municipal levels of government in the United States is offered. Particular attention is given to New Jersey government and politics, state party organizations, interest groups and electorate behavior, as well as the formal governmental structure.

### **POS-222 - Comparative Government** [GE SS](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The political systems of the major western powers and the developing nations compared. Political institutions are viewed against their economic, social and cultural backgrounds.

### **POS-231 - Constitutional Law**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: POS 121 or POS 201 or POS 220

Description: Examines the principal methods by which United States Supreme Court Justices give meaning to Constitutional provisions in the context of individual cases. Particular attention paid to the fundamental importance of a full and coherent understanding of the principles, precedents and problems of America's democratic system.

### **PSR-102 - Communication Techniques in Interviewing and Counseling**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Psychosocial Rehabilitation

Description: Introduces students to the principles and skills necessary for the effective use of therapeutic communication. The student will learn about values and attitudes impacting on professional interpersonal relationships. Classroom lectures and practice sessions expose students to interviewing and helping principles through active participation in faculty supervised clinical practice.

### **PSR-104 - Clinical Principles in Psychosocial Rehabilitation and Treatment**

**Credits: 3**

Lecture Hours: 3

Department Description: Psycho-Social Rehab & Treatmnt

Description: Introduces students to an understanding of psychopathology as it is addressed through psychosocial rehabilitation intervention efforts. Students will be able to define and differentiate between mental health and mental illness. The use of common psychotropic drugs and their side effects will also be covered. Current psychiatric practices will be discussed.

### **PSR-209 - Emerging Topics in Psychosocial Rehabilitation and Treatment**

**Credits: 3**

Lecture Hours: 3

Department Description: Psychosocial Rehabilitation

Co-requisites: PSR 211

Description: Acquaints students with emerging issues in the field of psychosocial rehabilitation and treatment, focusing on current developments in employment, education and residential services for people with mental illness.

Description: The organization, powers and procedures of the United States national government are presented along with such topics as the role of political parties, electorate behavior and interest groups as a continuing process of United States politics.

### **POS-225H - American Political Thought (Honors)**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: POS 121, Introductory Government and Politics and/or faculty recommendation. In accordance with the Honors Criteria, a cumulative GPA of 3.5 or higher after the completion of 12 college credits and completion of all developmental coursework, or specific waiver of same via faculty nomination.

Description: This course explores contemporary and historical American political activity through the study of key Western European and American ideas, theories, ideologies and philosophies. Original writings and commentaries serve as the primary course source material. Diverse areas of study are examined, including democratic theory, constitutional principles, domestic and international policy, and economic and religious thinking, as the value-based architecture of the historical and ongoing American Political and Governmental Experience.

### **PSR-101 - Introduction to the Principles of Psychosocial Rehabilitation**

**Credits: 3**

Lecture Hours: 3

Department Description: Psychosocial Rehabilitation

Description: Enables students to identify the methods by which individuals with severe mental illness are helped in psychosocial rehabilitation and treatment settings. Classroom lectures and seminars provide students with opportunities to explore concepts unique to psychosocial rehabilitation, including history, philosophy and values of psychosocial rehabilitation.

### **PSR-103 - Introduction to Group Dynamics**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Psychosocial Rehabilitation

Description: Introduces students to the principles and skills necessary for the effective use of groups to engage people and achieve goals. Classroom lectures and practice sessions to demonstrate group dynamics and group process. Includes participation in a faculty supervised group experience.

### **PSR-207 - Community Resource Management and the Individual with Severe Mental Illness**

**Credits: 3**

Lecture Hours: 3

Department Description: Psychosocial Rehabilitation

Prerequisites: PSR 101

Description: Introduces students to the principles and practices of systems utilization for the improved functioning of people with severe mental illness. Needs evaluation and goal formulation will be the basis of case coordination and resource linking within a systems framework. Classroom lectures and seminars provide students with opportunities to explore the relationship of services to the individual's needs.

### **PSR-210 - Clinical Practicum in Psychosocial Rehabilitation I**

**Credits: 6**

Lecture Hours: 3 Lab Hours: 16

Department Description: Psychosocial Rehabilitation

Prerequisites: PSR 101, PSR 102, PSR 103 and PSR 104

Description: This course builds on the knowledge that students obtained in previous PSR courses, including basic information about severe mental illness, program models, communication techniques and group skills. The course enables students to identify and begin to practice common interventions used in psychiatric rehabilitation settings. Classroom lectures, as well as topical and informal discussions will provide students with the opportunity to integrate theory with the practical experience gained at their field placements.

**PSR-211 - Clinical Practicum in Psychosocial Rehabilitation II****Credits: 6**

Lecture Hours: 3 Lab Hours: 16

Department Description: Psychosocial Rehabilitation

Prerequisites: PSR 210

Description: This course builds upon the knowledge obtained in the core PSR course and the prerequisite fieldwork course, and enables students to continue to develop rehabilitative and clinical skills in faculty supervised field placements. In addition, students will begin to participate in the assessment and service planning process, learn how to document clients' progress, and learn how to resolve ethical dilemmas. Weekly seminar classes will assist students in evaluating their field experiences and foster consolidation of learning.

**PSY-151 - Introduction to Addiction Studies****Credits: 3**

Lecture Hours: 3 Studio Hours: 15

Department Description: History and Social Science

Prerequisites: PSY 123

Description: This course focuses on the addiction process, familiarizing students with various substances and the impact of addiction on the individual, the family and society. Addiction is examined from social, psychological and biological perspectives. Students are required to attend 15 addiction meetings.

**PSY-217 - Psychology of Women [GE DIV](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The issues raised by female self-awareness. Topics include personality and biological differences between the sexes; the role of women in the family, society and sexual relationships; and the influence of the women's liberation movement.

**PSY-222 - Social Psychology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123 or SOC 121

Description: The behavior and development of the individual in society, the functions of social attitudes and the emergence of social awareness. Also, the character of group conflict and group solidarity.

**PSY-226 - Educational Psychology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: This course provides an overview of learning, motivational, and developmental theories with a focus on their application to the field of education. Educational research addressing the powerful role of the educator, effective teaching strategies, and curriculum decision making are discussed. Theory and research based practices to reach all learners in an educational environment are emphasized.

**PSY-232 - Lifespan Development [GE SS](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: This course introduces students to the psychological development of the individual across the life span. Developmental concepts and theories are reviewed and applied in the study of the various stages of life.

**PSY-235 - Abnormal Psychology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

**PSY-123 - Introduction to Psychology [GE SS](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Provides a psychological basis for the understanding of human behavior. A survey of fundamentals that are necessary for subsequent psychology courses. Topics include but are not limited to: learning, motivation, cognition, personality, abnormal behavior, development and social psychology.

**PSY-163 - Psychology of the African-American Experience [GE DIV](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Exploration of Black Psychology - its principles, theories and assessment techniques in relation to the personality and behavioral development of African-Americans.

**PSY-219 - Theories of Personality****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: An introduction to and evaluation of modern personality theories. A study of representative theories from different schools, including psychoanalysis.

**PSY-223 - Child Psychology [GE SS](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: Human behavior from prenatal development to maturity. The study of physical, intellectual and emotional behavior. Behavior characteristics of different age levels, individual differences and methods of adjustment.

**PSY-227 - Psychology of Persons with Disabilities [GE DIV](#)****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Examines the psychological development and problems of people with physical challenges and learning disabilities.

**PSY-234 - Psychology of Death and Dying****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The attitudes and feelings toward death and loss. An examination of the facts about death and dying in our society.

**PSY-244 - Business and Industrial Psychology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123 or permission of department chair

Description: A multidisciplinary approach to the problems of, mental health and illness stressing the role of, physical, psychological, and sociological forces, as causative factors in personality disturbances.

### **PSY-251 - Substance Abuse: Pharmacology**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 151

Description: An introduction to basic effects and neurophysiology of substance use, abuse and dependence. Socio-cultural and psychological perspectives are addressed, with additional emphases on the biomedical, socio-cultural and psychological perspectives.

### **PSY-255 - Adolescent Psychology [GE SS](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: An in-depth exploration of the transition period from childhood to adulthood. Biological, social and psychological processes involved in this transition are examined.

### **PSY-260 - Psychology Field Experience**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: History and Social Science

Prerequisites: PSY 123 with a grade of "C" or better and written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby students are employed in a departmentally approved position in order to gain the practical competency necessary for success in applied psychology. Supervision is provided by the College through on-the-job visits and individual progress review sessions. Students must be approved by the department and are required to describe their learning objectives. Students attend a bi-weekly seminar and work for a total of 180 field experience hours during the semester.

### **PSY-265 - Addiction Studies Practicum**

**Credits: 3**

Lecture Hours: 1 Studio Hours: 250

Department Description: History and Social Science

Prerequisites: PSY 264, PSY 257

Description: Students will apply skills learned from prior addiction studies coursework through a supervised practicum experience of 250 hours throughout the semester.

### **RAD-128 - Basic Medical Principles**

**Credits: 4**

Lecture Hours: 4

Department Description: Radiography Education

Description: This course introduces the student to the basic principles necessary for clinical practice. Course content includes general concepts in patient care, medical terminology, medical-legal aspects, vital signs, infection control, medication administration, pharmacology, patient communication and ethical considerations.

### **RAD-141 - Radiographic Positioning, Anatomy and Pathology I**

**Credits: 2**

Lecture Hours: 2

Department Description: Radiography Education

Co-requisites: RAD 128, RAD 142, RAD 171 and RAD 190

Description: A presentation of anatomy, positioning and pathology of the upper extremity, shoulder girdle, sternum, sterno clavicular & acromio

Description: The methods and techniques of psychology are applied to such problems as personnel selection, performance measurement, employee development, job satisfaction and decision making. Organization and leadership are explored within the framework of psychological and social principles.

### **PSY-252 - Community and Agency Counseling**

**Credits: 3**

Lecture Hours: 3 Studio Hours: 15

Department Description: History and Social Science

Prerequisites: PSY 151

Description: This course will familiarize students with the agencies and other resources available within the local community, particularly as they relate to addiction. The role of consultation and effective referral strategies is emphasized. Students are required to attend 15 addiction meetings.

### **PSY-257 - Counseling Theories and Techniques**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: Students learn about the various theoretical approaches in counseling psychology. Counseling interventions grounded in theory and research are explored and applied to individuals, groups and families.

### **PSY-264 - Addiction Counseling**

**Credits: 3**

Lecture Hours: 3 Studio Hours: 50

Department Description: History and Social Science

Prerequisites: PSY 151, PSY 257

Description: This course focuses on counseling interventions intended to assist individuals involved with substances and their families. Ethical and legal aspects of counseling are discussed. The importance of educating clients and being familiar with community resources is emphasized. Students are required to complete 50 hours of fieldwork.

### **PSY-270 - Adult Development and Aging [GE SS](#)**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123

Description: Examines the psychological processes of development from young adulthood through the middle years and later life. Specific attention is paid to psychological adjustments relating to changes in physical health, cognitive functioning, emotional outlook and social interactions of both men and women.

### **RAD-139 - Radiation Protection and Biology**

**Credits: 2**

Lecture Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190 Co-requisites: RAD 143, RAD 144, RAD 172 and RAD 210

Description: This course provides students with an understanding of and respect for the recommendations relating to the safe use of ionizing radiation. Students are provided with comprehensive coverage of the physical principles and technical aspects of radiation protection and their relationship to radiobiology.

### **RAD-142 - Radiographic Positioning Laboratory I**

**Credits: 1**

Lab Hours: 3

Department Description: Radiography Education

Co-requisites: RAD 128, RAD 141, RAD 171 and RAD 190

Description: Practical experience and competency evaluation covering positioning of the upper extremity, shoulder girdle, sternum, rib cage, sterno



clavicular joints, thoracic cavity, rib cage, chest, lungs and abdomen.

### **RAD-143 - Radiographic Positioning, Anatomy and Pathology II**

**Credits: 2**

Lecture Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190 Co-requisites: RAD 139, RAD 144, RAD 172 and RAD 210

Description: A presentation of anatomy, positioning and pathology of the lower extremities, hips, pelvis, sacrum, coccyx, sacroiliac joints and vertebral column including scoliosis studies.

### **RAD-145 - Radiographic Positioning, Anatomy and Pathology III**

**Credits: 3**

Lecture Hours: 3

Department Description: Radiography Education

Prerequisites: RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210 Co-requisites: RAD 146

Description: A study of the specific anatomy of the digestive, urinary and biliary systems with the appropriate positioning techniques. A discussion of the pharmacological concepts of contrast media and the use in these procedures as well as the theoretical principles of venipuncture are presented. The principles and equipment used for body section radiography are discussed.

### **RAD-171 - Radiographic Imaging and Science I**

**Credits: 4**

Lecture Hours: 4

Department Description: Radiography Education

Co-requisites: RAD 128, RAD 141, RAD 142 and RAD 190

Description: This first part of a three-part course is designed to introduce the student to the basic concepts and practices in radiation protection, equipment operation and maintenance as well as image production and evaluation. Content includes X-ray production, the X-ray tube, filtration, prime factors, interactions of X-ray with matter, beam restriction, grids, radiographic film, processing and intensifying screens. In addition, an introduction to radiation protection for the patient and radiographer is presented in order to prepare the student for clinical practice.

### **RAD-190 - Clinical Orientation**

**Credits: 1**

Lab Hours: 8

Department Description: Radiography Education

Co-requisites: RAD 128, RAD 141, RAD 142 and RAD 171

Description: A hands-on clinical experience, introducing the student to the clinical setting. The student will demonstrate basic medical skills by assisting the staff technologists during radiographic examinations.

### **RAD-220 - Clinical Practicum II**

**Credits: 2**

Lab Hours: 16

Department Description: Radiography Education

Prerequisites: RAD 145 and RAD 146

Description: Provides experiences toward mastery of competency in examinations of the digestive, biliary and urinary systems at an assigned clinical agency. Continued development of the student's professional work ethic and practical competency will be demonstrated on examinations of the appendicular skeleton, bony thorax, lungs and abdomen. Weekly discussions, assignments and reviews are given.

### **RAD-247 - Radiographic Positioning, Anatomy and Pathology IV**

**Credits: 2**

clavicular & acromio clavicular joints, abdomen, thoracic cavity, chest and lungs.

### **RAD-144 - Radiographic Positioning Laboratory II**

**Credits: 1**

Lab Hours: 3

Department Description: Radiography Education

Prerequisites: RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190 Co-requisites: RAD 139, RAD 143, RAD 172 and RAD 210

Description: Practical experience and competency evaluation covering positioning of the lower extremities, pelvis and vertebral column.

### **RAD-146 - Radiographic Positioning Laboratory III**

**Credits: 1**

Lab Hours: 3

Department Description: Radiography Education

Prerequisites: RAD 139, RAD 143, RAD 144, RAD 172 and RAD 210 Co-requisites: RAD 145

Description: Radiographic demonstration of the digestive, urinary and biliary system with the appropriate positioning techniques. Practical application of various contrast media is demonstrated. Venipuncture techniques are demonstrated using the phantom injectable arm. Discussion of the principles and equipment used for body section radiography using the energized radiographic laboratory and the phantom patient. Practical competency must be demonstrated.

### **RAD-172 - Radiographic Imaging and Science II**

**Credits: 2**

Lecture Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190 Co-requisites: RAD 139, RAD 143, RAD 144 and RAD 210

Description: A continuation of Radiographic Imaging and Science I designed to build upon previous objectives and introduce additional concepts and practices in equipment operation and maintenance as well as image production and evaluation. Film/screen combinations, sensitometry, exposure systems, automatic exposure control devices, mobile radiography and fluoroscopy are discussed and analyzed. Students learn to analyze the radiograph image with focus upon the interaction of various radiographic factors such as density, contrast, detail and distortion.

### **RAD-210 - Clinical Practicum I**

**Credits: 2**

Lab Hours: 16

Department Description: Radiography Education

Prerequisites: RAD 128, RAD 141, RAD 142, RAD 171 and RAD 190 Co-requisites: RAD 139, RAD 143, RAD 144, RAD 172

Description: An introduction to the functioning of a radiology department. Under direct supervision, students assist with, and perform radiographic examinations of the appendicular skeleton, bony thorax, lungs and abdomen on patients at an assigned clinical agency. Stresses competency in performance and in the development of a professional work ethic. Weekly discussions, assignments and reviews are given. Practical competencies must be demonstrated in specific radiographic examinations.

### **RAD-230 - Clinical Practicum III**

**Credits: 2**

Lab Hours: 16

Department Description: Radiography Education

Prerequisites: RAD 220 Co-requisites: RAD 247, RAD 248 and RAD 275

Description: Provides experiences toward mastery of competencies in the skull and sinuses. Continued practical competency will be demonstrated in examinations of the appendicular skeleton, thorax, lungs, abdomen, digestive system, biliary system and urinary system. Continued development of the student's professional work ethic is required. Weekly discussions, assignments and reviews are given.

### **RAD-248 - Radiographic Positioning Laboratory IV**

**Credits: 1**

Lab Hours: 2

Lecture Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 145, RAD 146 and RAD 220 Co-requisites: RAD 230, RAD 248 and RAD 275

Description: A presentation of anatomy, positioning and pathology of the cranium, sella turcica, facial bones (nasal bones, zygomatic arch, mandible and temporomandibular joints), paranasal and mastoid sinuses, orbits, optic foramina and mammary gland.

**RAD-250 - Clinical Practicum IV****Credits: 3**

Lab Hours: 24

Department Description: Radiography Education

Prerequisites: RAD 230, RAD 247, RAD 248 and RAD 275 Co-requisites: RAD 256 and RAD 285

Description: Emphasizes competency relating to examinations of the skull and sinuses and in the area of special radiographic procedures. Continued practical competencies will be demonstrated in the areas of the appendicular skeleton, thorax, lungs, abdomen, digestive system, biliary system and urinary system. The student must demonstrate competency in 25 designated examinations. Continued development of the student's professional work ethic is required.

**RAD-257 - Radiographic Seminar II****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 256 and RAD 260

Description: Continued review of the five major areas of radiography required for the National Board examination, utilizing testing, computerized review and problem solving. Simulated board examinations are administered throughout the course. A grade of 80% on the final simulated board exam is required to pass the course.

**RAD-275 - Radiographic Physics and Equipment Maintenance****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Radiography Education

Description: Radiographic Physics and Equipment Maintenance is designed to build upon previous objectives in Radiographic Imaging and Science I & II and introduce additional concepts and practices in the physics of equipment operation and maintenance as well as image production and evaluation. Topics include basic physical principles, physics of radiographic equipment, advanced circuit theory, radiographic quality control, bone densitometry, digital x-ray imaging and physics of mammography.

**RDG-009 - Reading Skills for College I****Credits: 4**

Lecture Hours: 3 Lab Hours: 1

Department Description: English

Description: Provides intensive instruction to help students develop basic reading comprehension, vocabulary, communication and study skills. "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

**RDG-070 - Reading 009 Bridge****Credits: 1**

Lecture Hours: 1

Department Description: English

Prerequisites: Reading score on ACCUPLACER of 60, 59, 58, 57, or 56

Description: RDG 070 is a course paralleling RDG 009. It is designed for students who, having graduated from high school in June, fall within the upper range of scores on the Accuplacer Reading Test. It is an intensive five day course which meets for three hours per day using compatible software in the Learning Center. In addition to the class work, students will take the final

Department Description: Radiography Education

Prerequisites: RAD 145, RAD 146 and RAD 220 Co-requisites: RAD 230, RAD 247 and RAD 275

Description: Practical experience and competency evaluation covering positioning of the cranium, sella turcica, facial bones (nasal bones, zygomatic arch, mandible and temporomandibular joints), paranasal and mastoid sinuses, orbits, optic foramina and mammography.

**RAD-256 - Radiographic Seminar I****Credits: 2**

Lecture Hours: 1 Lab Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 230, RAD 247, RAD 248 and RAD 275 Co-requisites: RAD 250 and RAD 285

Description: Review of the five major areas of radiography required for the National Board examination, utilizing testing, computerized review and problem solving. Simulated board examinations are administered throughout the course. A grade of 75% on the final simulated board exam is required to pass the course.

**RAD-260 - Clinical Practicum V****Credits: 3**

Lab Hours: 24

Department Description: Radiography Education

Prerequisites: RAD 250, RAD 256 and RAD 285

Description: A completion of the competency requirements as specified by the Radiologic Technology Board of X-ray Examiners and the Joint Review Committee on Education in Radiologic Technology. Emphasizes the assessment of performance competency and the student's mastery of the clinical objectives. Seven terminal competencies are to be completed prior to completion of the course.

**RAD-285 - Advanced Radiographic Imaging****Credits: 2**

Lecture Hours: 2

Department Description: Radiography Education

Prerequisites: RAD 230, RAD 247, RAD 248 and RAD 275 Co-requisites: RAD 250 and RAD 256

Description: A presentation of advanced imaging concepts and specialized equipment. A comprehensive discussion of special procedure examinations, radiographic anatomy, cross-sectional anatomy and imaging techniques as applied to central nervous system radiography, digital subtraction angiography, interventional procedures, computer tomography, magnetic resonance imaging and advanced contrast media studies.

**RDG-011 - Reading Skills for College II****Credits: 3**

Lecture Hours: 3

Department Description: English

Prerequisites: Appropriate score on the College placement test or a grade of "C" or better in RDG 009

Description: Designed to help students improve their comprehension and speed, to develop a college-level vocabulary and to learn academic study skills. Mastery of the behavioral objectives will enable students to comprehend collegiate texts. "C" is the minimum acceptable grade for movement from one developmental level to another and for completion of developmental requirements to include all credit equivalent courses.

**RDG-080 - Reading Workshop****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: English

Prerequisites: Appropriate Score on the College Placement Test

Description: Provides intensive instruction to help students develop basic reading comprehension, vocabulary, communication and study skills. Designed to help students improve their comprehension and speed, to develop a college-level vocabulary and to learn academic study skills. Mastery of the behavioral objectives will enable students to comprehend collegiate texts.

Mastery Test. In order to pass this course, students must average a 70 or better in the course. It is possible for students to obviate RDG 011 if they pass the final mastery test with a score of 22 out of 30 correct and a C+ in the coursework.

Successful students may obviate RDG 011 altogether, or may move from RDG 009 to RDG 011.

### **RDG-090 - Reading 011 Bridge**

**Credits: 1**

Lecture Hours: 2

Department Description: English

Prerequisites: Reading score on ACCUPLACER of 83, 82, 81, 80 or 79

Description: This two-week course provides an opportunity for those students who do not pass the Accuplacer Reading Comprehension to refresh their skills before attempting to retake the test.

### **RST-101 - Fundamentals of Respiratory Care**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 7

Department Description: Respiratory Care

Prerequisites: Acceptance into Respiratory Care Program Co-requisites: RST 100 and RST 102

Description: An introduction to basic therapeutic modalities employed in contemporary respiratory care, including medical gas therapy, humidity and aerosol therapy, airway pharmacology, chest physical therapy and lung expansion therapy (Lecture Hours: 45; laboratory hours: 45).

### **RST-103 - Applied Cardiopulmonary Pathophysiology I**

**Credits: 2**

Lecture Hours: 2 Lab Hours: 2

Department Description: Respiratory Care

Description: A study of the anatomy and physiology of the cardiopulmonary system as it relates to respiratory care. Includes basic anatomy of the pulmonary and cardiac systems; physiology of circulation; ventilation; gas exchange and transport, acid-base balance and the control of respiration; and an overview of the pathophysiology and treatment of common disorders of the cardiopulmonary system (Lecture hours: 30).

### **RST-203 - Applied Cardiopulmonary Pathophysiology II**

**Credits: 2**

Lecture Hours: 2

Department Description: Respiratory Care

Prerequisites: RST 103

Description: A study of the pathophysiology of disorders of ventilation, perfusion and oxygenation which results in cardiopulmonary failure, with an emphasis on diagnosis and treatment in the clinical setting (Lecture hours: 30).

### **RST-208 - Principles of Ventilatory Support**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 7

Department Description: Respiratory Care

Prerequisites: RST-101 Co-requisites: RST-209

Description: An introduction to the physiologic principles and techniques of artificial ventilatory support, including airway management, indications for and application of mechanical ventilation, functional operation of mechanical ventilators and basic monitoring and management of the patient in respiratory failure (Lecture hours: 30; laboratory hours: 45).

### **RST-210 - Cardiopulmonary Evaluation**

**Credits: 2**

Lecture Hours: 2 Lab Hours: 2

Department Description: Respiratory Care

Prerequisites: RST 103

Description: Invasive and non-invasive diagnostic and monitoring procedures including roentgenography, electrocardiography, pulmonary function testing,

### **RST-100 - Core Concepts in Respiratory Care**

**Credits: 1**

Lab Hours: 3

Department Description: Respiratory Care

Prerequisites: Acceptance into Respiratory Care Program and BIO 111 Co-requisites: RST 100 and RST 102

Description: Provides foundation theory and laboratory practice in methods of infection control, bedside patient assessment and cardiopulmonary resuscitation. Also covered are key aspects of health care delivery, including manual and computerized medical recordkeeping and protocol-based respiratory care.

### **RST-102 - Clinical Practice I**

**Credits: 1**

Lab Hours: 7

Department Description: Respiratory Care

Prerequisites: Acceptance into Respiratory Care Program Co-requisites: RST 100 and RST 101

Description: An orientation to the hospital environment and to the basic respiratory care procedures covered in Fundamentals of Respiratory Care. Clinical instruction and supervised practice are provided in the areas of medical charting, infection control, basic patient assessment and basic therapeutics (Clinical hours: 90).

### **RST-201 - Patient Management - Critical Care**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 6

Department Description: Respiratory Care

Prerequisites: RST 208 and RST 211 Co-requisites: RST 202

Description: An in-depth study of the clinical management of the cardiopulmonary patient in the critical care setting, emphasizing specialized respiratory assessment, advanced ventilatory management, basic interpretation of the chest film, hemodynamic monitoring, ECG interpretation and the effects of cardio-pulmonary disorders on other major body systems (Lecture hours: 30; laboratory hours: 45).

### **RST-207 - Cardiopulmonary Pharmacology**

**Credits: 1**

Lecture Hours: 1 Lab Hours: 1

Department Description: Respiratory Care

Prerequisites: RST 103

Description: An overview of systemic drugs affecting the cardiopulmonary system, including steroids, antibiotics, skeletal muscle relaxants, central nervous system, depressants, respiratory stimulants, diuretics and cardiovascular agents (Lecture hours: 15).

### **RST-209 - Clinical Practice II**

**Credits: 2**

Lab Hours: 12

Department Description: Respiratory Care

Prerequisites: RST 101 and RST 102 Co-requisites: RST 208

Description: Further practice and mastery of basic respiratory care procedures introduced in Clinical Practice I. Also introduced are airway management skills and principles of intensive respiratory care, including patient assessment and basic ventilator monitoring (Clinical hours: 180).

### **RST-211 - Pediatric/Neonatal Respiratory Care**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 3

Department Description: Respiratory Care

Prerequisites: RST 208 and RST 209 Co-requisites: RST 215

Description: This course provides an in-depth analysis of pediatric and neonatal disorders. In addition, the course covers an array of diagnostic therapeutic modalities specific to younger respiratory patients, including

hemodynamic monitoring, arterial blood gas analysis, patient interviewing and physical assessment.

### **RST-212 - Long-Term, Home and Rehabilitative Care**

**Credits: 3**

Lecture Hours: 3

Department Description: Respiratory Care

Prerequisites: RST 203, RST 207 and RST 210

Description: This course covers an analysis of the goals and methods of respiratory care in non-acute settings. Included are standards and regulations governing non-acute respiratory care, team planning, patient selection, program design and provision and documentation of various clinical services in the home and in long-term care and rehabilitation facilities. Quality, cost, reimbursement and ethical issues are also covered.

### **SBM-110 - Accounting for Small Business**

**Credits: 4**

Lecture Hours: 4

Department Description: Accounting, Business and Legal Studies

Description: Focuses on accounting as applied in the small business setting. Emphasizes small business record keeping from basic journalizing to year-end closing and financial statement preparation. Use of computerized general ledger and other software will be employed to accomplish the above mentioned tasks. Also covers managerial issues and demonstrates use of basic analytical tools for problem solving at the small business level.

### **SBM-130 - Marketing and Sales for Small Business**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: For the small business owners/entrepreneurs looking to improve their marketing skills in today's domestic, global and international business environments. Through a case study format with additional emphasis on other relevant functional areas of business, the student will come to fully understand all activities and processes involved in the flow of goods, services, ideas and events from producer and/or manufacturer to consumers. Through this type of analysis, the small business owner/entrepreneur will be able to incorporate a systems approach, to fully understand the marketing and sales conditions being affected and to analyze the problems as well as the strategies used in solving these problems.

### **SBM-220 - Leadership and Supervision**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Learn about leadership and supervision in modern organizations. Introduces a variety of behavioral and managerial leadership theories and research findings. Case studies, experimental exercises and the media are used to stimulate classroom discussion.

### **SBM-240 - Cooperative Education/Internship in Small Business**

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Accounting, Business and Legal Studies

Prerequisites: Student must have completed half the courses in the Small Business Management curriculum or written permission of the department chairperson and Counseling and Career Services Office

Description: Integration of classroom study with specific planned periods of learning through work experience. Co-op or internship based. The course utilizes a seminar approach with performance-based human relations activities and individual student objectives that are job related and employer evaluated.

### **SCI-116 - Introduction to Renewable Energy [GE MST](#)**

**Credits: 3**

newer diagnostic methods, such as genetic mapping and enhanced imaging techniques. Furthermore, recently introduced treatment techniques, such as extracorporeal membrane oxygenation (ECMO), liquid ventilation and newer medications, are also addressed.

### **RST-215 - Clinical Practice III**

**Credits: 3**

Lab Hours: 12

Department Description: Respiratory Care

Prerequisites: RST 208 and RST 209 Co-requisites: RST 107

Description: Supervised experience in critical care, with an emphasis on developing the skills necessary to function independently in a critical care setting. Observational experience in pulmonary function testing and pediatric neonatal respiratory care is also provided (Clinical hours: 180).

### **SBM-120 - Small Business Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Introduces the student to the principles of small business management and the functions of planning, organizing, directing, controlling, financing and staffing a small business enterprise.

### **SBM-210 - Advertising and Promotion for Small Business**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Techniques of advertising and sales promotion to increase sales. Topics include: policies and procedures used in planning and preparing advertisements evaluation and selection of media, planning and coordinating advertising, sales promotion and facility layout for small business.

### **SBM-230 - Risk and Financial Management**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Description: Introduces the fundamental principles of risk and financial management. Content focuses on insurance, consumer and trade credit, budgeting, banking, investing, loans and other financial considerations facing owners of small business.

### **SBM-250 - Seminar in Entrepreneurial Studies**

**Credits: 3**

Lecture Hours: 3

Department Description: Accounting, Business and Legal Studies

Prerequisites: BUS 101, SBM 110, SBM 120, SBM 130 and SBM 210 or written permission of the department chairperson Co-requisites: SBM 230

Description: Enhances the working knowledge required to manage a small business, considering both domestic and global implications. Learn the differences between business ownership and entrepreneurship. Emphasizes the real world financing of entrepreneurship, mergers and acquisitions as they apply to current business practices. Students will go beyond the rudiments of "discovering a good business concept" to analyzing and developing a comprehensive plan to test the profitability potential of the venture. Using the business plan approach, students will conduct the research and investigation required to determine the viability of starting, buying or selling an existing business. Case studies will include in-depth financial analyses of successful businesses.

### **SCI-155 - Introduction to Geology [GE MST](#)**

**Credits: 4**

Lecture Hours: 2 Lab Hours: 2

Department Description: Engineering Technologies

Prerequisites: MAT 107 or higher Co-requisites: ENG 121

Description: This is a survey course that includes topics of energy conversion, and the regulatory and economic aspects of alternative energy sources. The course covers the scientific aspects of the carbon cycle, fuel combustion, nuclear fission, heat transfer and thermodynamics. The course has a laboratory component that uses the scientific method to explore aspects of energy conversion (mechanical to electrical conversion, radiant collection, photo voltaic conversion, wind and mass flow to mechanical conversion, etc.).

### **SCI-157 - Introduction to Meteorology [GE MST](#)**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory science, MAT 013 or appropriate score on the College placement test

Description: An introduction to meteorology, providing an overview of the atmosphere, temperature, measurements and energy balance, as it pertains to air masses, clouds, precipitation, wind, storms and fronts. A series of physical principles will be used to illustrate the dynamics of the atmosphere, including force, density, methods of heat transfer and radiation. Weather predictions and forecasting instrumentation are integral parts of the course, including Internet sources and weather satellite transmissions.

### **SCI-160 - Essentials of Oceanography [GE MST](#)**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year high school laboratory science, MAT 013 or appropriate score on the College placement test

Description: The focus of this course is on the physical aspects of the world's oceans; the architecture of ocean basins, plate tectonics and tsunamis, the distribution of marine sediments, oceanic circulation and productivity, and the effects of deep ocean circulation on world climate. Geology, chemistry, physics and biology are addressed as interactive and interdependent systems. The history of marine exploration, marine fauna and flora, shore processes, and environmental concerns will also be covered.

### **SCI-204 - Concepts of Physical Science [GE MST](#)**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: A general introduction to physical science through an investigation of natural laws. Topics to be covered include Newton's laws of motion, the law of universal gravitation, gas laws, methods of heat transfer, and electricity and magnetism. Chemistry concepts and natural laws pertaining to astronomy, geology and meteorology will also be covered.

### **SCI-207 - Principles of Fire Protection Chemistry and Physics**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school chemistry or CHM 010

Description: This course represents an elementary review of selected fundamentals of chemistry and physics that are most relevant to fire. The course will cover the fire characteristics of materials, the properties of combustion products, fire extinguishing agents and procedures and movement of smoke.

### **SCI-215 - Current Good Manufacturing Practice and Quality Control for Biotechnology**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test

Description: A one-semester course dealing predominately with geology and with the physical aspects of the ocean. Topics include a discussion and identification of rocks and minerals, volcanism, the geologic time scale, earthquakes and their origin. Introduces important topics in physical oceanography and the geology of New Jersey and environs. Students are required to go on an all day field trip. Provides appropriate laboratory exercises.

### **SCI-158 - Planetary Astronomy [GE MST](#)**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory science, MAT 014 or appropriate score on the College placement test

Description: To provide an overview or introduction to descriptive space science covering the historical development of astronomy and planetology. Basic physical laws are introduced to help explain the tools used in the investigation of solar systems. Appropriate laboratory experience is provided.

### **SCI-162 - Historical Geology: Diamonds, Drilling and Dinosaurs [GE MST](#)**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: "Historical Geology: Diamonds, Drilling and Dinosaurs" provides comprehensive coverage of the geosciences, which spans from the formation of our universe to understanding the physical processes that affect the coastlines around the world. The principles of geology and earth sciences are used to demonstrate to the student that the geosciences are involved in every aspect of their daily lives and to make the students aware of the role geosciences play in society both economically and physically.

### **SCI-206 - Introduction to Forensic Science [GE MST](#)**

**Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013, MAT 013B or appropriate score on the College placement test

Description: This course is an introductory course in which scientific principles will be applied to the methods used to investigate and solve crimes. The course will focus on the principles and methods utilized in the traditional sciences of biology, chemistry and physics. The scientific techniques used to collect and analyze evidence will be covered.

### **SCI-210 - Environmental Geology**

**Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Description: This course introduces students to environmental geology. The focus is on the relationship between human society and the earth's five systems: water, ice, air, the solid earth and life. The course provides an understanding of the geologic mechanism and prediction of such natural hazards as earthquakes, volcanism, coastal and riverine floods, landslides, desertification, glaciation and global warming. The course discusses complex problems that arise from the human impact on the geological processes and how that can lead to tragic consequences. The stress of overpopulation, energy resource limitations, groundwater contamination, alternative energy sources, as well as the basic concepts of environmental geology management will be covered. The laboratory component includes an introduction to geologic methods of identification, groundwater contamination, exercises on water table problems (construction of water table profiles), exercises on geological and tectonic maps to study the most active (tectonically and volcanically) world regions and the study of rocks and minerals as mineral resources.

### **SCI-216 - Current Issues and Opportunities in Lab Technology**

**Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Description: Students will learn FDA regulations specific to the biotechnology industry. Topics will include the historical perspectives of the regulations, quality control concepts, case studies and example of FDA enforcement.

**SCI-217 - Environmental Health Hazards****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: A survey of current environmental health problems with emphasis on communicable diseases, waste disposal, water and air pollution control, food sanitation, pest control, hazardous waste disposal and other topics. Applicable federal and New Jersey regulations are studied.

**SCI-219 - Global Environmental Issues****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test and one year of high school laboratory science

Description: Focuses on solid and hazardous wastes, toxicology, food, soils, energy and radiation. Includes laboratory and field trips. SCI 218 and SCI 219 are not sequential and may be taken in either order.

**SCI-221 - Hazardous Waste Management****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Description: Covers, in detail, the Resource and Recovery Act regulations as they pertain to the generation, transportation, storage and disposal of hazardous wastes.

**SCI-224 - Atmospheric Pollution Control****Credits: 3**

Lecture Hours: 3

Department Description: Natural Sciences

Prerequisites: BIO 118, CHM 118 and MAT 014 or equivalent

Description: A survey of community air pollution stressing problems and the technology used for their detection and control. Students will learn about air monitoring equipment and air sampling procedures used in the field. Effects of air pollutants on the community will be considered on the basis of air quality standards. Techniques used to control air pollution emissions from both mobile and stationary sources will be discussed.

**SCI-256 - Stellar and Galactic Astronomy [GE MST](#)****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: One year of high school laboratory science, MAT 014 or appropriate score on the College placement test

Description: To provide an overview or introduction to descriptive space science covering stars, stellar evolutions and galaxies. Basic physical laws are introduced to help explain the tools used in the investigation the galaxies. The possibility of extraterrestrial intelligence is included as a necessary part of the subject. Appropriate laboratory experience is provided.

**Credits: 1**

Lab Hours: 2

Department Description: Natural Sciences

Description: Students will explore recent advances in technology which affect job opportunities. An overview of the lab technology field is given through site visits and guest speakers. Students will gain insights on how to write a resume and search and interview for a job.

**SCI-218 - Critical Issues in Air and Water Pollution****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test and one year of high school laboratory science

Description: Basic topics include the values, attitudes and concepts necessary to understand and appreciate the interrelationships among people, their culture and their biophysical environment. Emphasis is on the air and water environment. Includes laboratory and field trips. SCI 218 and SCI 219 are not sequential and may be taken in either order.

**SCI-220 - Forensic Science [GE MST](#)****Credits: 4**

Lecture Hours: 3 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: MAT 013 or appropriate score on the College placement test and one year of high school laboratory science. Students should not register for both SCI 206 and SCI 220.

Description: An overview of the fundamental principles of the physical and biological sciences as they relate to the field of forensic science. This course focuses on the role of the forensic scientist in criminal investigations. Scientific principles of crime scene investigation, including the chemistry of blood, physics of blood splatter, DNA and firearms identification will be covered. Laboratory analysis will include microscopy, atomic absorption and chromatography.

**SCI-222 - Principles of Occupational Safety and Health****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Prerequisites: CHM 118 or equivalent

Description: An introduction to industrial hygiene. This course examines the sampling and analytical techniques required to evaluate the safety and health hazards associated with the chemical, physical, biological and other stresses in the industrial environment. This course gives the student an understanding of the Fundamentals of Occupational Safety and Health and prepares the student for further training in Industrial Hygiene.

**SCI-226 - Environmental Issues in Our Diverse Society [GE DIV](#)****Credits: 3**

Lecture Hours: 2 Lab Hours: 2

Department Description: Natural Sciences

Description: This course looks at the environmental issues that affect people living today. Students will learn about people from a variety of cultures and different geographical regions of the world, studying their histories, how they live, how technology affects them and how they manage their environmental issues. Each issue will be reviewed by studying its origin, the effect it has on today's society and its impact on the generations to come.

**SCI-258 - Climatology****Credits: 3**

Lecture Hours: 4

Department Description: Natural Sciences

Prerequisites: MAT 014 or appropriate score on the College placement test

Description: This course provides an introduction to the study of climate. Processes that have an effect on the earth's climate are considered along with solar radiation. The interactions between the atmosphere and hydrosphere as determinants of climate are considered. Climate and feedback processes are included.

**SOC-121 - Introduction to Sociology** [GE DIV](#), [GE SS](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course examines human relationships in society, analyzes concepts of culture, socialization, values, norms, deviance, stratification and causes and effects of inequalities.

**SOC-123 - Introduction to Anthropology** [GE DIV](#), [GE SS](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course combines physical and cultural anthropology by exploring the relationship between physical evolution and the corresponding development of human cultural life. A study of cultures and customs around the world. These customs includes language, magic, religion, marriage, sex roles, political structure and subsistence pattern such as hunting and gathering.

**SOC-140 - Introduction to Criminology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: The nature and sources of criminal law, incidences and trends of criminology, relationship of culture and social systems to criminology, biological, psychological and sociological theories of criminology.

**SOC-205 - Diversity and Multiculturalism in U.S. Society** [GE DIV](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Introduces students to both the historical and the contemporary experiences, diverse cultural values, lifestyles and contributions of a cross-section of racial and ethnic groups and other minority groups such as women and the elderly.

**SOC-217 - Human Behavior in the Social Environment I****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: SOC 121

Description: This course presents an interdisciplinary approach to the understanding of human bio-psycho-social development from birth through death, emphasizing the effects that ethnicity, gender, race, culture, poverty, sexual preference and life style have on the individual's life cycle and social systems. It explores implications for social justice, empowerment, and social work practice resulting from this interaction. Implications for social work practice, and especially from relationship building and enhancing client strengths, are drawn from the process.

**SOC-222 - Political Sociology****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Analyzes the social conditions that affect government, politics and law. Some topics discussed: democracy in theory and in practice, political socialization and the nature of mass movements.

**SOC-224 - Marriage and the Family****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Analyzes the nature and role of the family by focusing on the

**SOC-122 - Social Institutions** [GE SS](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: SOC 121

Description: This course provides an intensive examination of the basic social institutions in America, such as religion, economy, family, law, health, government, military science and education, as well as collective behaviors, social movements and social change.

**SOC-131 - Contemporary Social Problems** [GE SS](#)**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course examines some major current social problems of American society: family problems, physical and mental emotional illness and disability, crime and delinquency, drug abuse, poverty, racial, sexual and age discrimination. Analyzes causes, effects, policies and remedies.

**SOC-141 - Introduction to Social Work and Social Welfare Policy****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Introduces the evolution of the policies and practices of social welfare and social work. Historical developments, current provisions, social, attitudinal, economic and political trends in the United States affecting institutionalized responses to perceived health and welfare needs are analyzed.

**SOC-210 - Methods of Casework and Counseling****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: An introductory study of social work methods: interviewing, diagnostic assessment, casework, counseling, problem solving, service coordination, placement and others used in social service agencies, institutions, programs and organizations.

**SOC-218 - Human Behavior in the Social Environment II****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: SOC 121 and SOC 217

Description: This course explores the theories and knowledge of bio-psycho-social human behavior within the reciprocal relationship of groups, organizations, communities and society. It provides the theoretical foundation for agency-based professional social work intervention with communities and organizations, including protective services, substance abuse, gerontological services and early childhood services. Systems theory serves as the organizing framework. This second course in the HBSE sequence continues to build students' understanding of how human behavior interacts with the social environment.

**SOC-223 - Power, Privilege and Class****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: This course describes and explains the social, cultural and historical processes that give rise to the differential distributions of power, privilege and wealth in the United States and to the emerging framework of the global community. The social, political lifestyle consequences of those distributions are explored.

**SOC-225 - Juvenile Delinquency****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Examines the nature and extent of juvenile crime, juvenile

institution of marriage and such related matters as separation, divorce and the rearing of children.

### **SOC-231 - Indians of the Americas** [GE DIV](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: A comparative analysis of native Indian cultures of the Americas. Native American traditions are explored from an archeological and anthropological perspective. Topics discussed are origin of the Indians, culture areas and subsistence patterns, health, medicine and religion, social systems, architecture, art and music; initial contact with Europeans, Africans and Asians and Native American relations with the larger society.

### **SOC-240 - Perspectives on Sexual Identity** [GE DIV](#)

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123 or SOC 121 or SOC 123 or permission of department chair

Description: Examines the processes involved in the formation of sexual identity from an anthropological perspective, including contemporary, historical and cross-cultural viewpoints. Discusses the evolution of sex roles in species. Covers the influence of culture in sex role behaviors and gender identification in a variety of cultures around the world.

### **SPA-122 - Elementary Spanish II** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 121 or equivalent

Description: A continuation of SPA 121.

### **SPA-210 - Spanish for Hispanics** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: Designed to improve language skills in speakers of Spanish as the home language. Emphasis is placed on grammar needed to reach command of reading and writing skills. The course highlights some differences between English and Spanish language usage. Class work is entirely in Spanish.

### **SPA-222 - Intermediate Spanish II** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 221 or equivalent

Description: A continuation of SPA 221. General review of grammar and basic fundamentals. Conversation is stressed and works from typical Spanish authors are read along with excerpts dealing with Hispanic civilization.

### **SPA-224 - Contemporary Hispanic Literature** [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 210 or SPA 222 or appropriate placement test score or written permission of the department chairperson

Description: Class work includes reading, analysis and discussion of major Spanish and Latin American writers from the Generation of '98 and the Modernist Period to the present. Readings and discussions mainly in Spanish.

### **SPA-228 - Spanish Civilization and Culture (Iberian)** [GE DIV](#), [GE HUM](#)

delinquency as a social and cultural problem, social and cultural factors in the explanation of delinquent behavior, types of offenders, theories of delinquency and treatment and prevention of delinquency.

### **SOC-234 - Sociology of Work and Organizations**

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Provides students with the opportunity to examine the relationships between individuals and the economic sector of society, with emphasis upon the world of work. Special focus will be given to the sociology of industry, especially the topics of power, theories of human motivation and management, multinational corporations, social stratification, employment, organizations and bureaucracies and the possibilities of alternative workplace situations.

### **SPA-121 - Elementary Spanish I** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: Use of integrated materials enables students to acquire and employ the fundamentals of reading, writing and speaking the language. Laboratory work is required. For students with little or no background in Spanish.

### **SPA-124 - Conversational Spanish**

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Description: Fundamentals of speaking are introduced to provide students with basic conversational skills of the language. Laboratory work is required. This course does not satisfy the foreign language requirement for the Associate in Arts Degree.

### **SPA-221 - Intermediate Spanish I** [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 122 or equivalent (two years of high school Spanish)

Description: General review of grammar and basic fundamentals. Conversation is stressed and works from typical Spanish authors are read along with excerpts dealing with Hispanic civilization.

### **SPA-223 - Main Currents in Hispanic Literature** [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 210 or SPA 222 or written permission of the department chairperson

Description: Introduction to the fundamental concepts of the study of literature in Spanish; an intensive study of representative authors and masterpieces of Hispanic literature from the 11th century to the onset of the Modernist period. Readings and discussions in Spanish.

### **SPA-226 - Hispanic Civilization (Ibero-American)** [GE DIV](#), [GE HUM](#)

**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 210 or SPA 221 or SPA 222 or SPA 226 or SPA 228 or written permission of the department chairperson

Description: Reading, analysis and discussion of Hispanic-American civilization and culture from pre-Columbian times to the present. Spanish readings are discussed mainly in Spanish.

### **SPA-231 - Spanish Conversation and Composition I** [GE HUM](#)



**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 210 or SPA 221 or SPA 222 or SPA 224 or SPA 226 or written permission of the department chairperson

Description: Political, economic, social and cultural development of Spain from prehistoric times to the present. Readings and discussions mainly in Spanish.

**SPA-232 - Spanish Conversation and Composition II** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 231

Description: A continuation of SPA 231.

**SPE-121 - Fundamentals of Public Speaking** [GE COM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Introduction to the theory and practice of public address; the study of representative public addresses and the preparation and delivery of short speeches.

**SPE-124 - Oral Interpretation****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: The theory and practice of effective oral reading. Materials include selections in poetry, prose and drama. The appreciation of literary forms through individual oral performance and choral readings. Development of effective voice and articulation.

**THE-105 - Introduction to Theatre** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: An investigation of the on-stage and backstage elements of contemporary theatre, film and television. Emphasis on the collaboration of performers, writers, directors, designers and technicians and the role of the audience. Attendance at professional and college productions is required.

**THE-124 - Contemporary Theatre** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A study of the development of twentieth century theatre art from Realism to New Theatre eclectic styles. The background and evolution of Realism, Expressionism, Theatre of the Absurd and current theatre movements are explored. Required of theatre majors, open to all students. Attendance at performances required.

**THE-132 - Acting II****Credits: 3****Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: SPA 222 or equivalent (three or more years of high school Spanish)

Description: An intensive study of advanced Spanish grammar specializing in analysis of grammatical and syntactical structures of modern Spanish. Selections from contemporary Spanish and Latin American authors are analyzed according to new linguistic methods. Emphasis is also given to special problems of English-speaking students. Course is conducted mainly in Spanish. An in-depth analysis of the cultural values exemplified in the readings.

**SPA-242 - Masterpieces of Hispanic Literature in Translation (20th Century)** [GE DIV](#)**Credits: 3**

Lecture Hours: 3

Department Description: ESL/Languages and Culture

Prerequisites: ENG 122

Description: Focuses on translated works of contemporary Hispanic Literature written in Spain, Latin America and the Caribbean. Introduces students to the reading and interpretation of outstanding Hispanic writers from the Generation of '98 in Spain and from Modernism in Spanish America to the present. Pursues various genres within prose, drama and poetry. Major literary trends will be studied: modernism, "criollismo", fantastic realism, magical realism, existentialism, neorealism, post-modernism and feminist literature, among others. (Taught in English). This course does not fulfill the foreign language requirement.

**SPE-123 - Discussion and Debate** [GE COM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: The development of clear, logical and effective speech communication is the goal of this basic discussion and debate course. The focus will be on reasoned decision making with the context of a free society. Topics will draw upon social values, personal responsibility and/or ethical behavior. Speech presentations will include large group discussions, panel discussions and debates that emphasize the ability to work in a team environment.

**SSD-101 - Student Success****Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Description: Students learn and adopt methods for success in college and lifelong learning. Orientation to college, study skills, critical thinking skills and learning styles are emphasized. An educational and career plan is developed.

**THE-123 - Theatre History** [GE HUM](#)**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A study of theatre as an art form with an emphasis on production practices in the Golden Ages of theatre: Greek, Roman, Medieval, Renaissance and Restoration. Representative plays, theatres, acting, staging and design styles are explored. Required of theatre majors, open to all students. Attendance at performances required.

**THE-131 - Acting I****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: Basic techniques of theatrical communication. Pantomime and improvisational exercises for perception and self-awareness. Use of the voice and body to interpret emotion and project characterization. Practical application through learning to approach the performing of scenes. Attendance at performances required.

**THE-145 - Stagecraft****Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Prerequisites: THE 131

Description: Further development of the basic techniques of theatrical communication. Learning to externalize through stage movement. Scene study to utilize clues in the script to fulfill the author's or director's intent. Study of the director-actor-audience relationship. Practical application through rehearsal and performance of one-act plays. Attendance at performances required.

### THE-146 - Play Production

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A theatre course in the elements of play production including design concepts, two dimensional working drawings and scale model building and lighting techniques. Practical application of theoretical knowledge in the theatre shop and college productions. Required of Theatre majors. Attendance at professional and college productions is required.

### THE-208 - Theatre Field Experience

**Credits: 3**

Lecture Hours: 1 Lab Hours: 12

Department Description: Visual, Performing and Media Arts

Prerequisites: THE 145 or written permission of the department chairperson and Counseling and Career Services Office

Description: A cooperative work experience program whereby students are employed in a performing arts position in order to gain some of the practical experience necessary for success in various aspects of theatre: artistic, technical and/or administrative. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to describe their objectives and attain specific job skills. Students attend a bi-weekly, two-hour seminar on campus and work a minimum of 13 hours a week. Individuals must be recommended by the faculty and the chairperson of the department. For additional details, see the department chairperson.

### DMA-222 - Web Animation and Interactive Media

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: DMA 218

Description: This course is an introduction to animation for websites and web applications. Animated graphics and type, interactive user interface design, and basic character development are covered. Traditional animation terminology and techniques are discussed as they apply to professional animation software, such as Flash, Maya and After Effects. Projects involve assembling clips with motion and sounds, and developing short interactive animation that responds to user input. Projects focus on developing short animation pieces for basic web publishing. Project-based learning is used in applying techniques and technologies to emphasize conceptual and creative development.

### DMA-280 - Portfolio

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: DMA 218, DMA 219 Co-requisites: DMA 222, DMA 223

Description: Students learn about industry-specific job search practices and developing a self-promotional package including resume, cover letter, and leave-behind materials, in addition to building an interactive portfolio website. Students evaluate their goals and set up strategies for meeting these goals. Career development includes topics on employment and employer research, job-targeted promotional materials, information on internships and transfer opportunities, interview strategies and an end of semester public portfolio review.

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: A theatre course in the basic physical elements of theatre stagecraft with particular emphasis on set construction. Practical application of theoretical knowledge in the theatre shop and college productions. Required of Theatre majors. Attendance at professional and college productions is required.

### THE-152 - American Musical Theatre

**Credits: 3**

Lecture Hours: 3

Department Description: Visual, Performing and Media Arts

Description: All aspects of America's most popular art form. Includes many trips to see musicals on stage and backstage as well as lectures and classroom discussions of the American musical theatre. A laboratory fee covers the cost of tickets.

### CPT-216 - Process Control

**Credits: 4**

Lecture Hours: 2 Lab Hours: 4

Department Description: Natural Sciences

Prerequisites: CPT 100, PHY 101, CHM 117

Description: A course in process control will introduce students to the real-world operation of a chemical plant and/or a refinery. Students will develop practical skills necessary to operate a variety of processes typically found in a chemical plant or a refinery. The course will completely rely on the use of a computer based process control simulator system. In addition, there are several virtual reality modules that enhance the basic simulator program.

### DMA-223 - Website Design and Layout

**Credits: 3**

Lecture Hours: 1 Lab Hours: 4

Department Description: Visual, Performing and Media Arts

Prerequisites: DMA 218, DMA 219

Description: This course is an introduction to web design with an emphasis on layout principles and visual content management. Best design practices in layout, typography, and color theory are applied to presenting information on the web. On the technical side, students address issues such as: multi-browser and multi-platform usability, troubleshooting and debugging and accessibility. Concepts expand to navigation, user interface design, and project planning. Tools used include Dreamweaver and basic HTML and CSS. Project-based learning is used in applying techniques and technologies to emphasize conceptual and creative development.

### IDC-101 - Technology and Education

**Credits: 3**

Lecture Hours: 3

Department Description: History and Social Science

Prerequisites: PSY 123 Co-requisites: PSY 226

Description: This course is designed for education majors. It focuses on how to use technological tools to support meaningful learning in an elementary classroom setting. Emphasis is placed on using technology in a developmentally appropriate way where there is an extensive focus on learning several technological tools such as computer office skills, Internet sites and website design, and other multimedia tools. Students will be required to develop technological products appropriate for the elementary school population.