other eligible persons.

of the American Occupational Therapy Association. JCC is also approved by the New York State Division of Veterans’ Affairs for the training of veterans and

ion for Education in Nursing. JCC’s occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education

be made available in alternative media upon request for those with disabilities.

courses/curricula offered or the teaching personnel listed in the catalog.

is possible that courses/curricula listed in the college catalog may not be approved at the time that a student enrolls in the college or the teaching personnel

that the State Education Department separately licenses all teaching personnel and independently approves all courses and curricula offered. Therefore, it

information provided in the catalog. The catalog contains information on the college’s teaching personnel and courses/curricula offered. Please be advised

the catalog may change. It is recommended that students considering enrollment check with the school director to determine if there is any change from the

course, program of study, degree, requirement, or policy. The information contained in this catalog is current as of the date of publication. It does not pre-

The college reserves the right, whenever it deems advisable, to change its schedule of tuition and fees; to withdraw, cancel, reschedule, or modify any
course, program of study, degree, requirement, or policy. The information contained in this catalog is current as of the date of publication. It does not pre-
clude the possibility of subsequent changes in course descriptions, faculty, tuition and fees, and college policies, or other changes which may result through
action by the State University of New York or the Board of Trustees of Jamestown Community College. Students should be aware that some information in
the catalog may have changed. It is again recommended that students check with the school director to determine if there are any changes in the
courses/curricula offered or the teaching personnel listed in the catalog.

The Master Schedule, published three times a year for the spring, summer, and fall semesters, is an addendum to the college catalog. These materials can
be made available in alternative media upon request for those with disabilities.

Jamestown Community College does not discriminate on the basis of color, sex, sexual orientation, race, creed, religion, national origin or citizenship,
age, marital status, military status, disability, family status, domestic violence victim status, arrest or conviction record, or predisposing genetic characteris-
tics. This policy applies to access to all activities and programs under the college sponsorship as well as to application and selection for admission, employ-
ment, and all other personnel procedures within the college.

Jamestown Community College is accredited by the Middle States Commission on Higher Education. Its curricula are approved by the State University of
New York and are registered by the New York State Department of Education. In addition, the nursing program is accredited by the Accreditation Commis-
sion for Education in Nursing. JCC’s occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education
of the American Occupational Therapy Association. JCC is also approved by the New York State Division of Veterans’ Affairs for the training of veterans and
other eligible persons.
Community colleges are unique institutions. As multifaceted as the ages and interests of their students, they react swiftly to change. As the first locally sponsored community college accepted into the State University of New York, Jamestown Community College has been in the forefront of this exciting development in education since 1950.

By providing high quality transfer programs for the university-bound, occupational skills for the career-minded, flexible schedules for working students, and specialized programs for business, industry and professional groups, and by being the cultural center of the community, JCC attempts to reach every segment of the population in the area it serves.

JCC offers the first two years of a bachelor's program, awarding the Associate in Arts degree or the Associate in Science degree, which are transferable to four-year institutions. For those pursuing a two-year career degree, it also awards the Associate in Applied Science degree as well as one-year certificates. In addition, JCC offers a variety of non-credit continuing education courses for those wishing to expand their vocational proficiency, to enrich their personal lives, or to acquire additional knowledge simply for the fun of it.

**JCC’S VISION, MISSION, AND BELIEFS**

**Vision**

JCC, an integral part of our communities’ social and economic frameworks, will be the region's premier provider of transfer, career, developmental, and continuing education, and will be recognized for academic excellence, a collaborative spirit, innovative leadership, and an entrepreneurial mindset.

**Mission**

JCC is a comprehensive, regional, open access, student-centered institution that embraces academic excellence and meets the service area's learning needs in diverse ways, including liberal arts transfer degree programs, career programs, community service, developmental education, and business and industry training. The college's partnership with the greater community contributes to the social and intellectual improvement, economic development, and cultural enrichment of western New York state and northwestern Pennsylvania.

**Statement of Beliefs**

**Commitment to Quality**

The college is committed to student learning and to the promotion of the college, its mission, and the welfare of our communities.

**Commitment to Students**

We believe students and other consumers of college services are the first priority in all we do.

**Commitment to Lifelong Learning**

We believe the entire college community is responsible for enriching lives by creating an atmosphere dedicated to lifelong learning and intellectual inquiry and for promoting communication, collaboration, and greater understanding of our pluralistic society and the world in which we live.

**Commitment to Community Partnership**

We believe we share responsibility for the well-being of our college and must play a role, in partnership with other community agencies, in fostering the economic, social, and cultural well-being of our community.
JAMESTOWN CAMPUS

Alumni House, on Curtis Street, is the location for the JCC Foundation and alumni relations offices.

The Arts and Sciences Center houses several programs within the sciences, technology, engineering, and mathematics and arts, humanities, and health sciences divisions; the nursing, occupational therapy assistant, and professional piloting programs; classrooms; lounges; physics and computer labs; music studios; management information systems department; the Robert Lee Scharmann Theatre; Weeks Gallery; and the Sarita Hopkins Weeks Reception Hall.

The Katharine Jackson Carnahan Center houses the JCC Center for Continuing Education's computer labs, conference rooms, training facilities, and the criminal justice and public safety programs.

The John D. Hamilton Collegiate Center houses the student union, campus store, cafeteria, health center, counseling services, employment/job search services, art studios, box office, student government offices, and maintenance department. All administrative offices, including the registrar, admissions, financial aid, and business offices, are located in this building.

Hillside Suites feature suites with four or five single bedrooms as well as a limited number of suites that contain three single bedrooms and one double bedroom.

Hultquist Library is a fully automated library featuring an outstanding collection of over 60,000 volumes, 215 periodical subscriptions, more than 85 cross-disciplinary databases, and an extensive audiovisual collection. Besides the library's resources, this building houses classrooms, the business and social sciences division, Main Street tutorial center, computer labs, conference rooms, distance learning facilities, Lenna Teleconference Theatre, and student lounges.

The Manufacturing Technology Institute is a partnership of JCC and the Manufacturers Association of the Southern Tier. MTI provides services to businesses and individuals in the region through hands-on manufacturing technical training as well as technology assistance. Mechanical technology, machine tool technology, and welding technology courses, as well as non-credit industry specific customized training programs, are taught in the facility.

The Physical Education Complex consists of a gymnasium, swimming and diving pools, racquetball court, running track, weight room, Life Fitness Center, and locker facilities. The gymnasium floor is also used for special spectator events, seating up to 2,000 people.

JCC and the Roger Tory Peterson Institute of Natural History, which is located on Curtis Street, collaborate on providing educational and cultural opportunities.

The Science Center, which opened in 2011, houses JCC’s biology, biotechnology, chemistry, and geology programs. The facility features energy efficient and sustainable elements designed to highlight resource conservation, habitat restoration, and social responsibility.

The Sheldon House, located at 9 Falconer Street, was the gift of Julia Sheldon Livengood. It is used for conferences and meetings.

Additional area facilities that are used for college programs include Russell E. Diethrick Jr. Park and College Park and Biological Station, commonly referred to as the 100-Acre Lot. Several municipal and private facilities in the city and county, which include public schools, hospitals, nursing homes, and social service agencies, provide off-campus learning experiences for JCC students.
CATTARAUGUS COUNTY CAMPUS

JCC’s Cattaraugus County Campus is situated in downtown Olean in the foothills of the Allegheny Mountains.

The Allied Health and Science Center includes a state-of-the-art nursing laboratory; classrooms; biology, chemistry and physics laboratories; faculty offices; and distance learning and smart classrooms.

College Center features a student union, campus store, student lounge, community room, cafeteria, art gallery, information desk, board room/teleconference room, and seminar room. Student services offices - campus life, admissions, financial aid, registration, business, counseling and career planning center, health center - are also located in the building, as well as administrative offices.

Cutco Theater, funded through a generous gift from Cutco Corporation, is a multipurpose facility and includes a 190-seat theater which can accommodate theater and music performances as well as lectures and training programs for large groups. The adjacent Magnano Reception Room, with complete kitchen facilities, makes this area ideal for college and community events.

The Library and Liberal Arts Center houses the campus library, faculty offices, the Teaching/Learning Center, classrooms, and offices for Empire State College and Houghton College's PACE program.

The Technology Center houses the Learning Assistance and Computer Center, JCC’s tutoring facility that offers free tutoring, individualized learning skills assessment and assistance, computer lab with Internet access, word processing and tutorial software, study areas, reserved materials, textbooks available for student use, and services and adaptive equipment for students with disabilities. In addition, the building includes state-of-the-art computer labs, classrooms, and faculty and assistant dean offices.

The Dresser-Rand Continuing Education Conference and Training Center houses classrooms, conference/seminar rooms, theatre, and a computer lab.

The Cattaraugus County Campus Manufacturing Technology Institute, which is scheduled to open by fall 2016, will feature classrooms, light duty and computer-aided design labs, and Center for Continuing Education facilities. Approximately 1000 students attend daytime and evening classes at the campus. The campus has over 20 full-time faculty. Adjunct faculty, many of them experts in a variety of professional fields, complement the full-time faculty in their areas of expertise. The student/faculty ratio allows for small classes and personalized attention. The distinctive rapport which develops between the students and the faculty begins on opening day and continues to flourish through commencement and beyond.

Because a student's life outside the classroom is an important part of his/her total education, the campus provides the opportunity to participate in a variety of clubs, organizations, and intramural activities.

The Campus Activity Board organizes activities throughout the year to help students become involved in campus life. Lectures, musical events, and theatre presentations are planned each semester. In the past, students have traveled to Toronto, New York City, and Buffalo to explore various cultural opportunities.

Various services are available to full- and part-time students. The library has over 17,000 volumes, subscriptions to more than 100 print periodicals, and a range of audiovisual materials. The Learning Assistance and Computer Center offers personalized help with most academic subjects, reading, writing, and study skills. The Counseling and Career Planning Center staff provides counseling services for students focusing on academic, personal, and career decision making and planning.

Courses offered on the Cattaraugus County Campus are the same as those offered on the Jamestown Campus. The college's policies on the admissions, grading, academic standing, degree requirements, and other related matters are also the same. With the exception of a few local scholarships unique to each campus, all financial aid opportunities available to Jamestown Campus students are also available to Cattaraugus County Campus students.
EXTENSION CENTERS

JCC operates approved extension centers in Dunkirk (Chautauqua County) and Warren (Warren County, PA). Courses of instruction leading to the awarding of degrees registered by JCC are offered at these locations. Listings of credit and non-credit courses and programs for each location can be accessed at www.sunyjcc.edu. Counseling services are available on a regular basis at each location and special arrangements are made for library services to support the curriculum offered.

North County Center
The North County Center offers a full range of services which includes assistance in admissions, financial aid, and registration, and provides student services such as counseling and career development, disability support, tutoring, placement testing, computer labs, and cultural and recreation activities.

In addition to credit course offerings, the North County Center also offers non-credit courses in personal enrichment, professional development, skill upgrades, and business and industry customized training. These courses are held in the North County Training and Conference Center facility which also hosts many community programs and also houses the Small Business Development Center, which provides a range of managerial and technical assistance to area business owners.

Warren Center
The Warren Center, established in 1987, operates under the auspices of the Warren-Forest Higher Education Council. Students enrolled in credit courses at the site are eligible for federal, state, and local financial aid opportunities, including a Pennsylvania Higher Education Assistance Agency grant.

In addition to credit courses, the Warren Center also offers non-credit courses in personal enrichment, professional development, skill upgrades, and business and customized training.
ADMISSIONS

The minimum requirements for admission to JCC are graduation from an accredited secondary school, possession of a high school equivalency diploma, or home-school documentation. The Scholastic Aptitude Test (SAT) or the ACT Assessment Test are not required for admission.

JCC has endorsed the concept of Full Opportunity of the State University of New York and accepts the philosophical implications of that decision. This means the college has agreed to accept all applicants who are legal residents of the sponsoring area, who are 18 years of age or older, and are high school graduates.

The college reserves the right to make exceptions to its admissions policies and to impose other criteria on students seeking admission who do not meet the requirements above. This policy does not, however, guarantee admission of students to specific programs within JCC’s curriculum. It does imply a commitment to meet the special needs of the students who may require developmental courses, tutorial services, and additional counseling services. It also challenges the college to expand its career programs, institute new approaches to the teaching-learning process, and provide students with the flexibility of changing courses and programs without penalty.

Applying to JCC
Matriculated (Degree Seeking) Students
Matriculation is the formal process by which students declare their intent to enroll in a college certificate or degree program. The process is complete once the student submits an application, with supporting documentation (official transcripts, GED/TASC, placement test scores, etc.), and has been accepted to JCC in a certificate or degree program. Federal and state financial aid is not available to non-matriculated students.

Application Process
Application for admission may be initiated at any time prior to the start of each semester, but admission cannot be guaranteed for applicants who begin the process after August 1 (for the fall semester). High school seniors, especially those concerned about admission to specific programs, should apply shortly after the beginning of their senior year. In some programs, such as nursing and occupational therapy assistant, students should consider early application deadlines, and limited enrollment. Visit www.sunyjcc.edu for supplemental applications and deadlines for the nursing and occupational therapy assistant programs.

New, First-Time Students
Students who have not attended another college and who are entering JCC for the first time should follow these steps:
- Apply online at www.sunyjcc.edu.
- Request high school guidance office to forward an official copy of the student's transcript to the admissions office.
- Home-schooled students must complete the necessary documentation indicating completion of secondary level education as defined by state (see below for additional information).
- Students possessing a recognized equivalent of a high school diploma, such as a GED/TASC certificate, must submit appropriate documentation.
- Students should visit JCC to acquaint themselves further with JCC’s programs and facilities. Personal interviews are optional, unless requested by the admissions office.
- Following notification of acceptance, students are informed of advisement and registration procedures that entering freshmen must complete prior to the start of classes.

Readmitted Students
A student who attended JCC previously and is returning after an absence must reapply. The reapplication can be accessed at www.sunyjcc.edu. Students who have attended another college since their last enrollment at JCC must request an official transcript be sent to the JCC admissions office.

Second Degree Candidates
A student pursuing a second degree at JCC must reapply for admission. Students must also meet with an advisor in the counseling center on either campus to update their program of study. Each additional associate’s degree will require 30 additional hours, 15 of which must be earned from JCC.

Students Transferring to JCC
A candidate for admission who has completed previous coursework is required to follow the transfer application procedure:
- Complete the online application at www.sunyjcc.edu and submit high school transcript, a copy of GED/TASC, or other documentation indicating successful completion of high school.
- Students seeking transfer credit from other institutions must request official college transcripts from all previous colleges attended and have them sent to the JCC admissions office.

Transfer of Alternative College Level Credit
Full-time students who have attended other colleges or who have earned college credit through the Independent Study Programs of the State University of New York, the College Proficiency Examinations of the State Education Department, the Advanced Placement Program of the College Entrance Examination Board, College Level Examination Program, or military experience are eligible to apply for advanced standing and credit. Official records should be directed to the JCC admissions office.

Transferring Credits
A student may transfer up to 30 semester hours of credit to JCC from another institution or other external sources. JCC considers expected learning outcomes and standards when evaluating incoming transcripts. Students must complete a minimum of 30 semester hours of credit at JCC to be eligible for an associate’s degree from JCC. If transfer credits are applied toward additional degrees, the credits must be a part of the maximum of 30 allowable transfer credits. Students must complete 15 semester hours of credit from JCC to be eligible for an associate’s degree from JCC. If

appeal process for transfer evaluations at JCC
Students who wish to appeal the results of a transfer evaluation may do so by contacting the JCC registrar in writing to briefly explain the issue under appeal and request a meeting to discuss it. The registrar may request that you provide additional information (such as a course syllabus). At the meeting, the registrar, or other evaluator, will discuss with you the criteria used to evaluate the credits brought
information for consideration. The vice president's decision is final or not. The vice president may request that you provide additional information. If you are transferring credits to JCC from a SUNY institution and do not agree with the vice president of academic affairs’ decision, you may take your appeal to the SUNY system provost by submitting the student transfer appeal form, available at www.suny.edu. It is the responsibility of the student to initiate each step of the appeal process and to provide any additional information requested pertaining to the course(s) in question. The process is outlined at www.sunyjcc.edu.

Non-Matriculated Students Registering For Courses for Personal Enrichment

A non-matriculated student is one who is taking courses to satisfy personal needs and interests without applying for candidacy for a degree or certificate. Non-matriculated students are not eligible to receive financial aid. JCC reserves the right to require placement testing for anyone wishing to register for classes. Non-matriculated students required to take placement tests must score at a satisfactory level to register. JCC will deny registration privileges to any student who does not comply with this procedure.

Earning a High School Equivalency Diploma (GED/TASC)

Students who do not possess a high school or equivalency diploma may satisfy the equivalency requirements by successful completion of 24 college level credits at JCC. Credit hours earned in this program will be applied concurrently toward the degree requirements. Visit www.sunyjcc.edu for additional information.

Students with an IEP Diploma

The State Education Department has ruled that unlike the high school diploma or the high school equivalency diploma, an Individualized Education Plan (IEP) diploma “is not an indicator of successful completion of high school study,” thus community colleges are under no legal obligation to accept IEP students under the terms of the state’s Full Opportunity policy. Any student with an IEP diploma, or those who do not have a high school diploma or its equivalent, may attend JCC part-time with no financial aid or may pursue a GED/TASC.

Home-Schooled Students

JCC welcomes home-schooled students. Students who have been homeschooled may apply for admission to JCC if they have reached compulsory age (the school year during which they turned 16 has ended). Documentation of a valid and in-effect individualized home instruction plan (HIHP) pursuant to section 100.10 of the regulations of the Commissioner of Education must be submitted. Home-schooled students unable to obtain this documentation must receive a high school equivalency diploma (GED/TASC) prior to receiving their degree from JCC. In all cases, home-schooled students must complete JCC’s placement testing. Contact the admissions office for additional information.

Admission of Correspondence School Students

According to the State Education Department, when a student has completed a high school program through correspondence study, the correspondence school must be recognized, authorized, or approved by the state educational entity where the correspondence school is located, and the student must be a resident of that state. New York state residents may not use a high school program of correspondence study to meet the requirements for a secondary education in New York state.

Early Admissions

JCC’s Early Admissions Program is designed for qualified high school students who have completed 11th grade to begin taking college level courses full-time (minimum 12 credit hours) prior to graduating from high school and, with permission from his/her high school and parent or guardian, to have JCC courses fulfill graduation requirements. Normally students should rank in the top half of their class.

In some cases, students and their guidance counselor must meet to discuss plans for early admission and determine if college courses could be used to fulfill high school graduation requirements.

• A statement from the high school principal or counselor indicating that a high school diploma will be issued upon satisfactory completion of specified college courses is required.

• The student is responsible for requesting that an official transcript be sent from the JCC registrar’s office to the high school guidance counselor upon the completion of courses.

• A statement from the student’s parent or guardian granting permission to enroll for full-time study at JCC must be submitted.

Pre-College Enrollment Program

JCC’s Pre-College Enrollment Program (PEP) provides high school students the opportunity to enroll part-time in courses (up to 11 credit hours), either day, evening, or online and earn college credit prior to and immediately following high school graduation. Students can enroll for classes at the Jamestown and Cattaraugus County campuses and North County and Warren centers.

PEP is open to all high school students of average to better academic ability who are recommended by their high school principals or guidance counselors. In most cases, students participating in the program are juniors and seniors who rank in the top half of their high school classes. PEP students are responsible for tuition and fees. Since they cannot matriculate, federal and state financial aid is unavailable to them. The PEP Grant, however, is available to provide for one-half the cost of tuition up to $300 per semester. Students are eligible for this grant by registering as a PEP student. Students entering JCC’s PEP program must register for at least one course at their home high school and cannot register as full-time students at JCC.

Since some high schools give dual credit for certain courses, credit earned at JCC may also be applied toward high school graduation requirements. Credit earned at JCC in courses taken by PEP students may be applied toward an associate degree from JCC or may be transferred to another institution.

As members of JCC’s Faculty Student Association, PEP students can participate in both the academic and extracurricular life of the college. They have library privileges, can attend special college events, and are welcome to join various clubs and interest groups.

For course selection, students meet with their high school guidance counselors to determine which classes fit into their daily or weekly schedules. Home-schooled students should contact JCC’s admissions office for assistance. Registration forms are available in the JCC admissions office, high school guidance offices, and at www.sunyjcc.edu. Many PEP students choose to enroll in more than one course each semester, and some individuals have been able to complete a full year of college credit during their last two years of high school.
Pep students may select courses from the entire curriculum as long as course prerequisites have been met. Prerequisites are required for most JCC courses.

Enrolled students have secure access to their individual student records at www.myjcc.sunyjcc.edu. Students can view six-week and final grades, advisement transcripts, registration, and access their JCC email account. No paper bills are sent to the student. Bills can be viewed and paid online at banner.sunyjcc.edu.

Special Circumstances

Individuals seeking admission who do not fit one of the above categories should contact the admissions director for assistance.

Admission Policy for Inmates and Ex-Offenders

SUNY policy requires applicants for admission to report whether they have been convicted of a felony. Each application for admission received from an inmate or ex-offender will be evaluated and judged on its own merits by a committee established for this purpose. These applicants must submit a criminal history record from the New York Division of Criminal Justice Services (1.800.262.3257) or similar state or federal authority if charged elsewhere. In addition, a personal statement and a letter of recommendation may be required for certain situations. A copy of the complete policy and procedure, as well as additional forms, are available from the admissions office at either campus.

JCC may deny admission to an applicant based on prior criminal convictions where such admission would involve an unreasonable risk to safety/welfare of the college community. JCC will consider an application for admission from an ex-offender if it is received at least 35 days prior to the start of the semester.

Admission Policy for Students Previously Dismissed From a College for Disciplinary Reasons

JCC will consider an application for admission from these students but it reserves the right to admit or deny any application. After applying, students must submit a detailed summary of the violations, a personal statement, and a letter of recommendation; however, certain situations may require additional information. The application deadline is 35 days prior to the start of the semester.

College Placement Testing

JCC administers a placement test to students prior to their enrollment in college courses. The test gathers information to place students in courses for which they are best prepared and in which they are most likely to succeed. The computer-based placement test consists of multiple-choice questions which are used to measure ability in the basic skills of reading comprehension and math, and a 300-600 word essay in which students demonstrate their ability to write a composition. The entire test takes approximately 2½ hours to complete.

All new full-time students are required to take the placement test. New part-time students are strongly encouraged to take the placement test prior to registration. Part-time students must take the placement test prior to enrolling in any course which has a reading or writing prerequisite. Certain students may qualify for an exemption from taking the placement test. A list of exemptions is outlined at www.sunyjcc.edu/placementtesting.

Students will receive placement test results upon completion of the test. Full-time students will discuss the results with their advisors at advisement and registration meetings. Part-time students may meet with an advisor to review the test results.

JCC provides special testing procedures for students with disabilities. Arrangements must be made prior to taking the test. To arrange special testing accommodations, contact the disability support services coordinator at either the Jamestown Campus or Cattaraugus County Campus.

To register to take the placement test, visit www.sunyjcc.edu/admissions/placement-testing.

Application/Admission Policy: International Students

Any applicant who is not a U.S. citizen, or documented permanent resident (non-immigrant) of the United States and wishes to study at JCC must do so through an F-1 (student) visa and is considered an international student throughout his or her academic stay. International students wishing to complete an entire degree online should contact the JCC admissions office.

- Contact JCC’s international student program coordinator or visit www.sunyjcc.edu to obtain the international student application.
- Submit academic documents showing high school graduation and any college study beyond high school. Applicants from countries where English is not the primary language or the language of education must have documents translated into English before submitting them to the admissions office.
- Applicants from countries where English is not the primary language or the language of education must submit the results of the Test of English as a Foreign Language (TOEFL). Minimum score considerations are 500 on the paper-based exam, 173 on the computer-based exam, and 61 on the Internet-based exam.
- Scores from JCC’s college placement test can be accepted from English speaking countries in lieu of the TOEFL exam. The placement test can be sent to students residing outside of the U.S. on a selective basis. Contact the counseling center on either campus for information.
- Submit documented evidence of adequate financing to cover the cost of tuition, fees, books, room, board, and other living expenses. Note that federal and New York state financial aid is not available to international students.

Applicants for January admission (spring semester) must complete admission procedures by November 1. Applicants for August admission (fall semester) must complete admission procedures by June 1. Applicants should take special note of the length of time required to process admissions applications and credentials. Final evaluation will take place when all admissions credentials have been submitted. If admitted to a degree program, the applicant will be issued an I-20.

To request information on the Test of English as a Foreign Language (TOEFL), write to Educational Testing Service, PO Box 6151, Princeton, NJ 08541-6151, USA or visit www.toefl.org. Official score reports will be sent directly from ETS to JCC if designated by the applicant.

Nursing Program

Accreditation

JCC’s associate degree nursing program has been awarded accreditation for achievement of quality and excellence in nursing education by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd., NE, Suite 850, Atlanta, GA 30326, phone: 404.975.5000; fax: 404.975.5020; e-mail: info@acenursing.org; or www.acenursing.org.

Admission Requirements

The nursing program is designed for full- or part-time study and may be completed in a minimum of two academic years of full-time study. The four-semester sequence of nursing courses, which begins each fall semester, must be completed sequentially. Students who desire part-time study may complete the general degree requirements before seeking admission to the program.

In addition to application to the college, students must apply for acceptance into the nursing program through the admissions office. The application to the nursing program is located at www.sunyjcc.edu/nursing. Enrollment into the nursing program is highly
competitive. Therefore, application by February 1 is of primary importance.

Applications will continue to be reviewed after February 1 on a space available basis. Students who are not admitted for one semester must reapply if they want to be considered for another semester. Students placed on a waiting list and not admitted during a given academic year must also reapply the following year.

Criteria for admission are:
- High school and college transcripts from all institutions attended must be filed in the admissions office prior to February 1 of the year seeking admission (i.e. February 1, 2016 for fall 2016 admission).
- A grade point average (GPA) of at least 2.5 for current or previous college students.
- Placement in the top 25% of the class (with a minimum of an 90% average) for high school students or high school graduates with no college experience. If you are a high school student who was not in the top 25% of your high school class and/or did not have a minimum of an 90% average, you may still be considered for admission to the nursing program after you have completed general education courses required for the nursing program and obtained at least a 2.5 GPA. Prior to full-time enrollment at JCC, high school students are encouraged to consider enrollment in college course opportunities, i.e. College Connections.
- A passing grade in a high school or college chemistry course. A strong science-based high school curriculum is highly recommended for student success in the nursing program.
- Eligibility for placement in ENG 1530: English Composition II. Eligibility is determined by placement test, or transfer credits, equivalent to ENG 1510 and the Accuplacer reading score of 80+.
- A record of grades from credit bearing college courses must be established by applicants with a high school equivalency diploma (GED/TASC).
- Must be 18 years of age by June 1 of the intended graduation year to be eligible to take the NCLEX exam for licensure as a registered nurse.
- Students entering the nursing program will only have two opportunities to successfully complete Anatomy and Physiology I and/or II with a “C” grade or better. Students who have taken Anatomy and Physiology I or II more than twice will not be permitted to enter or continue in the nursing program. A student wishing to be considered for a waiver to the two course limit should obtain letters of support from two faculty members, at least one of which must be from a nursing faculty member.

Point System

A point system will be applied to those applicants not admitted directly from high school (JCC math/science pre-nursing students or transfer students who meet admissions requirements) based upon courses completed toward the nursing program and GPA. Ten percent of seats are reserved for high school students/graduates who meet program entrance requirements.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE &amp; POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 2510</td>
<td>A - 3</td>
</tr>
<tr>
<td></td>
<td>B+ - 2.5</td>
</tr>
<tr>
<td></td>
<td>B - 2</td>
</tr>
<tr>
<td></td>
<td>C+ - 1.5</td>
</tr>
<tr>
<td></td>
<td>C - 1</td>
</tr>
<tr>
<td>BIO 2520</td>
<td>A - 3</td>
</tr>
<tr>
<td></td>
<td>B+ - 2.5</td>
</tr>
<tr>
<td></td>
<td>B - 2</td>
</tr>
<tr>
<td></td>
<td>C+ - 1.5</td>
</tr>
<tr>
<td></td>
<td>C - 1</td>
</tr>
<tr>
<td>BIO 2531</td>
<td>A - 3</td>
</tr>
<tr>
<td></td>
<td>B+ - 2.5</td>
</tr>
<tr>
<td></td>
<td>B - 2</td>
</tr>
<tr>
<td></td>
<td>C+ - 1.5</td>
</tr>
<tr>
<td></td>
<td>C - 1</td>
</tr>
<tr>
<td>PSY 2510</td>
<td>A OR B - 1</td>
</tr>
</tbody>
</table>

Meeting the criteria does not guarantee admission into the nursing program. A greater number of points improves the applicant’s chances of being selected. Violations of the “Academic Integrity” or “Student Conduct” policies in JCC’s Constitution of the Student Body, or any violations of equivalent policies at other postsecondary institutions, shall also be considered as a factor in the admissions decision.

Technical Standards for Nursing
(Cognitive, Physical, and Behavioral Criteria)

JCC provides the following technical standards with examples of learning activities to inform prospective and enrolled students of the skills required in completing their chosen profession’s curriculum and in the provision of health care services. These technical standards reflect the performance abilities and characteristics that are necessary to successfully complete the requirements of the nursing program. These standards are not a requirement of admission into the program. Individuals interested in applying for admission to the program should review these standards to develop a better understanding of the skills, abilities, and behavioral characteristics required to successfully complete the program.

Students admitted to the nursing program are expected to be able to complete curriculum requirements, which include physical, cognitive, and behavioral core competencies that are essential to the functions of the entry-level professional nurse. These core competencies are considered to be the minimum and essential skills necessary to protect the public. These abilities are encountered in unique combinations in the provision of safe and effective nursing care and can meet the criteria with or without reasonable accommodations. Students who are unsure if they can meet these criteria because of disability, or know they will need help in meeting them, must contact JCC’s disability support services office to discuss the use of reasonable accommodations and/or auxiliary aids. The college will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program.

Progression in the program may be denied if a student is unable to demonstrate the technical standards.

Cognitive:
- Recall, collect, analyze, synthesize, and integrate information from a variety of sources.
- Measure, calculate, reason, analyze, and synthesize date.
- Problem solve and think critically in order to apply knowledge and skill.
- Communicate verbally, and through reading and writing, with individuals from a variety of social, emotional, cultural, and intellectual backgrounds.
- Relay information in oral, written, and electronic form effectively, accurately, reliably, and intelligibly to individuals and groups, using the English language.

Examples of learning activities found in the nursing curriculum and related to industry standards:
- Process information thoroughly and quickly to prioritize and implement nursing care.
- Sequence or cluster data to determine client needs.
- Develop and implement a nursing plan of care for clients in acute, long-term, and community settings. Discriminate fine/subtle differences in medical word terminology.
- Report verbally and in writing client data to members of the healthcare team.
- Read and comprehend medical orders and client information found in the medical record.
- Perform math computations for medication dosage calculations both with and without a calculator.

Physical, Motor:
- Move efficiently enough to meet the needs of patients in a timely fashion.
- Coordinate fine and gross motor movements.
- Coordinate hand/eye movements.
- Maintain balance from any position.
- Negotiate level surfaces, ramps, and stairs.
- Function with both hands free for performing psychomotor tasks.
- Maneuver in small areas.
- Attend to cognitive and psychomotor tasks for up to 7-12 hours.
Examples of learning activities found in the nursing curriculum and related to industry standards:

- Transfer patients/clients in and out of bed from stretchers and wheelchairs.
- Turn and position patients.
- Control a fall by slowly lowering client to the floor.
- Perform cardiopulmonary resuscitation (CPR).
- Lift or move (turn, position) clients or objects, pull or push objects, weighing up to 50 pounds.
- Reach to shoulder or higher level to place or access equipment such as intravenous fluid bags, bend or squat to access equipment below bed level.
- Carry equipment and supplies to the client bedside.
- Manipulate small equipment and containers, such as syringes, vials, ampoules, and medication packages to administer medications without extraneous movement, contamination, or destruction.
- Accurately place and maintain position of stethoscope for detecting sounds of bodily functions.
- Record data with a pen or graphics and other flow sheets.
- Operate a computer.
- Dispose of needles in sharps container.
- Complete assigned periods of clinical practice (7-12 hour shifts, days, evenings, or nights).

Sensory:

- Acquire information from demonstrations and experiences, including but not limited to information conveyed through online coursework, lecture, small group activities, demonstrations, and application experiences.
- Collect information through observation, listening, touching, and smelling.
- Use and interpret information from diagnostic maneuvers.

Examples of learning activities found in the nursing curriculum and related to industry standards:

- Detect changes in skin color or condition. (pale, ashen, grey, or bluish)
- Detect a fire in the client care environment.
- Draw up a prescribed quantity of medication into a syringe.
- Observe clients in a room from a distance of 20 feet away.
- Detect sounds related to bodily functions using a stethoscope.
- Detect audible alarms generated by mechanical systems such as those that monitor bodily functions, fire alarms, call bells.
- Observe and collect data from recording equipment and measurement devices used in client care.
- Communicate with client and members of the healthcare team in person and over the phone in a variety of settings, including isolation and the operating room where health team members are wearing masks and there is background noise.
- Detect foul odors of bodily fluids or spoiled foods.
- Detect smoke from burning materials.
- Detect changes in skin temperature.
- Detect unsafe temperature levels in heat-producing devices used in client care.
- Detect anatomical abnormalities, such as subcutaneous crepitus, edema, or infiltrated intravenous fluids.
- Feel vibrations such as an arterial pulse.

Behavioral:

- Demonstrate emotional stability to function effectively under stress and adapt to changing environments.
- Maintain effective, mature, and sensitive relationships with others.
- Examine and modify one’s own behavior when it interferes with others or the learning environment.
- Possess attributes that include compassion, empathy, altruism, integrity, honesty, responsibility, and tolerance.
- Establish a therapeutic relationship and communicate in a supportive manner.

Licensure

Graduates of the nursing program are eligible to apply for the National Council Licensing Examination for Registered Nurses (NCLEX-RN). At the time of submission of an application for licensure and first registration, the applicant is required to report a history of a felony or misdemeanor, or if such charges are pending. State boards of nursing will review the information submitted by the applicant and will determine if the applicant is eligible for licensure. A history of a felony or a misdemeanor may jeopardize the applicant’s eligibility for licensure by state boards of nursing.

Persons intending to practice nursing in New York state should contact the New York State Board of Nursing, 89 Washington Ave., Albany, NY 12234-1000 or call 518.474.3817. Those intending to practice nursing in Pennsylvania should contact the Pennsylvania State Board of Nursing, PO Box 2649, Harrisburg, PA 17105-2649 or call 717.783.7142.

Criminal Background Check and Clearance

All health care agencies in Pennsylvania require criminal background checks on nursing students before beginning a clinical placement. All ICC nursing students will be assigned to clinical experiences in PA during some semester(s). Therefore, nursing students are required, at their own expense, to complete the required child abuse background check and a state or federal background check before beginning clinical placement. Inability to obtain a satisfactory clearance will prevent a student from being assigned to clinical experiences in PA, and as a result, the student will not be able to complete the clinical objectives for the course and will not be allowed to continue in the nursing program. (The college will not move a student from an agency that denies background clearance to another.) A criminal record may also jeopardize a graduate’s ability to obtain registered nurse licensure.

Cardiopulmonary Resuscitation (CPR)

Prior to entrance into NUR 1510, students are required to present evidence of completion of a course in Basic Life Support (BLS) that includes infant, child, and adult CPR and Automated External Defibrillator (AED). The acceptable courses are: BLS for the Health Care Provider (American Heart Association) or CPR/AED for the Professional Rescuer (American Red Cross). Students are strongly encouraged to take BLS during the summer prior to entering the nursing program. By taking BLS during the summer, the student will be compliant with the CPR requirement throughout the two-year nursing program. Courses may be available through the nursing program, ICC, and/or in the community.

Entry Into Nursing Program With Advanced Standing

Advanced Standing - Second Semester

Persons with prior experience in the health care field, such as a licensed practical nurse who does not meet the transfer requirements from an articulation agreement, or a paramedic, may apply for admission to NUR 1520 by challenging NUR 1510. The application will be reviewed when the individual has met the following criteria:

- Criteria for admission as outlined in the nursing program admission requirements section.

For challenging NUR 1510:

- A score of 75% or better on the NUR 1510 challenge examination (score valid for two years), and
- Achievement of a satisfactory grade for basic nursing assessment and intervention skills.

Students should contact the nursing program secretary to schedule the challenge examination and skills evaluation. A $30 fee is charged for each challenge exam and an $80 fee is charged for each nursing assessment and intervention skills evaluation. These fees are to be paid at the business office prior to taking any challenge examination.
Once the nursing sequence of courses has begun, the student must have successfully completed the following courses:

- BIO 2510: Anatomy and Physiology I 4 credits
- ENG 1530: English Composition II 3 credits

**Advanced Standing - Third Semester**

Licensed practical nurses and/or select nursing transfer students may be considered for advanced standing. These students may apply for NUR 2510 after completing the following requirements:

- Successful challenge of NUR 1510 and NUR 1520.
- Successful completion of the following required courses in general education:
  - BIO 2510: Anatomy and Physiology I 4 credits
  - BIO 2520: Anatomy and Physiology II 4 credits
  - ENG 1530: English Composition II 3 credits
  - PSY 1510: General Psychology 3 credits

Acceptance into any nursing course is contingent upon space available in the course and the qualifications of the applicants.

**Transfer or Readmission Into Nursing Program Policy**

A student seeking transfer or readmission may enter the nursing program according to the following criteria:

1. Each student must apply for admission/readmission to the nursing program through the admissions office at either the Jamestown or Cattaraugus County campus. If you wish to enter the nursing program in the fall semester, you will need to apply by May 15, and for other semesters, by February 1. Applications must be received prior to the deadlines on a space available basis.

2. Each student must be accepted into the college for the semester being readmitted. (Application/reapplication must be completed by any transfer student or readmitted student who was not attending JCC the semester immediately prior to admission.)

3. Students seeking readmission or transfer into the nursing program need to meet the same criteria as students entering the nursing program for the first time.

4. Any readmitted student who withdrew two years ago or longer will be required to enter NUR 1510 or successfully challenge NUR 1510.

5. A minimum grade of “C” is required in each nursing course. A student will be permitted to repeat one nursing core course (NUR 1510, NUR 1520, NUR 2510, and NUR 2520) one time. Should the student be unsuccessful in repeating any nursing core course, he/she would be ineligible to continue in the nursing program. Students who are unsuccessful in more than one nursing core course and have already repeated one core course will not be eligible to repeat a second nursing core course. Withdrawal from a core nursing course after the first 30 calendar days will be considered a failure of the course for reapplication purposes. In case of illness or other extreme circumstances, the faculty may consider a one-time exception. The student wishing to be considered for a waiver to the withdrawal counting as a failure for reapplication purposes should obtain letters of support from two faculty members. The waiver with letters of support from two full-time faculty members should be submitted to the nursing program committee for consideration.

6. Once the nursing sequence of courses has begun, the student must complete the program in three years. The faculty may consider exceptions to the three-year period. The student wishing to be considered for a waiver to the three-year period should obtain letters of support from two full-time nursing faculty members. The waiver, with letters of support, will be submitted to the nursing program committee for consideration.

7. A student seeking transfer or readmission into the nursing program will be considered on the basis of space available and grade point average.

8. A transfer student must complete at least 30 credit hours at JCC to be eligible for graduation.

9. Students seeking readmission or transfer into NUR 1520, 2510, or 2520 will be conditionally accepted according to the following policy:

   Students who are conditionally reaccepted into the nursing program must successfully demonstrate selected skills learned in the previous semester(s) as identified by nursing faculty. Students will be granted the opportunity to practice the skills and will have two opportunities to successfully demonstrate the skills. During this time the resources of the college laboratory will be available to them. The demonstration of skills will occur prior to the start of the semester. Students will be notified as to the skills to be demonstrated and the times for demonstration. Students who do not successfully demonstrate selected skills after the second opportunity will be denied reacceptance into the nursing program. An $80 fee will be charged for the skills demonstration. The fee must be paid at the business office prior to the demonstration of skills. The student must bring a copy of the receipt to the testing site.

**Transfer from a Practical Nursing Program**

JCC has articulation agreements with the Erie II-Chautauqua-Cattaraugus County, Cattaraugus-Allegany BOCES Schools of Practical Nursing, and the Practical Nursing Program at Venango Technology Center. Graduates of these programs may transfer into NUR 1520 based on the following criteria:

- Meet the college and nursing program admission criteria.
- Attain an overall GPA of 85% in the LPN program.
- Graduate from an LPN program within the previous three years.
- Complete BIO 2510: Anatomy & Physiology (4 credit hours).
- Complete ENG 1530: English Composition (3 credit hours).

**Occupational Therapy Assistant Program**

The occupational therapy assistant program is designed for full- and part-time study and may be completed in two academic years of full-time study. The four-semester sequence of OTA courses, which begins each fall semester, must be completed sequentially. The fourth semester (OTA 2700 and OTA 2720: Fieldwork II) must be completed within 12 months following successful completion of third semester OTA coursework. Fieldwork II assignments may have special housing and transportation requirements. Students who successfully complete JCC’s occupational therapy assistant program receive an Associate in Applied Science degree. Coursework includes a series of general education courses with an emphasis on the biological and psychological sciences. Professional studies focus on how human occupational development is affected by illness and injury and how function in various life roles can be facilitated.

Occupational therapy provides service to those individuals whose abilities to cope with tasks of living are threatened or impaired by developmental deficits, the aging process, poverty and cultural differences, physical injury or illness, or psychological and social disability. Occupational therapy is provided in a variety of settings such as hospitals, clinics, rehabilitation facilities, long-term care facilities, extended care facilities, sheltered workshops, schools and camps, private homes, and community agencies. Delivery of occupational therapy services involves several levels of personnel, including the occupational therapist, the certified occupational therapy assistant, and aides.

Upon completion of the program, students will be able to:

- develop and exhibit professional, desirable workplace behaviors which reflect occupational therapy standards of practice.
- apply occupation-based, client-centered interventions to treat the varying needs of their clients.
- demonstrate the ability to research evidence-based practices...
Admissions

Certification Examination for the Occupational Therapy Assistant, www.acoteonline.org, can be reached through AOTA at 301.652.AOTA or by accessing Montgomery Lane, Suite 200, Bethesda, MD, 20814-3449. ACOTE Accreditation Council for Occupational Therapy Education (ACOTE) Accreditation Transfer options are available at JCC. that institution’s individual requirements and articulation policies. Transfer options are available at JCC.

Accreditation

JCC’s occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Assn. (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda, MD, 20814-3449. ACOTE can be reached through AOTA at 301.652.AOTA or by accessing www.acoteonline.org.

Graduates of the program will be eligible to sit for the National Certification Examination for the Occupational Therapy Assistant, administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the graduate will be a certified occupational therapy assistant (COTA). In addition, most states require licensure to practice; however, state licenses are usually based on the results of the NBCOT certification examination. A felony conviction may affect a graduate’s ability to sit for the NBCOT certification examination or attain state licensure.

Admission Requirements

New full- and part-time students seeking admission must follow JCC application procedures and apply for acceptance into the OTA program. Steps for admission are:

- Students must first apply for general admission to JCC.
- Students must then complete the application for admission to the occupational therapy assistant program. The form is available at www.sunyjcc.edu/ota.

In keeping with the requirements of the Americans with Disabilities Act, preadmission inquiries about medical or disabling conditions are prohibited. For potential students to decide whether or not they may be able to participate fully in the program, students must review the Skill Sets Expected of Students in the OTA Program form available at www.sunyjcc.edu/ota. Students should examine these criteria carefully before applying to the program. Reasonable accommodations, including the use of auxiliary aids, will be made for students with documented functional limitations through JCC’s disability support services office.

After acceptance into the program, but before enrollment, students need to submit health and physical records, including proof of required immunizations, to JCC’s health center. All physicals must be completed by the occupational health physician provided through JCC. Following review, the applicant will be fully admitted into the OTA program.

Criteria for admission into the OTA program includes:

- Academic performance:
  - High school average of 80% or better;
  - Applicants with a GED/TASC will be accepted into the math/ science degree program until a college grade point average is established. With an established GPA, students can apply and be considered for the OTA program.
  - Currently enrolled JCC students or transfer students must have a GPA of 2.5 or better.

- Successful completion of high school chemistry, CHE 1500, or CHE 1530.
- Applicants must have ENG 1530 eligibility.

Application Procedures

Applicants must file a SUNY or JCC admissions application, complete the JCC application for admission to the OTA program, and include a copy of their high school transcript and all college transcripts from institutions other than JCC. Deadline: March 15 or until program is full. Meeting the criteria does not guarantee admission into the OTA program. Admission to the OTA program is selective and limited to assure that the number of students enrolled in the program is commensurate with available instructional and clinical resources.

Preference is given to applicants living in the New York counties of Chautauqua, Cattaraugus, and Allegany and the Pennsylvania counties of Warren, Potter, McKean, and Forest. Applicants who are not United States citizens will be considered if they have permanent resident status or an F-1 student visa issued by JCC.

OTA Applicants With College Credits

A point system will be applied to those applicants who meet admissions requirements based upon courses completed toward the OTA program and who meet the GPA requirement. To receive points, an applicant must have completed the courses and cannot be currently enrolled in the courses. Unless already on file, supporting documentation for all points, including transcripts, is required at the time of application submission. All points will be reviewed prior to acceptance by the admissions office. Meeting the criteria does not guarantee admission into the OTA program. A greater number of points improves the applicant’s chances of being selected.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE &amp; POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO2510</td>
<td>A- 4 B- 3 C- 2</td>
</tr>
<tr>
<td>BIO2520</td>
<td>A- 4 B- 3 C- 2</td>
</tr>
<tr>
<td>ENG1580</td>
<td>A- 3 B- 2 C- 1</td>
</tr>
<tr>
<td>MAT1540</td>
<td>A- 3 B- 2 C- 1</td>
</tr>
<tr>
<td>PSY2560</td>
<td>A- 3 B- 2 C- 1</td>
</tr>
<tr>
<td>SOC1510</td>
<td>A- 3 B- 2 C- 1</td>
</tr>
</tbody>
</table>

OTA Applicants Without College Credit

Applicants without college credit (first time freshmen) are evaluated for admission using the criteria of rank in their high school class, overall GPA, volunteer function, and previous health care experience.

Readmission to the OTA Program

A student seeking readmission may enter the OTA program according to the following criteria:

- Each student must apply for readmission. Admission criteria must be fulfilled.
- Any readmitted student who has withdrawn from the program for a period greater than three years will be given credit for OTA 1510 only, providing a grade of “C” or higher was obtained. The student is required to complete all other OTA courses in sequence.
- A minimum grade of “C” on the professional grading scale is required in each OTA course. A student is permitted to repeat each OTA course one time. If the student is unsuccessful in repeating any OTA course, he/she is ineligible to continue in the OTA program.
- A student seeking readmission to the OTA program is considered on a space available basis and GPA.
Chautauqua County Sheriff’s Law Enforcement Academy

Admission Policy

The Chautauqua County Sheriff’s Law Enforcement Academy is offered through the Chautauqua County Sheriff’s Department for students interested in becoming a local or county police officer in New York state. Acceptance into the academy is conducted on a competitive selection process which is contingent on the evaluation of a candidate’s prior college credits, cumulative GPA, criminal justice director.

Requirements section. Previous college work may be applied to this program.

ADMISSIONS

The cost of a college education is one of the major financial concerns of the American family. While few people doubt the ultimate value of this investment, many students seeking higher education find it difficult to meet their educational expenses within a concentrated period of time. Jamestown Community College believes that a college education should be within the reach of every student and offers a comprehensive financial aid program to support this goal.

Students attending JCC may participate in a full range of federal, state, and institutional grants, scholarships, loans, and work-study programs. Students must be accepted and matriculated by the JCC admissions office and meet academic eligibility criteria to receive awarded funds.

Although the primary obligation for college expenses rests with the student and his/her parents, federal and state agencies, JCC, and the community provide assistance to meet the financial costs of a college education. Eligibility criteria and application deadlines vary for individual sources of financial aid. Details are available at www.sunyjcc.edu/financialaid.

Students may contact the financial aid office in person or by telephone for general questions and assistance, in addition to scheduling personal appointments for special circumstances.

Applying for Financial Aid

Students initiate the application process for all financial aid programs by filing the Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov. The FAFSA application should be filed between January 1 and March 1 of each year for the following academic year. Due to limited funds for some programs, students who apply for aid by March 1 will receive priority consideration for federal campus-based and institutional aid programs. Late applicants are eligible for federal Pell grants, loans, and some state and miscellaneous scholarship programs.

After filing the FAFSA, New York state and Pennsylvania resident students should complete applications for state grants from their respective state agencies. Applications for the Tuition Assistance Program (TAP) for full-time New York state students can be completed online at hesc.ny.gov. New York state residents anticipating part-time status should download the Aid to Part-time Study (APTS) application from the financial aid web page and submit it to the college prior to the start of each semester. Full- and part-time Pennsylvania residents must complete PHEAA grant applications according to state instructions and deadlines. See www.phea.org for details.

Students interested in institutional scholarships and grants should complete the JCC application for miscellaneous awards and/or the individual scholarship applications. All applications are available in the financial aid office and at www.sunyjcc.edu/admissions/financial-aid.

Awarding and Disbursement of Aid

Federal and state grants and institutional scholarships are awarded on an annual basis, and are disbursed to the student's account each semester when the student's financial aid file is complete, the eligibility verification process is finalized, and attendance is confirmed.

Student loans are issued in at least two disbursements to the college business office, and are available to eligible students within the first two weeks of classes each semester. Federal regulations require the exception that first time freshman borrowers wait until 30 days after the first day of classes to receive their first loan disbursement.

Credit for aid that registered students are approved to receive is temporarily applied to their student accounts approximately six weeks before classes begin. If anticipated aid exceeds tuition, fees, and residence hall charges, students may charge textbooks and supplies from JCC’s campus stores when classes begin, up to the refund amount listed on their account. After attendance in class is confirmed, aid funds are forwarded to the college on the student’s behalf and applied to his account. The JCC business office issues refund checks for excess aid via U.S. mail within 14 days of receipt of funds.
Grants

The Federal Pell Grant is available to undergraduate students who demonstrate financial need, according to federal formulas.

The Federal Supplemental Educational Opportunity Grant (FSEOG) is for students of academic promise who are in great financial need, according to federal formulas, and who are Pell grant recipients. Students who have submitted financial aid applications by March 1 will be given preference to receive this grant award.

Iraq and Afghanistan Service Grants are for students whose parent or guardian died as a result of military service in Iraq or Afghanistan after the events of 9/11. If you were under the age of 24 or were enrolled in college at least part-time when your parent or guardian died, you may receive an award up to the maximum annual Pell grant. This grant does not have to be repaid and is prorated for enrollment in less than 12 credits/semester.

The Tuition Assistance Program (TAP) is available to New York state resident students who enroll full-time (12 hours or more) and demonstrate financial need, according to New York state formulas. Students who were first-time freshmen in the 2006-07 academic year or thereafter, have earned 12 credits or more in each of the two prior consecutive semesters, and have maintained a minimum of a “C” average may be eligible for a reduced Part-time TAP award if enrolled in 6-11 credit hours.

Aid for Part-Time Study (APTS) is designed for New York state resident students who enroll part-time (less than 11 credit hours) and demonstrate financial need, according to state formulas. Applications are available in the financial aid office and at www.sunyjcc.edu/admissions/financial-aid.

The PEP Grant is a financial aid award program for high school students enrolled at JCC through the early admission, or Pre-College Enrollment programs. Applications and program details are available in the financial aid and admission offices.

Pennsylvania students attending JCC’s Warren Center and Jamestown Campus who are enrolled in an associate’s degree program may qualify for a PHEAA grant from the Pennsylvania Higher Education Assistance Agency. Students must meet financial, academic, and residency requirements to qualify for the award. Students can apply for the grant by completing the Free Application for Federal Student Aid by May 1 each year.

Veterans’ Educational Assistance programs are available to part- and full-time students who are eligible armed forces veterans honorably discharged according to Veterans Administration guidelines. The application process should be initiated at www.gibill.va.gov.

Students with disabilities may be eligible for assistance through the New York State Adult Career and Continuing Education Services-Vocational Rehabilitation (ACCES-VR) program. Learn more about the program at http://www.acces.nysed.gov/vr/.

State Aid To Native Americans is available to members of native American families located on reservations within New York state. Applications can be obtained by contacting the higher education representative on one’s reservation.

Loans

Students interested in federal loans start the application by filing the annual Free Application for Federal Student Aid (FAFSA).

Federal subsidized and unsubsidized Direct Loans are available to students enrolled in a minimum of six credit hours and who are in good academic standing.

Federal Direct PLUS Loans are available to the parents of part- and full-time students whose financial expenses cannot be met by other funding sources.

Limited short-term emergency loans are designed for part- and full-time students who have filed for financial aid and can demonstrate proof of aid eligibility beyond tuition and fees expenses. Students must have valid emergency needs which cannot be met by any other source.

Scholarships

The Unified Student Assistance (USA) Scholarship for top students in JCC’s service area is the best known of the college’s institutional scholarships. Over 70 different scholarships, with varying application processes and renewal criteria, can be viewed at www.sunyjcc.edu/admissions/financial-aid.

Self-Help (Employment Opportunities)

The student assistant program is an on-campus employment program for matriculated students enrolled in at least six credit hours who have requested consideration for the program and meet the work schedule requirements.

The Federal Work Study (FWS) program is available to matriculated students enrolled in at least six credit hours who have been offered eligibility due to financial need according to a federal formula. Students who have submitted a FAFSA will be contacted if they are eligible to participate in this employment program.

Effect of Withdrawal from College on Federal Student Aid

Students who withdraw from all classes prior to the end of the semester may not be entitled to 100% of the aid they have been awarded. Financial aid is granted on the premise that the student will be enrolled for the entire semester. Students who withdraw from the college may be required to repay a proportionate amount of their federal financial aid. The amount students may be required to repay is based on the time in the semester that they withdraw. Earlier withdrawals will result in larger repayments than those filed later in the semester. Federal regulations require that students who receive Title IV funds (Pell or SEOG grants or student loans) must complete 60% of the semester or session in order to maintain eligibility for their entire grant or loan for that period. Repayment of unearned Title IV funds must be made to the federal programs in the following order: Unsubsidized Federal Direct Loans, Subsidized Federal Direct Loans, Federal Direct PLUS Loans received on behalf of the student, Federal Pell Grant, Federal SEOG Program Aid.

Students are encouraged to consult with the financial aid office if they intend to stop attending classes. Instructions for withdrawal are described under the Academic Information section. The failure of a student to notify the registrar in writing of withdrawal may delay refund of tuition due, pursuant to Section 5002 of the Education Law.
Maintaining Eligibility for Financial Aid

Students receiving federal and/or state financial aid must meet certain academic standards to maintain eligibility to receive aid. These standards are outlined briefly in the charts below. A detailed explanation of these standards is available at www.sunyjcc.edu/admissions/financial-aid. Students with questions concerning academic eligibility to receive financial aid are encouraged to contact the financial aid office.

Federal and state satisfactory academic progress standards are subject to change based on any new regulations issued by government agencies. Please read “Satisfactory Academic Progress” in the Academic Information section for details on interpreting the charts.

---

<table>
<thead>
<tr>
<th>Chart A: Satisfactory Academic Progress for Federal Financial Aid (Pell, FSEOG, FWS, and Direct Loans)</th>
</tr>
</thead>
<tbody>
<tr>
<td>After attempting this many credits (college level and imputed)</td>
</tr>
<tr>
<td>a student must have passed this many credit hours</td>
</tr>
<tr>
<td>with a cumulative GPA of not less than</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chart B: Satisfactory Academic Progress for New York State Aid (based on full-time enrollment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective 2011-12 for students enrolled in a *remedial program or all other students who received their first TAP award prior to 2010-11.</td>
</tr>
<tr>
<td>before receiving this TAP payment</td>
</tr>
<tr>
<td>a student must have earned at least this many college level credits (does not include imputed credits)</td>
</tr>
<tr>
<td>with at least this cumulative grade point average (GPA) (based on college level credits; does not include imputed credits)</td>
</tr>
<tr>
<td>and this % of course completion in the prior semester (based on 12 credit hours of college level and imputed credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chart D: Satisfactory Academic Progress for New York State Aid (based on full-time enrollment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective 2011-12 for *non-remedial students who received their first TAP award 2010-2011 or later.</td>
</tr>
<tr>
<td>before receiving this TAP payment</td>
</tr>
<tr>
<td>a student must have earned at least this many college level credits (does not include imputed credits)</td>
</tr>
<tr>
<td>with at least this cumulative grade point average (GPA) (based on college level credits; does not include imputed credits)</td>
</tr>
<tr>
<td>and this % of course completion in the prior semester (based on 12 credit hours of college level and imputed credits)</td>
</tr>
</tbody>
</table>

Tuition and Fees Payment Policy

Student bills for tuition and fees should be paid no later than the due dates published each semester in the master schedule. Students are expected to pay their bills in full, or make alternate arrangements as follows, according to semester due dates.

Payment by cash, check, money order, and MasterCard/Visa/Discover is accepted by the college business office.

JCC also offers an online payment option for student tuition and fees through Nelnet Business Solutions which allows payment in full or in installments with authorized ACH transactions from a bank account, debit card, and most major credit cards. Contact the JCC business office for additional information regarding the online payment process.

Students whose bills will be paid by third party agencies or employers must submit payment or written confirmation from the agency/employer to the college business office by the semester due date.

Students expecting grants, loans, or scholarships to pay their bills must apply for those funds. Upon completion of the financial aid disbursement process by the college, eligible students will have their aid credited to their student bills. Students who have not completed the financial aid process as of the semester due date are expected to make a downpayment on their bills and sign a promissory note with the business office. Students expecting financial aid assume the responsibility for payment of their accounts in the event they do not receive sufficient aid to pay the entire amount of their bills.

Students with delinquent accounts may be denied the privilege of registering for additional credit and non-credit courses and the release of grades and/or transcripts. Also, students who do not make satisfactory payment arrangements will be subject to collection efforts that may include the use of a collection agency.

JCC reserves the right to charge the student for any agency or attorney fees necessary for the collection of any amount not paid in accordance with the college's payment procedures.
FINANCIAL PLANNING

Tuition and Fees Refund Policy

Reduction of student tuition and fee charges for class registration and refunds of payments are determined by the date official withdrawal forms are completed by the student and filed with the registrar's office.

Fall and Spring Semesters

Students withdrawing from college or who reduce their credit load to part-time status are entitled to a reduction of tuition and fee charges and refund of payment as outlined for the fall and spring semester 15-week class schedule. Charges for courses with alternate schedules in the fall and spring sessions will be pro-rated accordingly. Students who withdraw from any or all classes shall be liable for payment of tuition and are eligible for refunds according to the following schedule:

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Tuition Reduction</th>
<th>Liability Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to first day of instruction</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>1st week of instruction*</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>2nd week of instruction</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>3rd week of instruction</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>4th week of instruction and later</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Students participating in drop/add procedures during the first week of classes are not assessed charges for dropped classes required for course scheduling changes.

Summer Sessions

Students withdrawing from summer courses are entitled to a reduction of tuition and fee charges and refund of payment as outlined for the six-week class schedule. Charges for courses with alternate schedules in the summer will be pro-rated accordingly.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Tuition Reduction</th>
<th>Liability Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to first day of instruction</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>During the 1st week of instruction*</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>During the 2nd week of instruction</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>After 3rd week of instruction</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Students participating in drop/add procedures during the first two days of the summer sessions are not assessed charges for dropped classes required for course scheduling changes.

Examples of how refunds are calculated are available upon request from the business office.

For all instructional periods, amounts reduced for students who received Title IV assistance for the period of enrollment will be returned and allocated in the following order to:
1. Federal Direct Loans (unsubsidized, subsidized)
2. Federal Direct PLUS Loans
3. Federal Pell Grants
4. Federal SEOG Program Aid
5. Required refunds of other federal, state, private, or institutional assistance
6. The student

Students may be responsible for unpaid charges after refunds have been returned to the financial aid award programs.

Students receiving federal Title IV assistance and state aid may have their awards reduced if they withdraw from JCC or stop attending classes prior to the scheduled end of any semester. As a result, JCC will return funds to the appropriate programs as listed above, and students may be responsible for repayment of some or all of their awards. Students are advised to file their course withdrawals promptly and to consult with the financial aid and business offices if they intend to stop attending classes. Explanation and examples of refund calculations for all semesters are available upon request from the business office.

Exceptions to the college's refund policy are considered under extenuating circumstances. Students may appeal a refund calculation by forwarding their written request for further reduction of tuition and fees with supporting documentation to JCC's business office within 10 days of the date of withdrawal.

Certificate of Residence

For tuition purposes, New York residency means that the student has lived in the state as a permanent resident for the immediate 12 months prior to the start of a semester. Students who have not lived in New York state for 12 consecutive months are assessed non-resident status.

The residence for the period of time students have served active military duty is deemed to be their permanent address prior to enlistment. Those students currently serving active military duty and attending classes are considered New York state residents.

New York State Education Law 6305 requires JCC to have a current certificate of residence on record for each student account every academic year. Students who have lived in New York for at least one year are required to submit certificate of residence documentation at the following times:

- Students who pre-register earlier than 60 days prior to the start of classes are mailed an affidavit for a certificate of residence with instructions. Students registering for classes within 60 days of the start of classes are asked to complete an affidavit upon registration. All students are required to complete the certification process as follows:
  - Proof of residency in New York state for the past 12 months is necessary with a current address in the city of Jamestown. Students who have moved to the city within the last 12 months must provide proof of their prior residence in New York state.
  - Students living in Chautauqua County, Allegany County, Cattaraugus County, and Erie County must complete the top portion of the form and return the notarized affidavit to JCC's business office. JCC will complete the certification process with these counties by mail.
  - Students living in other counties in New York state must complete the affidavit and present it with proof of residency to their county treasurer's office. The county treasurer will issue a fully completed certificate of residence which should be forwarded to the JCC business office.

Faculty Student Association Fees

All students attending classes on campus, whether full- or part-time, pay a Faculty Student Association fee. The fee amount is based on the total number of credit hours for which each student is registered. These fees are used to finance a variety of non-academic activities and services, including cultural events; intercollegiate sports; speakers; noontime programs; exhibitions; access to the Total Fitness program on the Jamestown Campus, the Olean YMCA-JCC facilities through the Cattaraugus County Campus, and Darwin’s Fitness Center through the North County Center; music and theatre programs; recreation and intramural programs; and student club and student government activities. The funds are administered by a faculty-student board of directors.

A student identification card is issued to each on-campus student and entitles the holder to free or reduced admission to all sports, cultural, and entertainment events supported by FSA fees.
Tuition and fees are established annually. The figures below may be helpful in planning tuition and fee expenses. As tuition and fees may change, students are advised to consult current credit course schedules or www.sunyjcc.edu.

UPDATED AUGUST 2015

Tuition (effective 2015-2016 academic year)

Full-time students (12 or more credit hours)
- New York state resident with valid certificate of residence* $2,260 per semester
- New York state resident without valid certificate of residence* $4,520 per semester
- Out-of-state resident $4,520 per semester

Part-time students (1-11 hours)
- New York state resident* $188 per credit hour
- New York state resident without valid certificate of residence* $377 per semester
- Out-of-state resident $377 per credit hour

Residence Hall Suites $3,750 per semester, single
$3,350 per semester, double

The following fees are mandatory unless noted as optional and are not refundable after drop/add period:

Aviation (AVN) Flight Fees up to $13,000 (pending review with program coordinator)

College Processing Fee (one-time fee payable upon admission to JCC) $85

Faculty Student Association (FSA) Fee $10.25 per credit hour

Health Services Fee $2.25 per credit hour

Insurance
- student accident insurance (optional for part-time students) $9 per semester
- student sickness insurance (optional for all) see JCC business office for details

Laboratory/Studio Fees varies $10-$185

Placement Test Retesting Fee $10

Late Payment Fee $35

Returned Check Fee $30 per check

Learning Network Fee $3.25 per credit hour

Technology Fee $8.25 per credit hour

Special Fees
- Additional degree/certification $20

Life Experience assessment
- portfolio review fee $25
- per credit awarded fee 1/2 current tuition rate

Annual College Expenses
To aid in planning for direct college expenses for full-time students, the following outline of annual estimated costs is presented.

New York state resident tuition and fees $5,360
Books and supplies 1,100
$6,460**

* A resident must have had a permanent address in New York state for 12 months prior to the start of classes. Students who do not meet this requirement will be charged non-resident tuition. Students must complete a certificate of residence as described on page 18.

** Students may also incur additional costs for transportation, living expenses, and personal needs. Estimated student budgets used for financial aid eligibility are established annually and are available from the financial aid office or online at www.sunyjcc.edu/admissions/financial-aid.
STUDENT SERVICES

The student development faculty and staff provide programs and services which encourage the growth of personal responsibility and self-direction. These programs and services are an integral part of the total educational experience.

Academic Advisement
The basic purpose of academic advisement is to provide sound and accurate academic information that will further a student’s academic plan each semester. This is accomplished by assigning all full-time students an advisor in their academic area who will assist them with career planning, course selection, transfer college decision-making, and life goal setting.

To accomplish this mission, full- and part-time students meet periodically with advisors to review life and career goals, to assess movement toward these goals, and to discuss alternatives that will support goal acquisition. It is fundamental to the advisor-advisee relationship that students take responsibility for their own decision-making while faculty take responsibility for the necessary education to fulfill the role of advisor.

It is ultimately the student’s responsibility to learn and know the graduation and program requirements for the degree being sought and to monitor progress toward fulfilling those requirements.

More details on academic advisement can be obtained through the counseling centers or at www.sunyjcc.edu/student-life/student-services/advising.

Academic Support Centers
JCC offers academic assistance to students at Main Street on the Jamestown Campus and the Learning Assistance and Computer Center on the Cattaraugus County Campus. In addition to help with most academic subjects, students can receive personalized assistance with reading, writing, and study skills. Students seeking help can receive one-to-one tutoring from trained peer tutors and experienced faculty members. Textbooks, study guides, and other resource materials are available. Computer labs offer students access to microcomputer applications, including word processing and Internet research.

Open, informal, and work-oriented atmospheres make the centers pleasant places to visit. Main Street is located on the second floor of the Hultquist Library on the Jamestown Campus, and the Learning Assistance and Computer Center is located in the Technology Center on the Cattaraugus County Campus. Limited tutorial services are available at the North County Center.

Counseling and Career Planning Services
The counseling centers on the Cattaraugus County and Jamestown campuses provide JCC students with a variety of confidential counseling services. Counselors are available to respond to student problems and concerns. Particular emphasis is placed on issues related to student growth and development and educational, transfer, and career decision-making and planning. Students who are experiencing stress, coping, or adjustment problems may find it helpful to meet with a counselor to deal more effectively with these issues.

The centers have extensive information available to those who seek a greater awareness of career and educational opportunities. Career assessment and transfer information is available at http://sunyjcc.edu/counseling. Those interested in learning more about themselves may also take a variety of tests, including personality and vocational interest inventories.

The centers are also responsible for overseeing the Life Experience Credit Assessment Program. Students interested in life experience credit can get details through the counseling centers.

Community residents are encouraged to use the centers’ career and educational counseling and information services.

Counseling services are available in the Counseling and Career Development Center, Jamestown Campus; Counseling and Career Planning Center, Cattaraugus County Campus; and on a limited basis at the North County and Warren centers. Office hours are posted at www.sunyjcc.edu/counseling.

Employment and Job Search Services
Students are encouraged to use the various resources available in the counseling centers when looking for a job. Part-time, full-time, and seasonal positions are posted at each campus and on the JCC’s website. Employment development specialists are available on the Cattaraugus County and Jamestown campuses to help students develop a job search strategy, write resumes and cover letters, prepare for interviews, and obtain information about job opportunities.

Students seeking full- or part-time work can take advantage of the Jobs in Your Inbox service. By registering for this service, students receive information about jobs that are posted with the college at an email address of their choice. On-campus student employment opportunities and applications are available at the counseling centers. Students also have the opportunity to meet employers and develop professional networks during career fairs and on-campus recruiting.

Graduate placement statistics are available from the office of institutional research.

Disability Support Services
JCC is dedicated to assisting qualified students with disabilities in earning grades that reflect their abilities and not their disabilities. The disability support services offices are located in the college’s tutoring centers: Main Street on the Jamestown Campus and the Learning Assistance Center on the Cattaraugus County Campus. Students from all college sites should contact the disability support services coordinator at the Jamestown Campus office to inquire about and/or arrange for services.

Policy Statement for Students with Disabilities
Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 state that qualified students with disabilities have the right to reasonable modifications in all on- and off-campus academic programs and services, as well as in student services in order to make a college education truly accessible. The philosophy of JCC is to do its utmost to maximize the educational opportunities of all its students. Thus, our policy regarding students with disabilities is a manifestation of our general approach to all students. We believe in treating students as individuals and in doing our best to meet individual needs.

To plan for necessary modifications and support services, students must contact the disability support services office coordinator and provide documentation that verifies the existence of a disability and supports the need for accommodation. The disability support services office can best meet the needs of students if requests for accommodations are made as soon as possible after the credit course schedule is published each semester. For those students who have a disability requiring services and/or equipment from outside the college, such as course materials in alternate media or sign language interpreters three months’ advance notice is strongly urged. All disability-related information will be treated confidentially.

Programs, or portions of programs with separate admissions policies (e.g. field placements), may have additional performance criteria for students to review prior to application. The nursing program’s Technical Standards for Nursing is published elsewhere in the college catalog and at www.sunyjcc.edu. Skill Sets Expected of Students in the OTA Program can be found on the college
Admission to the professional piloting program requires students to obtain an FAA First Class Medical Certificate prior to admission to the program.

Both the Chautauqua County Sheriff’s Law Enforcement and Corrections Academies require medical examinations, agility/fitness exams, and psychological profiling prior to acceptance. Full admissions criteria for both academies are published elsewhere in this catalog.

When a student requests a modification which is beyond the scope of authority of the disability support services coordinator to decide, the request will be decided upon by a committee appointed by the vice president of either academic affairs or student development. The procedure for filing such requests is available in the disability support services office, through either the vice president of academic affairs or student development, and on JCC’s website.

Health Centers

JCC’s health centers provide the college community with services ranging from clinical evaluation and treatment to wellness information. Confidential services are provided by registered professional nurses. The centers also offer information on various health topics. Health counseling, immunization requirement and medication information, and medical referrals, are also provided.

Clinical services include first aid, physical examinations, blood pressure screening, tuberculosis skin testing, and physician ordered blood tests. Wellness services include flu vaccination clinics, smoking cessation, cholesterol, weight, and stress management plans, body composition analysis, and nutritional assessments.

The health centers are located in the Hamilton Collegiate Center on the Jamestown Campus and in College Center on the Cattaraugus County Campus.

Immunization Requirements

Two New York state public health laws currently affect college students. The first requires students to demonstrate proof of immunity against measles, mumps, and rubella. This law applies to all on-campus students born on or after January 1, 1957 who are enrolled for six or more credits.

The second law requires JCC to provide students with information about meningococcal meningitis and also requires the student to acknowledge receipt of this information and indicate his or her choice regarding vaccination. (Meningitis vaccination is not mandatory). This law affects all students taking six or more credits.

A student’s high school does not automatically forward these records to JCC. Failure to comply will result in a $25 fine and disenrollment from classes.

Student Information

Student Records and Registration

Students enrolling in credit courses have secure internet access to their individual student records at www.myjcc.sunyjcc.edu. JCC’s self-service BANNER student information system provides online access for grades and transcripts, placement test scores, enrollment verification, registration, financial aid, student accounts, and personal records. In addition, students can track their program completion progress in DegreeWorks and access their JCC email account.

Currently, the items accessible by students includes: general student information (view/change address and phone number, e-mail address, directory profile, PIN, etc.); holds (library, immunization, academic, financial, FSA, accounts receivable); mid-semester (six-week grades) and final grades; unofficial academic transcript; registration status and add/drop courses; online registration; degree evaluation and “what if” analysis (“What if I changed my major?”); student tuition and fees account; enrollment certifications via a link to the National Student Clearinghouse; and placement test scores.

Release of Student Information

JCC complies with the Family Educational Rights and Privacy Act (FERPA) by maintaining the confidentiality of all student educational records. JCC accords all the rights under the law, regardless of age, to individuals who are in attendance at the college and have educational records. No one outside the institution shall have access to, nor will the institution disclose any information from a student’s educational record without the consent of the student.

Within JCC, only those members acting in the student’s educational interest are allowed access to student educational records. These members include administrative personnel and faculty, within the limits of their need to know.

Additionally, FERPA does permit the release of directory type information without the written consent of students. JCC reserves the right to disclose, at its discretion, the following information: names, permanent address, e-mail address, enrollment status, dates of attendance, class, previous institution(s) attended, major field of study, awards, honors, degree(s) conferred (including dates), and past and present participation in college activities. Students who wish the college to withhold such information must notify the registrar, in writing, prior to the start of each semester. Note: JCC considers students’ name and whether he/she is enrolled at the college as public information, essential to its operation. This, therefore, may be disclosed without restriction.

A copy of the FERPA document is on file in the registrar’s office and is available for review by students. Students who believe their privacy rights have been violated may file a complaint concerning alleged failure of the college to comply with the requirements of FERPA by contacting the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-5920.

Review of Student Records

FERPA provides students with the right to inspect and review information contained in their educational records; to challenge the contents of their educational records; to have a hearing if the outcome of the challenge is unsatisfactory; and to submit explanatory statements for inclusion in their files. Students wishing to review their educational records must make a written request to the appropriate dean listing the item or items of interest and following the process as outlined in the “Student Rights, Responsibilities, Regulations” appendix of the JCC Constitution of the Student Body.

Students may not inspect and review the following as outlined by law: financial information submitted by their parents; confidential letters and recommendations associated with admission; records of instructional and administrative personnel which are in sole possession of the maker; records of someone employed by the institution; and records of a person after he/she no longer attends JCC, i.e., alumni records.

Official records are kept by JCC for the time limits as designated by state and federal mandates. After that time, they are destroyed. The registrar’s record of a student’s academic performance is retained permanently.

Student Affairs Committee

The Student Affairs Committee, comprised of JCC staff, faculty, and students, acts as an advisory board to the vice president of student development on matters related to the student development division, student governance, campus life, and student welfare. The committee’s functions include interpretation and effective communication of college policy, procedure, and practice as they pertain to students as well as to act as a conduit between student governance and administration in matters of student concern.
The committee strives to increase connections between student resources across campus and works in conjunction with other standing committees to provide seamless resources and programs. Responsibilities of the Student Affairs Committee include, but are not limited to the following: annual selection of the SUNY Chancellor’s Award for Student Excellence nominees; review and update of the student constitution a minimum of every three years; and forming judicial appeal panels as needed and requested.

Student Success Seminar
To enhance the success of its students, JCC requires all first time, full-time students attending classes on campus to participate in the Student Success Seminar, a one-credit course taken during the first semester. The seminar helps students establish connections with other students and faculty, orients students to the college, and helps students develop the key academic and personal skills required of successful students. Part-time students are also welcome to enroll in the Student Success Seminar.

Transfer Advisement
Transfer agreements are available to assist students with transferring to selected transfer schools. Students intending to transfer to four-year colleges and universities following graduation from JCC should make their intentions known as early as possible.

A transfer counselor will assist students in obtaining information about the many colleges and universities which actively recruit JCC graduates. Faculty advisors will assist students in planning academic programs at JCC which conform to the requirements of transfer institutions. Upon written request, and barring any hold on a student’s record, the registrar's office sends transcripts to colleges or universities selected by students. When necessary, faculty write letters of recommendation for qualified students.

Counseling center staff on the Cattaraugus County and Jamestown campuses are available to discuss transfer alternatives.

Veterans Affairs
The veterans affairs coordinator assists veterans with questions concerning the application process. The coordinator processes enrollment certifications through the veterans affairs regional processing center. Assistance is also given to children, spouses, and survivors of veterans whose death or permanent disabilities were service connected. The veterans affairs coordinator is the liaison between the regional veterans affairs office and the veteran when various situations or policies need clarification. The coordinator's office is located in the financial aid office on the Cattaraugus County Campus and in the registrar's office on the Jamestown Campus.

Campus Life Offices
The campus life offices on the Jamestown and Cattaraugus County campuses coordinate leadership development opportunities, service projects, and a variety of student activities and events each semester in collaboration with the Campus Activity Board and other campus partners. The college-wide student activity hour (Mondays and Wednesdays from noon to 1:15 p.m.) enables JCC students to participate in these activities, which include guest speakers, comedians, musicians, poets, intramural sports and college-wide traditions. In addition, clubs and student organizations often hold meetings and host campus activities during activity hour.

Orientation
New and transfer students are invited to participate in summer orientation prior to each fall semester. Participating in an orientation session helps ease new students’ transition into collegiate academic and co-curricular life through interactive activities designed to help new students meet each other and become familiar with resources, technology, and the campus overall. Emphasis is placed on building connections, learning about the college culture, and understanding JCC’s expectations.

Student Government
The Student Senate is the officially recognized student governing body on the Jamestown and Cattaraugus County campuses and at the North County Center. These governing bodies meet regularly with meetings open for any student to attend. Student Senate operates on funding allocated by the FSA and may, in turn, allocate funds to student clubs which present appropriate budget requests.

The Student Senate also serves as an advisory board to the president of the college, bringing matters of student concern to his/her attention and making recommendations which it believes will aid JCC in meeting its commitment to students. Representation is through a general student election on the Jamestown Campus and by petition on the Cattaraugus County Campus. Student government also serves as a vehicle to select students for service on various college-wide committees.

More information about the structure of Student Senate can be accessed in the Student Constitution available on the JCC website.
Clubs & Student Organizations

Student clubs and organizations provide opportunities for leadership development, networking, as well as interpersonal and career skills development outside the classroom. Clubs are student-driven and as such, new and returning clubs are asked to submit an annual charter to the campus life office on the campus on which they are based.

Each group must present a signed list of members, as well as evidence of a commitment from a JCC faculty or staff member to serve as the group’s advisor. Those wishing to obtain more information regarding clubs should contact the campus life office on the Jamestown or Cattaraugus County campuses or at the North County Center. A list of active clubs is available on JCC’s website.

Campus Activity Board

The Campus Activity Boards (CAB) on the Jamestown and Cattaraugus County campuses and at the North County Center serve as advisory boards to the campus life directors on social and cultural programming at JCC. Primarily utilizing student activity hours on Monday and Wednesday, CAB sponsors live performances and interactive activities throughout the academic year.

Students interested in the experience of planning and implementing programs which fulfill the social, cultural, and educational needs of the student body, faculty, staff, and administration should contact the campus life office on the Jamestown or Cattaraugus County campuses.

College Program Committee

To enrich the quality of the college experience for students, the College Program Committee sponsors events that will be attractive to the college community in as many areas of academic and curricular interests as possible. Speakers, performers, events, touring exhibitions, demonstrations, and films are brought to JCC annually. Membership on the committee is open to students, staff, and faculty with designated representatives from each group.

All events are offered free or at a reduced charge to FSA members, and at a nominal fee to the general public. Those wishing to obtain more information about the College Program Committee should contact the campus life office on the Jamestown or Cattaraugus County campuses.

Arts at JCC

JCC’s Jamestown Campus presents exhibitions, theatre productions, workshops, and guest speakers in the Robert Lee Scharmann Theatre, Sarita Hopkins Weeks Reception Hall, and Weeks Gallery. The spaces share a common lobby. The Weeks Gallery presents the work of significant artists and curates an annual student art exhibition. Each exhibition opening features an artist’s lecture, music, and a reception. The gallery’s art collection is displayed college-wide.

The Cutco Theater and the Louis A. and Patricia Magnano Reception Room on the Cattaraugus County Campus are the focal points for cultural programs, lectures, community meetings, and social events. The Weeks Gallery collaborates with the Cattaraugus County Arts Council to present visual arts exhibitions in the Center Gallery at the Cattaraugus County Campus.

Music

The music department presents numerous concerts each year featuring JCC students and/or regional artists. Various instrumental and vocal groups are available for credit each semester on the Jamestown Campus. These non-audition ensembles are directed by music faculty members. Music groups include jazz ensemble, concert band, college chorus, and rock ensemble.

Theatre

The Uncommoners present a musical and a drama production each year. Auditions are open to JCC students. Students interested in dramatics or in any of the crafts associated with theatre will find an opportunity to explore those avenues at the Jamestown Campus.

Theatre program encourages those who show a curiosity about the world of theatre to become involved in its activities. Students wishing to present theatre pieces are supported and encouraged to reach their objectives. Students involved in the theatre program may be eligible for the Robert Lee Scharmann Award.

Recreation, Intramurals, and Total Fitness

The purpose of intramural sports at JCC is to provide a comprehensive and varied program of both competitive and recreational experiences designed to meet the needs and interests of enrolled students and faculty/staff members. These programs also help develop lifelong interests and recreational habits. Intramural competition is offered in men’s, women’s, and coed sports and is provided in the form of leagues, tournaments, and/or special events each semester.

Team and individual sports activities are designed to accommodate all individuals, regardless of skill level and experience. Programs are based on student interest and availability of resources and facilities. Some popular activities include flag football, basketball, volleyball, and badminton. Many activities are structured so students, faculty, and staff members can participate together. Awards are presented to winning teams or individuals. Details on eligibility requirements and intramural and recreational activities are available at the Physical Education Complex on the Jamestown Campus and the campus life office on the Cattaraugus County Campus.

The JCC Total Fitness program on the Jamestown Campus provides an outstanding opportunity to participate in a multitude of activities. The Physical Education Complex houses 40,000 square feet of playing space with 11,950 square feet of multipurpose flooring to accommodate basketball, volleyball, and other activities. Other facilities include a free weight room; cardiovascular machines; complete Life Fitness center; batting cage and golf area; racquetball court; indoor running track; diving pool and swimming pools; two whirlpools; and a steam room. Recreation schedules are available at the Physical Education Complex front desk and online.

Cattaraugus County Campus students are entitled to use the fitness and recreational facilities at the Olean Family YMCA/JCC Physical Education Center. Located on Wayne Street, the center includes weight rooms, aerobic equipment, gymnasium, pool, and men’s and women’s locker rooms.

North County Center students are eligible to use fitness equipment in the gymnasium located in the main building and also have free access to Darwin’s Fitness Center in Fredonia with their student ID card.

Athletics

JCC believes that education involves body and spirit as well as the mind. Students at JCC participate in athletics for a variety of reasons which gives each student athlete an opportunity to take a real measure of himself or herself and to pursue a goal of excellence through personal discipline, striving, and hard work.

The Jamestown Campus Jayhawk program participates in intercollegiate competition in men’s and women’s basketball, soccer, golf, and swimming, women’s volleyball, and men’s baseball and wrestling. Jayhawk teams have gained regional and national recognition.

The Cattaraugus Campus Jaguar program provides opportunities for students to participate in intercollegiate competition in men’s basketball and golf and women’s soccer and softball.

JCC is a member of the Western New York Athletic Conference and Region III of the National Junior College Athletic Association.

Residential Life

JCC has three residence halls located on the Jamestown Campus. Hillside Suites provide housing for 340 students, and include suite style living and accommodations for students with disabilities. Each
fully furnished suite consists of four or five bedrooms, a common kitchen with dining area, common living space, and two bathrooms. Most bathrooms have a separate vanity area and bathroom/shower space. All bedrooms and common living areas within the suites are equipped for cable television and wireless Internet.

Utilities are included with the cost of the suites and residents are able to control their own heat and air conditioning within each suite. Each building provides free laundry, vending machines, and recycling areas and features a common space for activities. Hillside Suites are alcohol-, drug-, and tobacco-free.

Each building has secure access as well as live-in professional and para-professional staff members who provide support and unique opportunities that enrich residential students' experiences. Through personal interaction, programming, and connectivity to campus resources, staff members provide opportunities that develop citizenship and personal growth for the members of the residential community. As students pursue academic challenges they can also avail themselves of many support services, social activities, physical education facilities, and performances in close proximity to Hillside Suites.

**STUDENT RESPONSIBILITY & EXPECTATIONS**

JCC is committed to creating and maintaining an effective community of learners in which all can grow and develop. We look forward to interacting with you in a civil and respectful classroom environment that encourages dialogue, supports the acquisition of knowledge, and assists all students in meeting their academic and personal goals.

**Civility and Student Responsibility Statements**

JCC is committed to the highest standards of academic and ethical integrity, acknowledging that respect for self and others is the foundation of educational excellence. As such, we will cultivate an environment of mutual respect and responsibility. Whether we are students, faculty, or staff, we have a right to be in a safe environment, free of disturbance and civil in all aspects of human relations.

All JCC students are expected to take an active role in their learning by recognizing they are accountable for their academic success. Student responsibility is demonstrated when students make choices and take actions which lead them toward their educational goals. Responsible students take ownership of their actions by exhibiting the following behaviors. They:

- demonstrate academic integrity and honesty.
- attend and participate in classes, labs, and seminars, prepared and on time.
- complete the assigned work in a timely manner with attention to quality of work.
- avoid making excuses for their behavior.
- communicate in a careful and respectful manner with professors, peers, and other members of the college community.
- are engaged learners who dedicate sufficient time outside of class to college work.
- act in a civil manner that respects the college learning/social environment and complies with college policies outlined in the student constitution and college catalog.
- utilize college resources and seek help when needed.
- respect diverse ideas and opinions.
- identify, develop, and implement a plan to achieve their educational goals.

**Expectations of Students in the Classroom**

Your academic attitude is a major factor in your success at JCC. You share responsibility, along with your professor and other students, for creating a productive learning environment. This responsibility includes behaving courteously and respectfully toward your professors and your classmates and becoming self-disciplined in your learning. To create a productive college experience for you and all students, you should:

- **Attend class and pay attention.** Do not ask the instructor to go over material you missed by skipping class or not concentrating. If you have difficulty understanding the presented material, ask the instructor to assist you.
- **Not come to class late or leave early.** If you must enter late, do so quietly and do not disrupt the class by walking between the class and the instructor. Do not leave class early unless it is an absolute necessity. If you know you need to leave class early, sit near an exit and inform the instructor prior to class.
- **Not talk with other classmates while the instructor or another student is speaking.** If you have a question or comment, please raise your hand, rather than start a conversation with your neighbor. Others in the class may have the same question.
- **Show respect and concern for others by not monopolizing class discussion.** Allow others time to give their input and ask questions. Do not stray from the topic of class discussion.
- **Turn off electronic devices, including but not limited to: cell phones, pagers, beeping watches.** If, due to work or family obligations, you need to remain in contact, inform your instructor ahead of time and set the devices to be as unobtrusive as possible.
- **Avoid audible and visible signs of restlessness.** These are both rude and disruptive to the rest of the class.
- **Focus on class material during class time.** Sleeping, talking to others, doing work for another class, checking email, exploring the Internet, etc., are unacceptable and can be disruptive.
- **Not pack bookbags or backpacks to leave until the instructor has dismissed the class.**
- **Clear any visitors you would like to bring to class with your instructor ahead of time.**

**Your Rights as a Student**

As a student, you have the right to a learning environment free from distractions. If others in your classroom are engaging in behavior that interferes with your learning, bring the situation to the attention of your instructor. He or she is responsible for managing the classroom environment and determining the action that should be taken.

**Consequences of Inappropriate Classroom Behavior**

The instructor has the right and the responsibility to take appropriate action when he or she observes inappropriate classroom behavior. The form of intervention taken by the instructor will depend on the nature of the misconduct observed. The student constitution outlines the process to be followed and sanctions that may be placed on students who engage in various forms of misconduct.
Students have important responsibilities both in and out of the classroom. The student constitution addresses two key areas in which students have important responsibilities:

Academic Integrity - Providing an atmosphere that promotes honesty and free exchange of ideas is the essence of academic integrity. As members of the college community, students have an obligation to uphold high intellectual and ethical standards. Academic integrity includes adherence to codes of ethical behavior associated with all areas of study including specialized environments such as internships, fieldwork, and cooperative and clinical experiences. Students who violate the college’s policies on academic integrity will be subject to discipline by members of the college community.

JCC has an internal complaint system available to students who believe they have a grievance with the institution. For more information on the process, consult with the vice president of student development on the Jamestown Campus, the vice president’s office on the Cattaraugus County Campus, or the director at JCC’s North County Center.

Student Constitution
Students who enroll at JCC do so with the understanding that they have accepted the responsibilities for proper conduct both in and out of the classroom. The student constitution addresses two key areas in which students have important responsibilities:

- Providing an atmosphere that promotes honesty and free exchange of ideas is the essence of academic integrity. As members of the college community, students have an obligation to uphold high intellectual and ethical standards. Academic integrity includes adherence to codes of ethical behavior associated with all areas of study including specialized environments such as internships, fieldwork, and cooperative and clinical experiences. Students who violate the college’s policies on academic integrity will be subject to discipline by members of the college community.

CAMPUS SAFETY & SECURITY

Jamestown Community College is committed to assisting all members of our community in providing for their safety and security as they learn, work, and take advantage of the opportunities our campuses have to offer.

The campus safety office is located in the human resources suite in the Collegiate Center on the Jamestown Campus, located at 525 Falconer St., Jamestown, NY 147012. The campus safety and security director can be contacted at 716.338.1015 (office) or 716.490.0115 (cell).

Students’ and Employees’ Responsibilities
The cooperation and involvement of students and employees in a campus safety program is absolutely necessary. Students and employees must assume responsibility for their own personal safety and the security of their personal belongings by taking simple, common sense precautions. For example, although the campus is well-lighted, any student or employee, male or female, may feel more comfortable walking with a friend or contacting a member of the buildings and grounds department for an escort to their cars at night. Valuables should not be left where they can be seen in the vehicle, but should be locked in the trunk. Bicycles should be left in designated areas and locked. Students and employees should report any suspicious activity or unusual incident or individuals whom they feel do not belong on campus to the campus safety and security director as soon as possible.

Visitors on Campus
Visitors are welcome on campus and they are expected to abide by the same rules that apply to students. Action, including ejection from campus, may be taken against any and all persons who are present in or on college owned or used facilities for an improper purpose or purpose which, in the judgment of the college representative, is improper or interferes with or obstructs the functioning of the college or the normal processes or activities of the college. Children on campus must remain under the direct supervision of their parents or guardians. Any unsupervised or disruptive children may be detained by a college representative. The child’s parents will be contacted immediately and the child may be asked to leave the campus.

Safety and Security Policies and Procedures
JCC offers an open campus experience within its facilities at all locations. Campus buildings are open from approximately 7 a.m.-10 p.m., during which JCC students, faculty, and employees have access to academic, recreational, and administrative facilities. The general public can attend cultural and recreational events on campus, as well as access the libraries. Many events are advertised for the public at large and athletic facilities are periodically open to the general public.

JCC does not employ a security force. Security services are provided through a joint effort between staff and faculty and coordinated by the campus safety and security director. The building and grounds department maintains college buildings and grounds with a concern for safety and security. They inspect campus facilities regularly, make prompt repairs affecting safety and security, and respond immediately to reports of potential safety and security problems.

Minor crime incidents are investigated by the campus safety and security director who follows up with local law enforcement as appropriate. Serious crime incidents and felonies are reported to the appropriate police department depending on campus or extension center location.

Weapons are prohibited on JCC campuses. Intentional use, possession, or sale of firearms or other dangerous weapons on campus or college property by students and employees is strictly forbidden and is a violation of the college’s code of conduct.

The college has adopted a drug and alcohol abuse prevention program. Alcoholic beverages are not permitted on campus without the express approval of the vice president of administration.

Further information on JCC’s safety and security policies and procedures can be found at www.sunyjcc.edu/student-life-campus-safety. Information includes:

- JCC’s Sexual Offense Policy Statement
- Title IX of the Education Amendment Information
- Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act

Incident Reporting
JCC’s incident reporting system provides a means for anyone who has witnessed, or knows about, a crime committed on campus to anonymously report incidents. The system, which can be accessed at www.sunyjcc.edu from any computer or smart device, provides users an electronic option to report a wide variety of concerns or issues including crime, safety, and security issues. Once a report is submitted it is forwarded to the appropriate office for follow-up.

Crimes in progress or emergencies should be reported to 911. Safety and security incidents as well as past-tense crimes can be reported online or in person during business hours directly to the campus safety and security director by calling 716.338.1015 or...
716.490.0115. During evenings and weekends, incidents should be reported to the buildings and grounds department (Jamestown Campus, 716.490.0415; North County Center, 716.490.0477; and Cattaraugus County Campus, 716.490.0416).

**JCC’s Behavioral Intervention Team (BIT)**

The JCC behavioral intervention team is comprised of JCC faculty, staff, and administrators. They meet biweekly to discuss behavioral incidents and concerns occurring on campus; to discuss, plan, and implement intervention strategies; and consult with the vice president of student development regarding students who are at risk of concern. To respect confidentiality, meetings are closed to the college community. Members come to the team with experience in managing health, behavior, and safety aspects of the college experience and may therefore spot trends and set up early intervention services as they evaluate behaviors from a variety of college perspectives.

**JCC Alert**

JCC utilizes JCC Alert for emergency notification. JCC Alert enables JCC to provide a safer environment, enhance emergency preparedness, and keep our faculty, staff, and students better informed. Students, full-time faculty and staff, and others who have a JCC e-mail receive emergency alerts from JCC via text messages, e-mail, and voice notification.

Three types of messages are sent using JCC Alert: 1) messages sent to test that the system is functioning properly will be clearly identified as test messages. These test messages are sent out approximately twice a year. 2) Actual alerts about campus emergencies, closures, or delayed openings. 3) Important communications from the college.

JCC also uses other means of communication for emergency notification. Messages will appear on the JCC website and JCC Facebook page, as well as regional media outlets.

**Blue Light Phones**

JCC has strategically placed emergency blue light phones on campuses for use in the event of an emergency on campus when a person is unable to get to a phone. The blue light phones are a direct link to 911 operators who can dispatch the necessary emergency services required based on the information provided by the caller.

**Tobacco-Free Policy**

JCC joined a movement across the nation for college and university campuses to move toward being tobacco-free, which is in line with requests from the New York state commissioner of health and the State University of New York chancellor to promote all SUNY schools as tobacco-free.

As part of its commitment to healthy lifestyles, respect, and well-being, JCC became tobacco-free on August 1, 2014. After a thoughtful decision-making process among members of the JCC community and based on well-documented evidence that use of tobacco products poses significant health risks and that there is no safe level of secondhand smoke, JCC made the decision to prohibit smoking and the use of chewing tobacco and other tobacco products on all campus-owned grounds, including parking lots and residence halls.

JCC embraces the opportunity to make its environment the most respectful and healthiest for all students, employees, and visitors and offers smoking cessation information to those looking to quit.

**MSDSonline**

JCC maintains a comprehensive list of chemicals on campus that can be accessed via MSDSonline (also known as Material Safety Data Sheets or MSDS). MSDSonline is an online library of safety data sheets. Safety sheets contain information to keep JCC faculty, staff, and students safe from dangerous chemicals such as methanol, acetone, hydrochloric acid, and millions of other hazardous substances. Through MSDSonline, you can access information on all chemical products used at JCC.

**Campus Crime Statistics Disclosure**

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act is the landmark federal law, originally known as the Campus Security Act requiring colleges and universities across the United States to disclose information about crime on and around their campuses. JCC complies with these regulations by providing information relating to crime statistics to all current students and employees. Prospective students and employees are notified of its existence and afforded an opportunity to request a copy. JCC’s crime statistics can also be accessed at www.sunyjcc.edu.

During the 2014-2015 academic year, approximately 2,485 full-time and 883 part-time students were enrolled at JCC’s Jamestown and Cattaraugus County campuses and North County and Warren extension centers. JCC employs approximately 600 people across all locations and performs pre-employment criminal background checks on all new hires. JCC’s campus safety and security director will provide, upon request, all campus crime statistics as reported to the U.S. Department of Education. Further details about campus safety and security can be obtained from JCC’s campus safety and security director or at www.sunyjcc.edu/safety.
OTHER STUDENT SERVICES

Library Services

JCC has two full-service libraries - the Hultquist Library on the Jamestown Campus and the Cattaraugus County Campus Library in Olean. Networked workstations in each campus library provide easy access to the libraries' resources, the Internet, and Microsoft Office Suite.

JCC’s libraries are committed to supporting the mission of JCC as a student-centered institution which embraces academic excellence and meets the learning needs of the college and greater community. As a full partner in the teaching/learning process of the college community, the libraries work with students, faculty, and the community to develop critical thinking and lifelong learning skills.

The goals of JCC’s libraries are to:
- Acquire, produce, organize, and provide access to a collection of high quality resources which address the information needs of the college.
- Provide instruction and services to students, faculty, staff and the greater community in the effective use of learning resources.
- Seek and maintain partnerships that increase access to information, cultivate support for library collections and services, and strengthen the greater community.
- Provide an easily accessible, user-friendly, and safe environment that fosters teaching and learning for both library users and library employees.
- Contribute to the intellectual, cultural, and recreational pursuits of the college beyond the classroom.
- Evaluate on a continuing basis all library services and activities.

The JCC libraries share a commitment to “acquire, produce, organize, and provide access to a collection of materials which reflect the needs of the college.” The present print collections exceed 80,000 book and media titles. In addition, the libraries maintain a growing collection of online resources available through www.sunyjcc.edu/library.

Classrooms located in each campus library include workstations for hands-on instruction and research activities. Wi-fi connections enable students to work from laptops and other portable devices, adding flexibility to the use of library resources.

Students attending the college’s extension center in Dunkirk, NY are provided with library services and instruction through the Hultquist Library, the JCC libraries’ website, and the Ask Us 24/7 reference service. When visiting other SUNY campuses, all JCC students, faculty, administration, and staff are entitled to the same use of the campus library collection, and the same library services and facilities, as the library offers its own community, including borrowing privileges simply by showing their JCC student ID. This service is part of SUNY’s Open Access program. In addition, JCC students attending the Warren Center may take advantage of the resources and services at the Warren Public Library.

JCC’s libraries also participate in Academic Share, which provides students access to a number of private college libraries in the region.

Through participation in SUNYConnect, a joint initiative of the Office of Library and Information Services and the libraries of the 64 SUNY campuses, the JCC libraries are able to provide access to databases spanning the academic disciplines. Participation in SUNYConnect, as well as other consortial groups, allows JCC to provide a broader collection of information resources than would otherwise be possible.

A core component of SUNYConnect is ALEPH, a library management system that is used for both the administrative and research needs of each of the SUNY libraries. The JCC libraries adopted ALEPH in 2003. Its web-based catalog provides a simple searchable interface for identifying resources available in the JCC libraries’ collections.

The Hultquist Library and the Cattaraugus County Campus Library maintain periodical collections in both print and electronic formats. JCC’s libraries currently subscribe to more than 85 cross-disciplinary databases that provide full-text access to nearly 40,000 journals, magazines, trade publications, newspapers, and eBooks. Using their JCC logins, JCC students, faculty, administration, and staff can connect to the JCC libraries’ online resources from any Internet-connected computer, regardless of time or location.

In addition to providing access to a broad collection of print and online resources, the JCC libraries provide interlibrary loan services (ILL) via the OCLC Resource Sharing and Delivery network. ILL allows library users to borrow materials not owned by the JCC libraries from libraries throughout the world.

JCC’s libraries provide full reference service to assist all patrons with research, database searching, and in locating materials on the library shelves. The reference staff provides assistance through one-on-one instruction, classroom instruction, workshops, and via e-mail or telephone. The reference librarians also maintain a growing collection of instructional guides on the JCC libraries’ website and LibGuide collection (sunyjcc.libguides.com).

In addition, Ask Us 24/7 provides reference service 24 hours a day, 365 days a year.

The JCC libraries actively participate in a number of college-wide events as well as host several library-related events throughout the academic year. Students are encouraged to follow the JCC libraries’ blogs and Facebook page for announcements about upcoming library events and activities.

Manufacturing Technology Institute - Jamestown

The Manufacturing Technology Institute on the Jamestown Campus is a partnership between JCC and the Manufacturers Association of the Southern Tier. MTI focuses on the development and provision of training to support advanced manufacturing in the region. MTI houses several of the college’s accredited educational programs such as industrial equipment technology, mechanical technology, machine tool technology, and welding technology, as well as non-credit industry specific customized training programs.

MTI’s mission is to provide services to businesses and individuals in the region in the form of hands-on manufacturing technical training and technology assistance.

MTI’s vision is to be the premier manufacturing skills training provider in the region. MTI works in cooperation with the public and private education system to define and implement a clear pathway of manufacturing technology training from grade school to a graduate degree. MTI builds partnerships with both public and private sectors to support this vision.

Manufacturing Technology Institute - Olean

The Manufacturing Technology Institute on the Cattaraugus County Campus in Olean will be completed in 2016. The facility will be used to educate students in advanced manufacturing programs and processes and will feature classrooms, specialized training space for machining and other industrial skills, light duty labs, and a computer-aided design lab.
Continuing Education
JCC’s Center for Continuing Education, with full service offices in Jamestown, Dunkirk, and Olean, offers a broad spectrum of programs and services that JCC offers to its communities. It provides the public with an open door to lifelong learning opportunities in higher education, professional and vocational advancement, personal development, and cultural enrichment.

Through its Center for Continuing Education, JCC administers a diversified program that includes professional certifications, job-related skill development, and personal enrichment opportunities. Modestly priced seminars and workshops of varying lengths are open to people of all ages. Programs are offered year-round at times convenient for adults. Numerous online courses and programs are also available.

In addition to regularly scheduled public offerings, the Center for Continuing Education at JCC’s campuses and extension centers administers numerous programs designed to serve specialized groups in the community. These are offered in cooperation with and often at the request of industries, governmental agencies, businesses, labor, and professional associations.

Continuing Education Units
JCC offers Continuing Education Units (CEUs) for approved professional credit-free courses offered through the Center for Continuing Education. The CEU is a nationally recognized unit of measure for professional development used for career advancement. Each CEU is defined as 10 contact hours in an organized continuing education experience.

Customized Training
The Center for Continuing Education acts as a liaison between JCC and area businesses bringing both college and community resources together to meet the needs of business for training and technical assistance. Training needs assessment and customized skills development programs are provided to employees at all levels from entry to upper management. Technical assistance is available to help companies improve processes to remain competitive. Staff also assists companies to secure grant funds to support costs for training and technical services.

Extension Centers
JCC offers credit and credit-free courses at its extension centers. The North County Center has a “full service” office where students can receive academic and career counseling and financial aid information, do placement testing, and register for any JCC course regardless of where it is offered. Customized training and small business counseling services are available at the North County Center.

In addition to credit courses, the Warren Center also offers non-credit courses in personal enrichment, professional development, skill upgrades, and business and customized training.

Youth Programs
Courses oriented to youth are available at the Jamestown and Cattaraugus County campuses and North County Center. Individual courses and all-day camps are available, depending on the site. Examples include the popular Kids’ College for ages 8-12, Wee/ Junior Kids’ College for ages 6-7, Tweens to Teens for ages 10-14, Innovation Academy for ages 11-14, and other programming as appropriate.

Personal and Professional Enrichment Courses
Throughout the year JCC offers many short, non-credit courses in professional development, customer service, computer applications, basic skills, technology, and personal enrichment. Online courses are also available. Contact the Center for Continuing Education at any of its locations or visit www.sunyjcc.edu/continuing-education for a current course listing.

Small Business Assistance
The Small Business Development Center provides management and technical assistance to start-up and small businesses. For additional information contact the SBDC at 716.338.1024 or visit www.sunyjcc.edu/continuing-education/small-business-development-center.

Upper Division Courses
The Communiversity at JCC
The Communiversity at JCC is an alliance of regional colleges and universities making select associate, bachelor’s, and master’s degrees accessible to individuals in Chautauqua and Cattaraugus counties while providing the caring environment and individualized attention that has been a hallmark of JCC for over 60 years.

Programs are delivered online, through interactive television, or face-to-face at a JCC location.

Current Communiversity programs and partners include:
• Alfred State College: Technology Management (B.B.A.), Nursing (B.S.), Court Reporting (A.A.S.)
• Daemen College: Nursing (B.S.)
• Empire State College: bachelor’s degrees in 11 areas of study
• Medaille College: Health Information Administration (B.P.S.), Homeland Security (B.P.S.), Information Systems (B.B.A.)

Complete information is available at www.sunyjcc.edu/communiversity.
ACADEMIC INFORMATION

Academic Affairs Mission Statement
Our mission is to prepare students for successful employment, transfer, and life-long learning. We equip students with the knowledge, skills, and attitudes necessary to succeed in their professional endeavors, and to lead in service to their communities.

Enduring Values
To achieve our mission, we pursue goals and activities within a framework of shared values which serve as a touchstone for our decision-making, and which form the foundation for assessment of our effectiveness in achieving our goals. We value:
- Excellence in all endeavors.
- Evidence-based assessment of progress towards goals.
- Continuous improvement.
- Personal responsibility for one’s roles in the learning environment.
- Recognition and reward for outstanding accomplishments.
- Partnerships of varying types which advance goal achievement.
- Effective use of technology to support learning.

Policies
The academic policies and regulations adopted by JCC are designed to maximize each student’s opportunity for success and to provide the student with a fair and realistic assessment of his/her progress. Essentially, JCC’s approach is a positive one, based on reward for achievement rather than penalty for failure.

Attendance
Every student is expected to attend all lecture and laboratory sessions for which he or she is registered. Absences will be recorded by instructors, and the student will be held responsible for making up all work missed. Attendance requirements for each course will be established by the instructor and announced, published, and distributed with the course outline at the first class meeting.

Course Withdrawal
A student can withdraw from a single course up to and through 66% of individual class meetings for the fall and spring semesters and receive a “W” grade. During a summer session, a student can withdraw through the last day of instruction and receive a “W” grade. A student who wishes to withdraw from a single course must discuss the withdrawal with his/her instructor and obtain the instructor’s approval in writing (via email is acceptable for online students). On-campus students can obtain a withdrawal card online at www.sunyjcc.edu, from the registrar’s office, the Counseling and Career Planning Center in Olean, or from the main office at any of the extension sites. The student must fill out the card and obtain the instructor’s signature on the card to indicate the student has discussed his/her withdrawal with the instructor. If the instructor is unavailable, the student should see a dean for approval, preferably the dean of that academic area.

Signed withdrawal cards must be submitted to the registrar’s office. Failure to withdraw properly from a course will result in the student receiving the grade he/she earned in the course.

Military Withdrawal Policy
There shall be no tuition or fee liability established for a student who withdraws to enter military service or is called into active duty prior to the end of an academic term for those courses in which the student does not receive academic credit. A grade of “W” shall be recorded on the student’s transcript for each class in the affected semester. If a student is forced to relocate due to the orders of an active duty family member, the same conditions will hold true.

Note: The term “military service” means full-time active duty in the Army, Navy (including Marine Corps), Air Force, Coast Guard of the United States, or qualifying National Guard duty during a war, other military operation, or national emergency as defined in Section 5 of the Higher Education Relief Opportunities for Students (HEROES) Act (Public Law 108-76).

Enlistment under a delayed enlistment plan does not constitute “full-time duty” until the student is required to leave school on the effective date of active duty as stated in the student’s or family member’s orders.

A student who is a member of a National Guard, Army, Navy, or Air Force Reserve unit who is not called up for duty as defined above, is entitled to a refund only if in the judgment of the college’s business office the student is unable to attend classes due to hardship beyond the student’s control and the student has made bona fide efforts to permit continued class attendance. Documentation of membership on active duty in the military service shall be provided to and retained by the business office as part of the appeal process. In the event that a refund is granted to a student in National Guard or reserve status, documentation of the reasons for such action shall be in writing and retained by the campus.

Military personnel withdrawing from any program or term because of changes of assignment beyond their control and upon proper certification of such change from a base education service officer or other appropriate military official shall be deemed to have incurred no liability for tuition and fees due from the student, as opposed to tuition and fees paid by the federal government on the student’s behalf (to which federal regulations on return of such funds apply.)

A student who is called for short-term deployment should discuss how course work will be completed with his/her instructors before leaving for duty. The option of an I (incomplete) grade, which is given at the end of the semester, can be discussed at this time. The student must not be forced to withdraw from the course or be given a failing grade because of the time missed. The student has the option to withdraw from the course without financial penalties.

Credit/Fail
Students may elect to take one course per semester graded on a credit/fail basis (in addition to those courses normally graded on a credit/fail basis). No more than 16 credit hours taken on a CR/F basis may be applied toward an associate degree. Students should avoid using the CR/F option in their major field of study. The student must inform the registrar’s office at the beginning of each semester of his/her desire to take the course on this basis. Upon the completion of the proper form, the registrar will notify the instructor of the student’s choice.

The student will have a period of up to 33% of individual class meetings to decide on the credit/fail option. The student retains the right to return to the standard letter grade system in that course at any time up to and through 57% of individual class meetings.

The “F” grade is reflected in the computed grade point average while the “CR” grade is not.

General Policies
Courses and programs listed in this catalog are offered whenever there is evidence of sufficient student enrollment. Since some courses require highly specialized faculty and facilities, scheduling may be limited by their availability.

Students are considered to be full-time when they are registered for 12 or more credit hours per semester. Students will be permitted to register for more than 19 credit hours only with special permis-
tion of the vice president of academic affairs, the vice president of student development, the vice president of the Cattaraugus County Campus, or the appropriate academic dean.

A credit hour is normally equivalent to one hour per week of lecture or two hours or three hours per week of laboratory/studio work taken during a 16-week semester (inclusive of final exam work).

Students are advised to plan an average of two hours of preparation per week for each credit hour of course work. Students registered for 12 or more credit hours are strongly urged not to consider outside employment requiring more than 15 hours per week.

Sophomore status has been achieved when the student has accrued 26 college level credits.

**Issuance of Official Transcripts**

A student may request in writing that the registrar’s office send an official transcript of his/her record directly to another college or to a prospective employer. All official transcript requests must be signed by the student. Students may request unofficial copies of their transcripts for personal use from the registrar’s office. Allow up to 48 hours for processing of an official transcript. Students requesting six or more transcripts at one time should allow at least five business days for processing. No fee is charged for transcripts.

**Repeating a Course**

When a student wishes to raise his/her grade and average by repeating a course, his/her highest grade will be used in the computation of his/her grade point average. Only the number of credit hours offered in that course for one particular semester will be used in the computation of total hours and GPA for graduation. Repeating coursework may impact financial aid eligibility. Students who anticipate repeating a course should check with the financial aid office.

**Special Audit Tuition Waivers**

The State University of New York chancellor has delegated to the campus president authority to determine who may attend courses as auditors and to establish rules and regulations concerning such course auditors.

JCC’s tuition waiver procedure is consistent with the established SUNY rules and regulations concerning course auditors. Protocol for special audits is as follows:

- Special auditors must be 60 years old or older.
- They may begin registering the day the class begins.
- Special audits are accomplished on a space available basis. In some cases, instructor permission cards may be used.
- The instructor sets the expectations for the audit grade.
- No tuition is charged, but the special auditor pays technology fees, Open SUNY fees (if applicable), and any course-related fees.

While students 60 years old or older are permitted to take a course as a special auditor on a space available basis, persons taking the course for credit will receive priority. Special auditors will not receive college credit or formal recognition. Upon successful completion of the course, a grade of SA will be recorded on the student’s transcript. A grade of SX can be assigned if the student fails to meet the instructor’s expectations. A grade of SW is assigned if the student withdraws from the course.

**Grading**

**Grading System**

The following grading system is in effect at the time of publication of this catalog:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Meaning</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>B+</td>
<td>Above Average</td>
<td>3.5</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2.5</td>
</tr>
<tr>
<td>C+</td>
<td>Average</td>
<td>2.0</td>
</tr>
<tr>
<td>D+</td>
<td>Below Average</td>
<td>1.5</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Administrative Withdrawal</td>
<td>None</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>Special Audit</td>
<td></td>
</tr>
<tr>
<td>SW</td>
<td>Special Audit Withdrawal</td>
<td>None</td>
</tr>
<tr>
<td>SX</td>
<td>Special Audit Administrative Withdrawal</td>
<td>None</td>
</tr>
</tbody>
</table>

Other historic grades may appear on a student’s transcript. Contact the registrar’s office for an explanation of any grade that does not appear in this catalog or on the transcript legend.

**AU - Audit - No Quality Points (Q.P.)**

A student wishing to audit a course must obtain permission from the instructor to do so. Students may enroll to audit a course at the time of registration or change from regular grading system to audit by the last day of the fifth week (33% of individual class meetings) of the semester with permission of the instructor. The instructor sets the expectations for the audit grade. Generally, the student is expected to attend all classes, but is not required to complete examinations, papers, and other class projects. No credit is awarded for the audit grade and the grade of AU will be recorded on the student’s transcript. An “X” grade can be assigned if the student fails to meet the instructor’s expectations. Audit forms are available at the registrar’s office on the Jamestown Campus, the Counseling and Career Planning Center on the Cattaraugus County Campus, and at JCC’s extension sites. Students auditing courses will pay full tuition and fees other than those associated with matriculation and graduation.

**CR-Credit (see Credit/Fail Policy) - No Q.P.**

**I - Incomplete**

The “I” grade is a student initiated grade subject to the approval of the instructor, taking into account the circumstances under which the Incomplete is requested. Arrangements to make up incompletes will be contracted between students and faculty, and the student must complete course requirements within a mutually agreed upon time, which may not exceed one calendar year. Failure to do so will result in an “F” grade. This student/faculty agreement must take place and be filed with the registrar prior to the date listed on the student instructional calendar under “Grades Due.”

Students are not granted an incomplete grade in lieu of an “F” grade. The intention of the “I” grade is to allow for students to complete course requirements after the conclusion of a semester without attending subsequent offerings of the same course.

**SA - Special Audit - No Q.P. (See Special Audit Tuition Waivers)**

**W - Official Withdrawal - No Q.P.**

Students may officially withdraw from a course up to and through 66% of individual class meetings and receive a “W” grade. During a summer session, a student can withdraw through the last day of instruction and receive a “W” grade. All students have the privilege, through appropriate procedure* (see below), of totally withdrawing from the college through the last day of instruction of the current semester and receiving a grade of “W.” A student may not withdraw from a course which has already ended.

**X - Administrative Withdrawal - No Q.P.**

The administrative “X” grade will be used for lack of attendance or maintaining enrollment requirements, including but not limited to: financial dismissals, non-compliance health dismissals, and failure to complete an “AU” course. If an administratively withdrawn student is allowed to return to class before the end of the semester, faculty will have the option of changing the “X” to a standard grade. A full-time student who receives all “Xs” must reapply for admission to JCC.
Total Withdrawal - *A full-time student desiring to withdraw totally from JCC may officially do so through the counseling cen¬ter (without seeing each faculty member separately). A "W" grade will be recorded on the transcript. Without withdrawing of¬ficially, an "F" grade will be recorded. Any full-time student who officially withdraws is withdrawing from JCC and must reapply for admission should he/she desire to return. Withdrawal forms are available online at www.sunyjcc.edu or at the registrar’s office on the Jamestown Campus, the Counseling and Career Planning Center on the Cattaraugus County Campus, and at JCC’s exten¬sion sites.

Grade Appeal
A student who believes that he/she has been graded unjustly or who wishes to present evidence of extenuating circumstances may appeal to the academic standings committee for review of his/her case within one year after the grade has been assigned. Grade appeals must first be considered at the instructor and division levels. Following a thorough review of all written documentation, it is at the committee’s discretion to request a meeting that includes the student and applicable members of the faculty and college.

Grade Point Average
Each student’s academic standing is based on the average of all grades earned, as determined by his/her Grade Point Average (GPA). The GPA is determined by dividing the total number of quality points by the number of credit hours undertaken in courses for which a letter grade has been assigned. No quality points are given for courses in which a grade of CR is received, although credit hours for such courses will be included in the compilation of hours needed for completion of degree or certificate requirements. Neither credit hours nor quality points are earned for courses in which the grade “I” is recorded. Grades of “I” (incomplete) must be removed by the end of one calendar year, or earlier if specified by the instructor, or they will be replaced by an “F”.

Neither credit hours nor quality points are earned for courses in which grades of I, CR, AU, W, X, SA, SW, or SX are recorded.

Academic Standing
The academic policies of the college are carried out by the academic standings committee which meets regularly to review student progress, recommend policy changes, and review students for probation or dismissal.

Satisfactory Academic Progress
Because graduation from JCC requires 60 semester hours with a cumulative grade point average of 2.00, the academic standings committee directs the registrar to identify at the end of each semes¬ter students who have attempted six credit hours or more and have a cumulative grade point average or number of hours completed which is less than those shown on Academic Progress Chart A.

Any student identified as not meeting these minimal standards will be considered as not making satisfactory progress and will be placed on academic or progress probation. Academic probation is deficiency in cumulative grade point average. Progress probation is deficiency in hours earned only. Academic probation supersedes progress probation. For students enrolled in credit courses spring 1997 and thereafter, whose last hours attempted at JCC were five or more years ago, the “W,” “X,” “NC,” or bankruptcy hours earned five or more years prior to the semester being reviewed will be excluded for progress probation. Once identified, these hours are permanently removed from progress probation consideration.

A student on academic probation will continue to be on academic probation or may be dismissed if either the semester GPA, or the cumulative GPA, remains below the required standards in sub¬sequent semesters. Dismissal is at the discretion of the academic standings committee, which will consider the status of each student based upon current grades and academic history. A student on progress probation will continue to be on progress probation as long as hours earned remain below the required standards in subsequent semesters.

Students placed on progress probation because of a deficiency in “hours earned” have the opportunity to appeal their probation status to the academic standings committee.

Students have the right to appeal any academic standings decision. First, they may appeal in writing to the academic standings committee within a period of time specified in a letter that is sent to students when a decision is rendered. Following a thorough review of all written documentation, it is at the committee’s discretion to request a meeting that includes the student and applicable members of the faculty and college. After the committee decides on the appeal, students have the right to further appeal to the vice president of academic affairs.

The first time a student is placed on either probation, the student retains federal financial aid eligibility. However, if the student fails to meet satisfactory quality point average standards or hours earned standards a second time, eligibility for federal financial aid is lost until the student can again demonstrate satisfactory academic progress in both areas. Students who lose financial aid eligibility may, under special circumstances, receive a waiver in order to receive federal aid. Information about the waiver process can be obtained in the financial aid office.

Upon review of records, the committee reserves the right to waive probation status when it deems the circumstances warrant such a waiver.

Warning Status
Warning status is defined as:

<table>
<thead>
<tr>
<th>Credit hours attempted</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I 1-23</td>
<td>0.0 to 1.75</td>
</tr>
<tr>
<td>Category II 24-41</td>
<td>0.0 to 1.99</td>
</tr>
</tbody>
</table>

A student will be warned if his/her semester or cumulative grade point average falls in the above range for a given semester.

Warning status denotes students who are above but close to the college’s minimum standards for satisfactory academic progress (see Satisfactory Academic Progress/Probation chart).

Appeal of Dismissal
A student who believes he/she has been dismissed unjustly or who wishes to present evidence of extenuating circumstances which may have contributed to his/her dismissal may appeal directly to the academic standings committee for a review of his/her case. Such appeal must be made in writing to the committee one week after notification of dismissal has been received. Following a thorough review of all written documentation, it is at the committee’s discretion to request a meeting that includes the student and applicable members of the faculty and college. A student readmitted to JCC is given one semester in which to satisfy the college’s policy of aca¬demic progress. Readmitted students may be limited in the number of credits in which they are permitted to enroll, and may also be required to participate in counseling or other educational assistance programs.

Imputed Credit
The faculty and administration have determined that some courses listed in this catalog may not be counted toward degree programs offered by JCC. These are developmental courses for students who need to prepare themselves for college level work. Courses listed in this category carry imputed credit and are designated as “IC”. Courses carrying imputed credit will count toward financial aid requirements.

The following imputed grade designations were in place at the
time of the publication of this catalog:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Meaning</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>Excellent</td>
<td>0.0</td>
</tr>
<tr>
<td>IB+</td>
<td>Above Average</td>
<td>0.0</td>
</tr>
<tr>
<td>IB</td>
<td>Above Average</td>
<td>0.0</td>
</tr>
<tr>
<td>IC+</td>
<td>Average</td>
<td>0.0</td>
</tr>
<tr>
<td>IC</td>
<td>Average</td>
<td>0.0</td>
</tr>
<tr>
<td>ID+</td>
<td>Below Average</td>
<td>0.0</td>
</tr>
<tr>
<td>ID</td>
<td>Below Average</td>
<td>0.0</td>
</tr>
<tr>
<td>IF</td>
<td>Failure</td>
<td>0.0</td>
</tr>
<tr>
<td>II</td>
<td>Imputed Incomplete</td>
<td>None</td>
</tr>
<tr>
<td>ICR</td>
<td>Imputed Credit</td>
<td>None</td>
</tr>
<tr>
<td>IW</td>
<td>Imputed Withdrawal</td>
<td>None</td>
</tr>
<tr>
<td>IX</td>
<td>Imputed Administrative Withdrawal</td>
<td>None</td>
</tr>
</tbody>
</table>

Other historic grades may appear on a student’s transcript. Contact the registrar’s office for an explanation of any grade that does not appear in this catalog or on the transcript legend.

Graduation Requirements

To graduate with an associate degree from JCC all students must have earned a cumulative average of 2.0 or better in at least 60 credit hours of appropriate coursework as described by the Board of Regents of the State of New York and must have met the specific requirements of a degree program in place at the time of their first enrollment or any subsequent set of requirements. Requirements for subsequent degree/requirements are based on matriculation date.

If a student transfers in appropriate credits toward an associate degree, a minimum of 30 JCC credits is required to complete a degree. Students graduating in a certificate program must complete all courses listed in the certificate with a minimum 2.0 cumulative average. If a student transfers in appropriate credits toward a certificate, a minimum of 15 JCC credits is required to complete a degree.

A student who is nearing completion of degree or certificate requirements must make formal application for the degree or certificate by completing the appropriate form at the registrar’s office on the Jamestown Campus, the counseling center on the Cattaraugus County Campus, the main office at the North County Center, or online at the JCC website or Blackboard. The form should be completed five weeks prior to graduation. Failure to do so may result in not being included in the final review of candidates and in the awarding of degrees and certificates at commencement exercises.

Earning Additional Degrees and/or Certificates

A student interested in earning a second or subsequent degree must complete the admissions reapplication online at www.sunyjcc.edu. Students pursuing additional degrees will follow the degree requirements for the new degree program as listed in this catalog at the time of matriculation into the new program. For each additional degree, students must complete the minimum number of credit hours listed in the table below with an overall GPA of 2.0 or better. Additional certificates are earned upon the completion of the certificate requirements. For each additional degree or certificate, a $20 fee is charged to cover the cost of additional diplomas and diploma covers.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Minimum hours and GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second degree</td>
<td>90 hrs. with an overall GPA of 2.0 or better</td>
</tr>
<tr>
<td>Third degree</td>
<td>120 hrs. with an overall GPA of 2.0 or better</td>
</tr>
<tr>
<td>Fourth degree</td>
<td>150 hrs. with an overall GPA of 2.0 or better</td>
</tr>
</tbody>
</table>

Replacement Certificate, Degree Diploma Charges

To replace an original diploma for a certificate and/or degree, these charges apply: $5, diploma only, and $10, diploma and cover, plus a mailing charge.

JCC General Education Requirements

To be successful in work and life, graduates need a wide range of skills and knowledge in addition to those required for their chosen specialization. General Education equips students to think critically, communicate effectively, understand ideas that shape society, and develop a solid foundation for lifelong learning. General Education requirements are the foundation for all degrees offered at JCC.

Core Elements

JCC’s program of general education includes several distinct and important elements. Graduates of JCC must meet the following general education requirements in order to receive a degree:

- Appropriate liberal arts and sciences courses for the degree sought.
- Completion of English 1530 (3 credits).
- Completion of three additional credits of college-level writing as specified for each degree.
- Completion of three credits of college-level mathematics.
- Completion of at least three additional hours of math/science beyond the required college-level math course.
- Completion of six credits of social sciences.
- Graduates who matriculate in a program for the first time beginning fall 2008 or thereafter are required to complete at least one course that has been designated as incorporating study of values, ethics and diverse perspectives (VEDP). This skill involves developing an awareness of the diversity of religious, political, ethical, and social perspectives in our society and world.
- Graduates who matriculate in a program for the first time beginning fall 2010 or thereafter are required to include in their degree programs at least one course that has been designated as incorporating study of scientific reasoning (SR). Scientific reasoning involves the ability to understand and appreciate the methods scientists use to explore natural and/or social phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis.

VEDP and SR courses can be found in the master schedule of courses issued each semester and may be identified by using the list of attribute types when searching for courses online at https://banner.sunyjcc.edu.

Additional Competencies

In addition to the requirements listed above which are incorporated into specific courses, the college also expects each degree holder to demonstrate several other competencies which are infused across courses.

Information literacy/management skills - Students are expected to find, understand, evaluate, and use information in various forms. These skills are acquired in a variety of ways and in a range of courses.

Critical reasoning - Students will identify, analyze, and evaluate arguments as they occur in their own and others’ work and will learn to develop well-reasoned arguments.

Technological competency appropriate to the discipline - This competency requires students to possess the knowledge and skills to successfully and efficiently apply computer and other discipline-specific technology as individuals, students, employees, and citizens. Some elements of technological competency are infused across courses; in addition, each program of study determines what additional technological skills are essential for graduates of its program area, and incorporates those skills into required coursework.

SUNY General Education Requirements

The SUNY General Education Requirement (SUNY GER) is the 30-credit requirement for all SUNY baccalaureate, A.A., and A.S. degree recipients, which supports academic excellence as well as student choice, mobility, and degree attainment by expect-
ing students to demonstrate achievement of SUNY-wide learning outcomes.

Students matriculating between fall 2010 and spring 2015 were encouraged to complete 30 credits of SUNY GER courses in at least seven of the 10 SUNY content categories, but were not required to do so. Students matriculating in fall 2015 or after and graduating with an A.A. or A.S. degree must complete 30 credits of SUNY General Education courses that are distributed among at least seven of the 10 SUNY content categories. Mathematics and basic communication must be among the seven categories. Exceptions to this policy will be noted on the appropriate academic program description page.

Consult JCC’s credit course schedule or https://banner.sunyjcc.edu for the current list of approved SUNY GER courses.

Writing Across the Curriculum

JCC’s faculty have long understood the mutual relationship between knowing and writing. This relationship is the basis for JCC’s Writing Across the Curriculum policy, which calls for instructors to use writing as a teaching tool in courses from all disciplines, including those in nursing, psychology, Spanish, criminal justice, economics, and occupational therapy assistant, as well as in such traditional writing courses as literature and philosophy.

Teachers respond to a student’s writing in many ways: face-to-face conferences, referrals to the tutoring center, creation of peer-editing sessions or discussions in class, and marginal notes. Revision is taught as a way to reexamine the subject or to deepen and enrich one’s understanding and expression.

JCC’s Writing Across the Curriculum policy commits students and faculty to the most authentic and valuable kind of higher education.

Awards & Honors

Dean’s List, Other Honors

In February and June of each year, the dean’s lists are issued to recognize full- and part-time students who have achieved outstanding academic success. The names of all full-time students who have earned a GPA of 3.5 or better in 12 or more credit hours (not counting imputed credits) of work completed during the preceding semester are included on the dean’s list. The names of all part-time students who have earned a GPA of 3.5 or better in 6-11 credit hours of work completed during the preceding semester are included on the part-time student dean’s list. CR and imputed credits are excluded.

At commencement, the JCC board of trustees honors outstanding graduates who have been full- or part-time students and who have achieved the highest scholastic standings in each of the three associate degree areas with 60 or more credits earned at JCC. Students who have earned highest honors (4.0 GPA), high honors (3.5 to 3.99 GPA) and honors (3.25 to 3.49 GPA) in all courses at JCC have this noted on their transcripts.

JCC also recognizes special achievements in scholarship, athletics, service, and leadership at annual awards ceremonies. Traditionally, about 100 awards are presented at these events.

Phi Theta Kappa

Each year a number of students are nominated for membership in Phi Theta Kappa, a national honor society for two-year colleges. For many years Phi Theta Kappa has been the most prestigious national honors group to which a community college student can belong. Nominated students must have a GPA of at least 3.5, completed at least 15 credit hours which are applicable toward a degree and contribute to a student’s GPA, and be recommended by at least two faculty members.

Transfer Information

A majority of JCC graduates transfer as juniors to four-year colleges and universities throughout the United States. The Associate in Arts and Associate in Science degrees are designed for transfer and represent the first half of a baccalaureate education. While Associate in Science degrees were not originally intended for transfer, some are now transferable.

Students interested in transferring to another college or university after completing a degree program at JCC are urged to engage early in a planning process with a JCC counselor or advisor. Most four-year schools require a minimum cumulative grade point average of 2.0 (C), and some schools and degree programs require a higher average. Students should check the requirements of transfer institution(s) prior to application.

Transfer & Other Special Agreements

JCC has signed specific transfer articulation agreements with numerous four-year colleges and universities for many of its degree programs. The purpose of these agreements is to identify JCC courses that meet degree requirements at the transfer institution, and to facilitate the transfer process.

Most of the agreements guarantee acceptance of JCC students who meet requirements specified by the various four-year schools. Most also guarantee junior status and the opportunity to complete a bachelor’s degree with four semesters at a transfer school, and several are dual admission agreements that simultaneously admit a student to JCC and to a bachelor’s, master’s, or doctoral degree program at the transfer school.

These transfer agreements are too numerous and too detailed to include in this catalog, and new agreements are negotiated each year. All transfer agreements are on file in the counseling centers at the Cattaraugus County and Jamestown campuses, North County Center; and in the office of the vice president of academic affairs. Divisional offices maintain files of transfer agreements appropriate to their disciplines, and all transfer agreements are available online at www.sunyjcc.edu/transferring-from-jcc/transfer-agreements.

Students are encouraged to examine those agreements in which they have a specific interest. Transfer agreements are updated on a regular basis to reflect changes made in the curriculum at JCC or the transfer institutions. Transfer counselors at all JCC sites are knowledgeable about these agreements and are fully prepared to assist students in the transfer process.

JCC also has “one-plus-one” arrangements for transfer to several two-year degree programs at the SUNY College of Technology at Alfred (Alfred State) and the SUNY College of Environmental Science and Forestry - New York State Ranger School at Wanakena. In addition, JCC continually works to develop special agreements that meet the needs of students and the community in other areas such as radiologic technology and pharmacy.

Academic Statistics

Adjunct Faculty

Of the total credit hours taken by students at JCC in fall 2013, 45.6% were taught by full-time faculty. The other 54.4% were taught by adjunct faculty.

Graduate Job Placement

A total of 56% of 2012-13 JCC graduates with Associate in Applied Science degrees responding to a survey indicated they were employed full-time. Of those responding, 78% said their current occupation is highly related to their JCC degree area and 98% said JCC prepared them for their positions in the workforce (64% indicated “very well,” 34% noted “adequately”).

In the same survey, 95.1% of full-time transfer students responded that JCC prepared them for continuing their education. Of the
respondents, 66.0% indicated JCC had prepared them “very well” and 29.1% said “adequately.” Also, 84.5% of the full-time transfer students are studying in a program related to their JCC program.

Retention and Graduation Rates
Current retention and graduation rates are updated and published in the credit course schedule each semester.

Special Academic Programs
Developmental Studies Program
Full-time students who place into the Developmental Studies Program will find a learning community to meet their unique needs. Selected English, mathematics, and human development faculty work closely with Developmental Studies students to help them attain the skills they need to succeed in college. Students will also find support in the connections they make with other students in the program.

College Connections: College Courses in High Schools
As part of its College Connections program, JCC offers courses in over 40 area high schools. High school students who qualify for the program are able to choose from among several courses that are completed for both high school and college credit. To date, thousands of students have received college credits prior to high school graduation. College Connections credits may be used at JCC or easily transferred to most other colleges and universities.

Courses are taught by high school teachers who meet JCC’s adjunct instructor qualifications. All courses are offered in high schools throughout Chautauqua, Cattaraugus, and Allegany counties, and some are available over the BOCES Interactive network as distance learning (DL) courses. JCC faculty oversee course development and ensure that a quality, college-level educational experience is provided. The program is accredited by the National Alliance of Current Enrollment Partnerships (NACEP).

For additional information, contact the College Connections program director.

College-Level Examination Program (CLEP)
CLEP is a national program of credit-by-examination sponsored by the College Entrance Examination Board. CLEP exams allow a person to receive college credits for knowledge gained in a wide range of subjects.

The 33 CLEP exams cover material that is taught in introductory level courses and specific subject areas at many colleges and universities across the country. Each institution determines the CLEP exams for which credit will be awarded. A list of the exams for which JCC awards credit is available in the Jamestown Campus admissions office and the counseling center on the Cattaraugus County Campus. Information on the exact number of credits that may be earned under CLEP and their transferability is also available from these offices.

CLEP tests are administered on a regularly scheduled basis. Information on time and place is available through JCC’s continuing education office on the Jamestown Campus.

Honors Program
JCC’s honors program provides a challenging curriculum, supportive services, and special enrichment opportunities for highly motivated students who have demonstrated their academic ability. Honors students work in a community of scholars, enrolling in honors-designated courses, engaging in co-curricular activities, and completing fieldwork that synthesizes academic and life experiences.

Honors courses may be targeted and reserved exclusively for honors students, or they may be “blended” in which honors students participate with other students while engaging in special activities designed to provide additional rigor and reward.

Program Eligibility and Maintenance Requirements
Students entering JCC for the first time with fewer than 12 college credits must have a high school grade point average of 90% or better, must be eligible to take college-level English and MAT 1540, and must have a reading score of 80 or better. Students with 12 or more college credits who are eligible to take college-level English and MAT 1540 and have a cumulative GPA of 3.5 or better are eligible for the program. Those required to take placement tests must do so before they can be considered fully eligible for the honors program.

To stay in the program, a student must earn a cumulative grade point average of 3.0 or better. Students will receive an honors designation on their transcripts if they do the following during their time at JCC:

- maintain and graduate with a cumulative grade point average of 3.0 or better,
- complete a minimum of nine hours of honors-designated coursework,
- complete at least one honors fieldwork or service-learning course, and
- attend at least four honors engagement activities.

Students must not go more than one semester without enrolling in an honors course (excluding summer) to maintain honors eligibility. If an honors student is registered for a blended honors course and wishes to withdraw from the honors section, but still earn regular credit for the course, he or she must withdraw from the honors course CRN no later than the semester’s “W” date.

Online Courses and Degree Opportunities
JCC is a member of a statewide consortium of campuses that offers graduate and undergraduate online courses called Open SUNY, a student-centered approach to teaching and learning that eliminates the constraints of time and location for students. It utilizes an asynchronous learning model, which means students and teachers do not have to be online at the same time; rather, they logon when it is convenient for them.

Class activities are the same: students read course materials, write papers, do research, and communicate with their instructor and fellow students. What is unique is that courses are designed so that you can do everything online. The learning is both interactive with faculty and collaborative with other students. Even more, a wealth of resources is readily available online.

Refer to program listings to determine which programs are available online.

Online courses are available in over 23 discipline areas. Students need not be enrolled in a degree program to take online courses. For more information regarding online courses, visit www.sunyjcc.edu online.

Cooperative Education
Students who wish to be paid for work experience while attending JCC may earn one credit hour per semester for a total of no more than four credits. A student works with the coordinator of cooperative education who meets with him or her regularly and supervises a paper the student submits each semester. (See cooperative education course descriptions.)

Independent Study
A student who wants to participate in an independent study project must make arrangements directly with a faculty member who agrees to serve as his/her project advisor. With the assistance of the advisor, the student establishes a proposal covering the work and goals to be accomplished. The number of credits to be earned for completion of the project is determined and the appropriate as-
'Assistant dean approves the project. The final grade is determined by the advisor. Credit for a single project is limited to 1-3 credit hours, and no more than six credit hours in independent study earned at JCC may be applied toward an associate degree.

**Interdisciplinary Studies**

Courses which cross the normal boundary lines between disciplines are listed under the common heading of Interdisciplinary Studies (INT). These courses draw upon the faculty from various academic areas and are often team taught. They are wide-ranging in their approach to important topics and are considered suitable electives in either a transfer or career program.

**International Education and Study Abroad**

JCC students have the opportunity to study abroad through the college’s membership in the College Consortium of International Studies (www.ccisabroad.org). The International Education and Study Abroad Program is open to sophomore students with a minimum GPA of between 2.5 and 3 (depending on the program) and to freshmen with exceptional academic credentials. Students may earn 15 credits while studying abroad, which are counted toward their degrees at JCC.

Students should consult with both financial aid and the coordinator of global education to determine the appropriate program in which to register. CCIS offers programs in North and South America, Africa, Europe, and Asia. Programs consist of courses taken at a college or university in the host country and credit hours earned vary by program and sessions.

Students can choose courses in the humanities, social sciences, and business as well as internships in service professions. Classes are conducted in English and other languages. Students may take a conventional semester abroad, studying at a university, or they may engage in service learning for 20 hours per week while attending a university abroad. Financial aid for which a JCC student is eligible applies to these programs also. Contact the coordinator of the study abroad program for application deadlines.

Details about study abroad opportunities are available from the coordinator of global education or the vice president of academic affairs at the Jamestown Campus.

**Internships**

Internships are available to students who wish to acquire work experience related to a particular field of study while attending JCC. Internships are intended for full-time sophomores who have at least a 2.0 GPA. (Disney internships require a minimum 2.5 GPA and successful completion of the application process.) Some certificate and degree programs require internships; students in other programs have the option of completing an internship to help them gain valuable work experience. Students may earn up to six college credits for internships and must fulfill 135 hours of work along with a satisfactory evaluation for each three credits awarded.

Students who wish to arrange an internship should speak to the assistant dean and/or designated faculty of the desired academic field or the director of academic initiatives. The faculty member involved with the internship will work with the business or agency and with the student to develop specific learning objectives. A sample of internship placement sites can be found at www.sunyjcc.edu/internships. Although many internships are non-paid work experiences, students may receive remuneration for the work. See course descriptions and eligibility at www.sunyjcc.edu.

**Life Experience Credit Assessment**

JCC believes that valuable and meaningful learning takes place for the individual in his/her personal world. Through work, training, and other experiences, learning occurs which can be complementary to short- or long-term educational goals. It is the desire of the college to help the individual focus on his/her life experiences and translate them into college credit if appropriate.

The assessment process is one of deciding on an educational objective, determining how the life experience to be evaluated supports this goal, and developing a portfolio to substantiate the involvement and learning from the experiences. The portfolio is then evaluated by JCC faculty to determine if and what credit can be awarded. Military experiences can be considered for life experience credit.

Additional information is available at the counseling centers on the Jamestown and Cattaraugus County campuses and at www.sunyjcc.edu.

**Off-Campus Study Programs**

Credit earned through a variety of non-traditional, off-campus study programs may be applied toward the requirements for an associate degree from JCC or may be used in combination with credit earned at JCC for fulfilling the requirements for higher academic degrees. Information regarding these programs, which include the New York External Degree Programs and Empire State College, is available at JCC’s Center for Continuing Education.
DEGREES & CERTIFICATES

JCC, in affiliation with the State University of New York (SUNY), offers three types of degree programs:

- Associate in Arts (A.A.)
- Associate in Science (A.S.)
- Associate in Applied Science (A.A.S.)

The college also offers certificate programs which are described in this catalog.

Associate in Arts (A.A.)

JCC is authorized to offer the Associate in Arts (A.A.) degree in Liberal Arts and Sciences: Humanities, Liberal Arts and Sciences: Social Science, and Global Studies. The course of study for each consists primarily of courses in the liberal arts. The A.A. degrees are primarily intended to prepare students for transfer to a four- year college or university to enter a bachelor's degree program in a specialized area.

To earn the A.A. degree, a minimum of 48 credit hours of study must be taken in the liberal arts and sciences. These 48 hours must include a breadth and depth in the liberal arts and sciences. For all three A.A. degrees, breadth requires a minimum of nine credit hours in each of the three categories: humanities, mathematics and science, and social sciences. For the A.A.: Liberal Arts and Sciences: Humanities and the A.A.: Liberal Arts and Sciences: Social Sciences, depth requires a minimum of 24 credits hours in one of these three categories. For the Global Studies degree, the depth requirement is met in the program core requirements. The general degree requirements for the A.A. degrees are outlined in the program sections of this catalog.

Associate in Science (A.S.)

JCC is authorized to award Associate in Science (A.S.) degrees in biotechnology, business administration, communication, computer science, criminal justice, engineering, environmental science, fine arts, human services, individual studies, Liberal Arts & Sciences: Education, Liberal Arts & Sciences: Math/Science, Media Arts, and Physical Education Studies.

Intended as a transfer degree, the A.S. degree programs offered by JCC are designed to prepare students to enter a bachelor's degree program at a four-year college or university.

The A.S. degree programs provide a course of study which demonstrates a balance between the liberal arts and sciences and those courses related to specific professions. Students earning the A.S. degree are prepared to enter Bachelor of Science (B.S.) degree programs in such areas as art, engineering science, business, chemistry, biology, mathematics, geology, physics, computer science, communication, education, music, and human services.

To earn the A.S. degree, a minimum of 30 credit hours of study must be taken in the liberal arts and sciences and must include both breadth and depth. The breadth includes a minimum of six hours in each of three categories: humanities, social sciences, and mathematics and sciences. The depth includes a minimum of 18 credit hours in one of these categories or a career area where appropriate. The requirements of each A.S. degree program are outlined in the program section of this catalog.

JCC is authorized to offer Associate in Applied Science (A.A.S.) degrees in the following areas: accounting, business administration, computer information systems, criminal justice-police, early childhood, human services, individual studies, information technology, mechanical technology, medical office technology, office technology, nursing, occupational therapy assistant, professional piloting, and welding technology.

The course of study for these degree programs includes a balance between courses related to career areas and the liberal arts and social sciences. The sequence of courses in A.A.S. degrees is designed to prepare the student for proficiency in a specific career and provide a minimum of 20 credit hours in the liberal arts and sciences. These 20 credit hours must be distributed to include a minimum of six hours in each of three categories: humanities, social sciences, and mathematics and science. The remainder of each degree program consists of core courses related to a specific field and electives. Some A.A.S. degree programs require more than 60 credit hours for completion. The requirements for each A.A.S. degree are shown in the program section of this catalog.

Originally intended as career degrees, some A.A.S. degree programs are transferable to four-year colleges and universities. The development of new degree programs by four-year colleges and universities are designed to make it possible for some A.A.S. degree holders to transfer.

In recent years a growing number of JCC graduates with A.A.S. degrees transfer to bachelor's degree programs while others enter the workforce after graduation. Specific information about the transferability of the A.A.S. degree is available from program faculty or at the counseling centers.

Certificate Programs

Any student who wishes to receive a certificate must complete all courses listed in the certificate with a minimum 2.0 cumulative average. If a student transfers in appropriate credits toward a certificate, a minimum of 15 JCC credits will be required to award the certificate. A student may only transfer back a maximum of three of the last credits toward a certificate.

Accreditation

JCC is a member of and fully accredited by the Middle States Association of Colleges and Secondary Schools. Its curricula are approved by the State University of New York and are registered by the New York State Department of Education. In addition, the nursing program is accredited by the National League for Nursing Accrediting Commission and the occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association.
The degree and certificate programs offered by Jamestown Community College include:

### Associate in Arts Degree (A.A.)
- Liberal Arts & Sciences: Humanities (Hegis Code 5649)**
  with an option to specialize in:
  - English
- Liberal Arts & Sciences: Social Science (Hegis Code 5649) 50
  with an option to specialize in:
  - Economics
  - Psychology
  - Sociology

### Global Studies (Hegis Code 5622)
- 46

### Associate in Science Degree (A.S.)
- Biotechnology (Hegis Code 5604)* 41
- Business - Business Administration (Hegis Code 5004)** 41
- Computer Science (Hegis Code 5101)** 42
- Criminal Justice (Hegis Code 5505) 43
- Engineering Science (Hegis Code 5609)* 44
- Environmental Science (Hegis Code 5604)* 45
- Fine Arts: Music (Hegis Code 5610)*
- Fine Arts: Studio Arts (Hegis Code 5610)*
- Human Services (Hegis Code 5501)
- Individual Studies (Hegis Code 5699)**
- Liberal Arts & Sciences: Adolescence Education
  (Teacher Education Transfer) (Hegis Code 5649)
- Liberal Arts & Sciences: Childhood Education
  (Teacher Education Transfer) (Hegis Code 5649)
- Liberal Arts & Sciences: Early Childhood Education
  (Teacher Education Transfer) (Hegis Code 5649)
- Media Arts (Hegis Code 5012)*
- Physical Education Studies (Hegis Code 5299)*

### Associate in Applied Science Degree (A.A.S.)
- Business-Accounting (Hegis Code 5002)** 41
- Business-Business Administration (Hegis Code 5004)** 42
- Computer Information Systems (Hegis Code 5103)** 44
- Criminal Justice-Police (Hegis Code 5505) 43
- Early Childhood (Hegis Code 5503) 44
- Human Services (Hegis Code 5501) 46
- Individual Studies (Hegis Code 5699)** 47
- Information Technology (Hegis Code 5101)** 48
- Mechanical Technology (Hegis Code 5315)* 51
- Medical Office Technology (Hegis Code 5214)** 52
- Nursing (Hegis Code 5208.1) 52
- Occupational Therapy Assistant (Hegis Code 5210)* 53
- Office Technology (Hegis Code 5005)** 53
- Professional Piloting (Hegis Code 5302)** 54
- Welding Technology (Hegis Code 5308)* 55

### Certificate Programs
- Computer-Aided Design & Computer Numerical Control
  (Hegis Code 5303)* 56
- Corrections Officer Technology (Hegis Code 5505) 56
- Digital Audio Production (Hegis Code 5008)* 56
- Digital Graphic Design and Publishing (Hegis Code 5012)* 56
- Early Childhood Development (Hegis Code 5503) 57
- Entrepreneurship (Hegis Code 5004)** 57
- Industrial Equipment Technology (Hegis Code 5312)* 58
- Information Technology (Hegis Code 5101)** 58
- Law Enforcement Technology (Hegis Code 5505)* 58
- Machine Tool Technology (Hegis Code 5315)* 58
- Medical Office Technology (Hegis Code 5214)** 59
- Multimedia Production (Hegis Code 5012)* 59
- Network Administration (Hegis Code 5103) 59
- Office Technology (Hegis Code 5005)** 59
- Web Design (Hegis Code 5104) 60
- Welding Technology (Hegis Code 5308)* 60

* Program completion will require students to attend some classes on the Jamestown Campus.
** Program is available online.

**DegreeWorks**
DegreeWorks is a web-based advisement tool that students should use to determine program requirements and monitor their academic progress. The DegreeWorks audit system provides information on completed and outstanding requirements necessary to complete a degree, so students easily understand what coursework is still needed. Students can access DegreeWorks through MyJCC on the college’s website.
## GRADUATION REQUIREMENTS BY DEGREE

### General Degree Requirements
- Students must meet both program and degree graduation requirements in place at the time of first matriculation or any subsequent set of requirements. Requirements for additional degrees are based on matriculation into that program. Degree requirements are outlined throughout the Academic Information section of the catalog. Specific requirements are listed for each program in the following pages.
- Cumulative grade point average (GPA) of 2.0 or better in at least 60 credit hours.
- Complete graduation application at least five weeks prior to graduation.
- First time, full-time students are required to take INT 1520: Student Success Seminar.

<table>
<thead>
<tr>
<th></th>
<th>Liberal Arts &amp; Sciences (LAS)</th>
<th>SUNY General Education (SUNY)**</th>
<th>JCC Specific General Education (JCC)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum Requirements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Associate in Arts</strong></td>
<td>Minimum of 48 credits with at least 9 credits each in:</td>
<td>Minimum of 30 credits in at least 7 of the 10 categories. SUNY Gen Ed categories:</td>
<td>Minimum of one course in each of the following areas:</td>
</tr>
<tr>
<td></td>
<td>- humanities (H)</td>
<td>- Math (MATH)</td>
<td>- College-level Mathematics (CMAT)</td>
</tr>
<tr>
<td></td>
<td>- mathematics/sciences (N)</td>
<td>- Natural Sciences (NSCI)</td>
<td>- ENG 1530: English Composition II (CENG)</td>
</tr>
<tr>
<td></td>
<td>- social sciences (S)</td>
<td>- Social Sciences (SOC)</td>
<td>- College-level Writing (3 credits), other than ENG 1530 (CWRT)</td>
</tr>
<tr>
<td></td>
<td>- with at least 24 credits in one of the categories (H, N, or S)</td>
<td>- American History (AHIS)</td>
<td>- Scientific Reasoning (SR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other World Civilizations (OCIV)</td>
<td>- Values, Ethics, and Diverse Perspectives (VEDP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Western Civilizations (WCIV)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Humanities (HUMA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Arts (ARTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Foreign Language (FLAN)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Basic Communication (BCOM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- MATH and BCOM must be among the seven categories</td>
<td></td>
</tr>
<tr>
<td><strong>Associate in Science</strong></td>
<td>Minimum of 30 credits with at least 6 credits each in:</td>
<td>Minimum of 30 credits in at least 7 of the 10 categories. SUNY Gen Ed categories:</td>
<td>Minimum of one course in each of the following areas:</td>
</tr>
<tr>
<td></td>
<td>- humanities (H)</td>
<td>- Math (MATH)</td>
<td>- College-level Mathematics (CMAT)</td>
</tr>
<tr>
<td></td>
<td>- mathematics/sciences (N)</td>
<td>- Natural Sciences (NSCI)</td>
<td>- ENG 1530: English Composition II (CENG)</td>
</tr>
<tr>
<td></td>
<td>- social sciences (S)</td>
<td>- Social Sciences (SOC)</td>
<td>- College-level Writing (3 credits), other than ENG 1530 (CWRT)</td>
</tr>
<tr>
<td></td>
<td>- with at least 18 credits in one of the categories (H, N, S, or C)</td>
<td>- American History (AHIS)</td>
<td>- Scientific Reasoning (SR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other World Civilizations (OCIV)</td>
<td>- Values, Ethics, and Diverse Perspectives (VEDP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Western Civilizations (WCIV)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Humanities (HUMA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Arts (ARTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Foreign Language (FLAN)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Basic Communication (BCOM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- MATH and BCOM must be among the seven categories</td>
<td></td>
</tr>
<tr>
<td><strong>Associate in Applied Science</strong></td>
<td>Minimum of 20 credits with at least 6 credits each in:</td>
<td>none</td>
<td>Minimum of one course in each of the following areas:</td>
</tr>
<tr>
<td></td>
<td>- humanities (H)</td>
<td>- College-level Mathematics (CMAT)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- mathematics/sciences (N)</td>
<td>- ENG 1530: English Composition II (CENG)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- social sciences (S)</td>
<td>- College-level Writing (3 credits), other than ENG 1530 (CWRT)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Scientific Reasoning (SR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Values, Ethics, and Diverse Perspectives (VEDP)</td>
<td></td>
</tr>
</tbody>
</table>

* Please note: Other JCC General Education requirements are embedded within each program. See JCC General Education Requirements section for more information.

** Engineering requires a minimum of 30 credits in at least five of the 10 categories, including MATH and BCOM.

Certificate requirements are specific to each program and are defined in the following pages.
The following information is designed to assist students in the selection of appropriate courses to meet the Liberal Arts & Sciences (LAS) distribution requirements of a degree program. Students should consult the current college master schedule for a list of courses approved as State University of New York general education requirements (SUNY GER), values, ethics, & diverse perspectives (VEDP), and scientific reasoning (SR).

Specific course attributes may be found on each master course syllabus and online through Banner at www.sunyjcc.edu.

Liberal Arts & Sciences Courses

Courses that hold a Liberal Arts & Sciences designation include courses of a general or theoretical nature that are designed to develop judgment and understanding about human beings’ relationship to the social, cultural, and natural facets of their total environment.

Humanities

In general, courses in Art (ART), English (ENG), Communication (CMM), Humanities (HUM), Drama (DAN, THE), Languages (ARA, ASL, FRE, RUS, SPA), Music (MUS), Philosophy (PHL), and Religion (REL) which focus on history, composition, theory, and/or appreciation within these disciplines are considered humanities courses. Courses within these disciplines that focus on performance, studio work, or practical experiences do not count as humanities, but rather as career and/or electives. Courses currently listed as humanities courses include (Please note: courses marked with an ‘*’ will no longer be considered a humanities course if taken after the fall 2015 semester - 201512. These courses will become career and/or electives.):

Mathematics/Sciences

In general, courses in Math (MAT), Astronomy (AST), Biology (BIO), Chemistry (CHE), Engineering (ENR), Geology (GLG), Meteorology (MET), and Physics (PHY) are considered math or natural sciences courses. Some courses within Computer Science and Criminal Justice are also classified as sciences. Courses within these disciplines that focus on practical experiences do not count as mathematics & sciences courses, but rather as career and/or electives. Courses currently listed as mathematics & sciences courses include:

Social Sciences

In general, courses in Anthropology (ANT), Sociology (SOC), Criminal Justice (CRI), Economics (ECO), History (HIS), Psychology (PSY), and Political Science (POL) are considered social sciences courses. Courses within these disciplines that focus on practical experiences do not count as social sciences courses, but rather as career and/or electives. Courses currently listed as social sciences courses include:
Career and/or Electives
In general, courses in Aviation (AVN), Business (BUS), Education (EDU), Electricity (ELC), Entrepreneurship (ENT), Human Development (HUM), Human Services (HSU), Library Science (LIB), Mechanical Technology (MCT), Medical Office Technology (MOT), Nursing (NUR), Occupational Therapy (OTA), Physical Education (PHE), Welding (WLD) and some courses in Criminal Justice (CRI), Computer Science (CSC), Interdisciplinary Studies (INT) are considered career and/or elective courses. These and any other courses that focus on practical experiences are considered career and/or electives. Courses currently listed as career and/or elective courses include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVN 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 101</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMM 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIB 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIB 200</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCT 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOT 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUR 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTA 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WLD 100</td>
<td>Selected Studies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Selected Studies
Each academic division may occasionally elect to offer courses of a topical or experimental nature which draw upon the special interests and expertise of the faculty members. These courses are listed in the master schedule and are numbered within the appropriate discipline at 7000-7999 (freshman level) or 8000-8999 (sophomore level); i.e. CMM 8503: Selected Studies - Public Relations. Selected Studies courses count as electives in JCC programs or may meet depth, distribution, or core requirements. Consult your faculty advisor or counselor for details.

Frequency of Course Offerings
All courses required to earn a specific associate degree are normally offered with such frequency that a full-time student can earn the degree in a two-year period.
Each course description has designations indicating during which semester and on which campus (Jamestown - J, Cattaraugus County Campus - C, and Online) the college intends to offer the course.
Certain courses do not have a designation indicating which semester they are offered. These courses may or may not be offered on the specified campus(es) during the period 2015-2016. The college reserves the right to cancel course offerings if enrollment is insufficient.

Course Numbering
Credit hours to be earned in each course are shown following the course title. Course numbers are designated as: 0000-0999 - imputed and developmental courses, 1000-1999 - freshman level courses, and 2000-2999 - sophomore level courses.
# ACADEMIC PROGRAMS: DEGREE

## ASSOCIATE IN APPLIED SCIENCE

### Biotechnology

**curriculum code:** 1211 | **HEGIS code:** 5604

This degree program is intended to prepare students to transfer to a four-year college or university as a major in pre-health professions, biology, biotechnology, molecular genetics, biochemistry, or related field. It provides a strong background in the liberal arts as well as a comprehensive, interdisciplinary and robust academic experience in theory and laboratory methodologies in the biological sciences, chemistry and mathematics that are required to enter bachelor’s degree programs in biology-related fields, biotechnology and other related areas. Students will perform undergraduate research to learn cell biology and tissue culture methods, electrophoresis techniques, instrumental analysis, bioinformatics, genetic research techniques including DNA analysis, bacteriological methods, as well as mathematics and two years of chemistry all in state-of-the-art classrooms and laboratories.  **Program completion will require students to attend some classes on the Jamestown Campus.**

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>16 credit hours</strong></td>
<td><strong>18 credit hours</strong></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM H CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>HUMA H CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>up to 6 credits may be SUNY General Education-category specific</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MAT 1600: Precalculus (or higher)</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>42 credit hours</td>
</tr>
<tr>
<td>*BIO 1575: Biology: A Molecular Approach or BIO 1570: Principles of Biology</td>
<td>NSCI N SR,VEDP</td>
</tr>
<tr>
<td>BIO 1580: Principles of Biology II</td>
<td>NSCI N SR</td>
</tr>
<tr>
<td>BIO 2560: Genetics</td>
<td>N</td>
</tr>
<tr>
<td>BIO 2800: Cell and Molecular Biology</td>
<td>N</td>
</tr>
<tr>
<td>BIO 2810: Biotechnology Research</td>
<td>N</td>
</tr>
<tr>
<td>CHE 1550: College Chemistry I</td>
<td>NSCI N SR,VEDP</td>
</tr>
<tr>
<td>CHE 1560: College Chemistry II</td>
<td>NSCI N SR</td>
</tr>
<tr>
<td>CHE 2530: Organic Chemistry I</td>
<td>N</td>
</tr>
<tr>
<td>CHE 2540: Organic Chemistry II</td>
<td>N</td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>8</td>
</tr>
<tr>
<td>choose from the following list: BIO 1820, BIO 2820, BIO 2510, BIO 2520, BIO 2531, BIO 2532, BIO 2840, PHY 1610 or PHY 1710, PHY 1620 or PHY 2710</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>5 credit hours</td>
</tr>
<tr>
<td>at least 3 credits must be SUNY General Education-category specific</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 63**

**IMPORTANT POINTS:**
- *BIO 1575: Biology: A Molecular Approach is the preferred course.*

### Business-Accounting

**curriculum code:** 0630 | **HEGIS code:** 5002

This degree program prepares students for entry level accounting careers such as junior accountant, payroll accountant, receivables/payables clerk, or bookkeeper. It combines application courses in accounting, computer science, law, and management with liberal arts courses to develop communication and computation skills. With this background, the students will be readily employable and have the skills necessary for further development. Students interested in professional careers in public accounting (CPA) or management accounting (CMA) that require a bachelor’s degree are encouraged to refer to the Associate in Science in business administration degree information. **Program is also available online.**

<table>
<thead>
<tr>
<th>General Degree Requirements 19 credit hours</th>
<th>Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM H CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>HUMA H CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>ECO 2610: Macroeconomic Principles</td>
<td>SOSC S SR</td>
</tr>
<tr>
<td>ECO 2620: Microeconomic Principles</td>
<td>SOSC S SR</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>7</td>
</tr>
<tr>
<td>MAT 1590: College Algebra and Trigonometry (or higher)</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>MAT 1540: Elementary Statistics</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>Program Core Requirements 21 credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 1510: Principles of Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUS 1520: Principles of Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>CSC 1560: Microcomputer Applications I</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 60**

**IMPORTANT POINTS:**
- To maximize student success, it is strongly recommended that ENG 1530 be taken before registering for 2000-level business courses.

### Business-Business Administration

**curriculum code:** 0671 | **HEGIS code:** 5004

This degree program prepares students for transfer into bachelor level programs in business and many business-related majors. This degree allows for flexibility in selecting major and elective courses, enabling students to match the requirements set by transfer institutions. Students who successfully complete this degree can transfer into programs that lead to professional careers including accounting (CPA or CMA), business administration, financial management, human resource management, industrial relations, international business, management science, marketing, production control, and others. Working with their faculty advisor, JCC students can create a program that will help them achieve full junior status upon completion and transfer. **Program is also available online.**

<table>
<thead>
<tr>
<th>General Degree Requirements 19 credit hours</th>
<th>Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM H CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>HUMA H CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>ECO 2610: Macroeconomic Principles</td>
<td>SOSC S SR</td>
</tr>
<tr>
<td>ECO 2620: Microeconomic Principles</td>
<td>SOSC S SR</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>7</td>
</tr>
<tr>
<td>MAT 1590: College Algebra and Trigonometry (or higher)</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>MAT 1540: Elementary Statistics</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>Program Core Requirements 21 credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 1510: Principles of Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUS 1520: Principles of Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>CSC 1560: Microcomputer Applications I</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 60**

**IMPORTANT POINTS:**
- To maximize student success, it is strongly recommended that ENG 1530 be taken before registering for 2000-level business courses.

---

**ACADEMIC INFORMATION**

**Degree Requirements**

| Humanities | 6 |
| ENG 1530: English Composition II | BCOM H CENG |
| ENG 1540: Writing About Literature | HUMA H CWRT |
| Social Sciences | 6 |
| ECO 2610: Macroeconomic Principles | SOSC S SR |
| ECO 2620: Microeconomic Principles | SOSC S SR |
| Mathematics and Sciences | 7 |
| MAT 1590: College Algebra and Trigonometry (or higher) | MATH N CMAT |
| MAT 1540: Elementary Statistics | MATH N CMAT |
| Program Core Requirements 21 credit hours |                      |
| BUS 1510: Principles of Financial Accounting |                      |
| BUS 1520: Principles of Managerial Accounting |                      |
| CSC 1560: Microcomputer Applications I |                      |
ASSOCIATE IN ACADEMIC INFORMATION

Program Core Electives
6 BUS credits must be numbered 2500 or higher.
Any additional BUS course beyond the Program Core Requirements.

Electives
20 credit hours
at least 11 credits must be SUNY General Education-category and Liberal Arts & Sciences specific

Total Credits: 60

IMPORTANT POINTS:
- Calculus I is essential to achieving junior status in business programs at these SUNY campuses: University at Buffalo, Binghamton University, and the University at Albany.

ASSOCIATE IN APPLIED SCIENCE

Business-Business Administration
curriculum code: 0632 | HEGIS code: 5004
minimum credit hours required: 60
This degree program offers students the opportunity to obtain a broad business foundation and the knowledge, skills, and values necessary for a variety of entry level positions in business. This career program is designed to provide the student with the skills necessary to function in a professional, competent manner in business organizations. Students will take courses in accounting, management, law, computer applications, and courses that are related to business. Decision-making skills are stressed throughout the program as well as consensus-building skills that support working in team situations. Program is also available online.

ASSOCIATE IN SCIENCE

Communication
curriculum code: 1173 | HEGIS code: 5008
minimum credit hours required: 60
This degree program is intended for students who wish to transfer to four-year institutions to pursue further study in human communication, public relations, communication management, broadcast journalism, intercultural communication, or other branches of communication. This program can also serve the needs of students seeking entry level employment in those areas, or of students who are currently employed in those areas who wish to continue their education and upgrade their skills.

Computer Information Systems
curriculum code: 0581 | HEGIS code: 5103
minimum credit hours required: 60
This degree program will allow students to gain an understanding of the foundation of the system development life cycle for business-oriented and computer-based information systems. The topics involve the study of systems analysis, systems design, database management, computer and Web programming. Other technical and business areas of study, with an emphasis on database and web development, will focus on the implementation of information systems in a variety of operational settings. Program is also available online.

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Degree Requirements</td>
<td>27 credit hours</td>
<td>18 credit hours</td>
<td>12 credit hours</td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td>30</td>
<td>42</td>
<td>-</td>
</tr>
</tbody>
</table>

ASSOCIATE IN LIBERAL ARTS

Humanities
- English Electives (college level)
- Social Sciences Electives
- Mathematics Electives (college level)
- Program Core Electives
- Electives

Total Credits: 60
ASSOCIATE IN SCIENCE

Computer Science
curriculum code: 0532 | HEGIS code: 5101
minimum credit hours required: 60

This degree program is designed for students who plan to transfer to a four-year college or university to major in computer science. Program is also available online.

**General Degree Requirements 21 credit hours**
- **Humanities**
  - ENG 1530: English Composition II
  - ENG 1540: Writing About Literature
- **Social Sciences**
  - Social Science Electives
    - up to 6 credits may need to be SUNY General Education-category specific
- **Mathematics and Sciences**
  - Mathematics Electives (college level)
    - 3 credits must be SUNY General Education-category specific

**Program Core Requirements 36 credit hours**
- CSC 1530: Web Publishing
- CSC 1560: Microcomputer Applications I
- CSC 1570: Programming Concepts and Applications
- CSC 1590: Computer Programming
- CSC 1630: Web Technologies
- CSC 1760: Microcomputer Application II
- CSC 2410: Web Programming
- CSC 2450: CTT Capstone
- CSC 2540: Introduction to Systems Analysis
- CSC 2660: Database Management
- Business Electives
  - must be numbered 1500 or higher
- **Electives**
  - 6 credit hours

**Total Credits:** 60

**ASSOCIATE IN APPLIED SCIENCE**

Criminal Justice - Police
curriculum code: 0640 | HEGIS code: 5505
minimum credit hours required: 60

This degree program provides the pre-service student (no previous employment in the field) with the occupational skills and background necessary for entering employment with law enforcement agencies; upgrades skills and background knowledge of in-service personnel; and provides both pre- and in-service students with a broader understanding of human nature through general education.

**General Degree Requirements 18 credit hours**
- **Humanities**
  - ENG 1530: English Composition II
  - ENG 1540: Writing About Literature
- **Social Sciences**
  - Social Sciences Electives
- **Mathematics and Sciences**
  - Mathematics Electives (college level)
- **Program Core Requirements 26 credit hours**

**ASSOCIATE IN SCIENCE**

Criminal Justice
curriculum code: 1100 | HEGIS code: 5505
minimum credit hours required: 60

This degree program is intended for students interested in fields such as law enforcement, corrections, probation, investigations, and other criminal justice related fields. In addition, this program is intended to prepare students for transfer to a four-year college or university to earn a baccalaureate degree in an area of criminal justice.

**General Degree Requirements 27 credit hours**
- **Humanities**
  - ENG 1530: English Composition II
  - ENG 1540: Writing About Literature
- **Social Sciences**
  - Social Sciences Electives
- **Mathematics and Sciences**
  - Mathematics Electives (college level)

**Program Core Requirements 21 credit hours**
- CRI 1510: Introduction to Criminal Justice

**Electives 6 credit hours**
- up to 6 credits may need to be SUNY General Education-category specific

**Total Credits:** 60

**ASSOCIATE IN SCIENCE**

Criminal Justice
curriculum code: 0532 | HEGIS code: 5101
minimum credit hours required: 60

This degree program is designed for students who plan to transfer to a four-year college or university to major in computer science. Program is also available online.

**General Degree Requirements 21 credit hours**
- **Humanities**
  - ENG 1530: English Composition II
  - ENG 1540: Writing About Literature
- **Social Sciences**
  - Social Science Electives
    - up to 6 credits may need to be SUNY General Education-category specific
- **Mathematics and Sciences**
  - Mathematics Electives (college level)
    - 3 credits must be SUNY General Education-category specific

**Program Core Requirements 24-25 credit hours**
- CSC 1570: Programming Concepts & Applications
- CSC 1580: Microcomputer Hardware & Systems Software
- CSC 1590: Computer Programming
- CSC 1630: Data Structures
- CSC 2510: Introduction to Networks
- CSC 2670: Computer Organization

**Program Core Electives 3-4**
- any additional CSC course(s) beyond the Program Core Requirements, with at least 1 credit numbered 2500 or higher

**Electives 14-15 credit hours**
- up to 6 credits may need to be SUNY General Education-category specific courses

**Total Credits:** 60

**IMPORTANT POINTS:**
- Recommended mathematics and sciences electives include MAT 1540, CSC 1510, and CRI 2540.
- Criminal justice electives should be selected with career goals in mind.
  Working closely with the academic advisor will help assure the correct mix of electives.
• Credit for criminal justice courses may be given to those students who
  have successfully completed an accredited Basic Recruit School for Po-
  lice. Arrangements for this corresponding credit must be made through
  the criminal justice coordinator or admissions director.

IMPORTANT POINTS:
• Recommended electives include: BIO 1510: Health Science; BIO 1710:
  Personal Health & Safety; CHE 1500: Introduction to Chemistry; CHE
  1550-1560: College Chemistry I or II; or a mathematics course appropri-
  ate to the student’s background.
• CMM 1610: Public Speaking is strongly recommended as an elective.
• Credit for criminal justice courses may be given to those students who
  have successfully completed an accredited Basic Recruit School for Po-
  lice. Arrangements for this corresponding credit must be made through
  the criminal justice coordinator or admissions director.

ASSOCIATE IN APPLIED SCIENCE

Early Childhood
Curriculum code: 1327 | HEGIS code: 5503
Minimum credit hours required: 60

This degree program is designed to develop the skills needed to be a suc-
cessful early childhood professional and is directed toward students plan-
ning to work with young children in a variety of early care and education
settings, in titles such as assistant teacher or lead teacher in preschools,
childcare centers, and in school-age childcare settings. In addition, the pro-
gram provides opportunities for those already employed in child care facil-
ties, including family care providers and those holding Child Development
Associate (CDA) credentials, to update and refresh their knowledge and
skills. Early childhood educators need to develop and teach programs, cul-
tivate strong written and oral communication skills, and inform the public
about children and family issues. The program also provides students with
the opportunity to continue their education beyond the level of a certificate
to that of an A.A.S. in early childhood education with the added possibility
of transferring to a bachelor’s level program in early childhood education.

ASSOCIATE IN SCIENCE

Engineering Science
Curriculum code: 0530 | HEGIS code: 5609
Minimum credit hours required: 65

This degree program is designed to prepare students to transfer to a four-
year college or university to earn a bachelor degree in engineering. This de-
gree program provides appropriate preparation for continued study toward
careers in aerospace/mechanical, biomedical/chemical, civil, environmental,
or industrial engineering. Program completion will require students to
attend some classes on the Jamestown Campus.
**IMPORTANT POINTS:**
- Choosing electives carefully, with the help of an advisor, students can complete a focus in aerospace/mechanical, biomedical/chemical, civil, environmental, or industrial engineering.
- Students routinely elect to take up to 70 credit hours to enhance transferability.
- Recommended social sciences electives are ECO 2610: Macroeconomic Principles and/or ECO 2620: Microeconomic Principles.

**ASSOCIATE IN SCIENCE**

**Environmental Science**
curriculum code: 2061 | HEGIS code: 5604
minimum credit hours required: 60

This degree program will:
- Provides critical foundations for well-trained environmental scientists and citizen scientists to address the urgent and growing environmental challenges of the 21st century and beyond.
- Prepares students to comprehend and critically evaluate contemporary environmental problems at the intersection of nature, human institutions, and scientific study.
- Provides the interdisciplinary explorations and scientific tools and technologies essential for addressing the emerging environmental challenges and opportunities of today’s world.
- Engages students in exploring the ethical dimensions of decisions and actions associated with being responsible local and global citizens, and in understanding that a more sustainable world will nurture healthier ecosystems, vibrant human communities, and stronger economies.
- Prepares students for transfer into numerous four-year college and university baccalaureate programs such as environmental science, environmental biology, natural resource management, conservation science, forest ecosystem science, fisheries and wildlife biology, natural history, ecology, ethnobotany, soil science, sustainable agriculture, and related fields.
- Helps meet the academic and professional needs of students seeking careers related to environmental science and other disciplines related to the environmental health of the planet.

Program completion will require students to attend some classes on the Jamestown Campus.

<table>
<thead>
<tr>
<th>Program Core Electives</th>
<th>7-8</th>
<th>Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIO 1570: Principles of Biology I is the preferred course.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>6 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 6 credits may need to be SUNY General Education-category specific.</td>
<td></td>
</tr>
</tbody>
</table>

**ASSOCIATE IN SCIENCE**

**Fine Arts: Music**
curriculum code: 0682 | HEGIS code: 5610
minimum credit hours required: 63

This degree program prepares students for transfer to a four-year baccalaureate degree in music or a music-related field. It includes a strong core component of mathematics/science, social sciences, and humanities. The program also serves the student interested in an associate’s degree as a terminal degree before pursuing employment in music or a music-related career. Students from other areas of study such as communication, multimedia, theatre, education, arts management, sound recording, audio engineering, and therapy find JCC’s course offerings useful. Full- and part-time students are welcome to participate in music courses and ensembles.

Program completion will require students to attend some classes on the Jamestown Campus.

<table>
<thead>
<tr>
<th>General Degree Requirements</th>
<th>16 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>BCOM H CENG</td>
<td></td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
</tr>
<tr>
<td>HUMA H CWRTVDP</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>ECO 1530: Contemporary Economic Problems or ECO 2610: Macroeconomic Principles or ECO 2620: Microeconomic Principles</td>
<td>3</td>
</tr>
<tr>
<td>SOSC S SR</td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives up to 3 credits may need to be SUNY General Education-category specific.</td>
<td>3</td>
</tr>
<tr>
<td>(X) S</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MAT 1600: Precalculus (or higher) at least 4 credits must be SUNY General Education-category specific.</td>
<td>4</td>
</tr>
<tr>
<td>MATH N CMAT</td>
<td></td>
</tr>
</tbody>
</table>

**Program Core Requirements**

<table>
<thead>
<tr>
<th>Program Core Requirements</th>
<th>38 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1550: Introduction to Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>NSCI N</td>
<td></td>
</tr>
<tr>
<td>*BIO 1570: Principles of Biology I or BIO 1575: Biology: A Molecular Approach</td>
<td>4</td>
</tr>
<tr>
<td>NSCI N SR VEDP</td>
<td></td>
</tr>
<tr>
<td>BIO 1580: Principles of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>NSCI N SR</td>
<td></td>
</tr>
<tr>
<td>BIO 2550: Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>N</td>
<td></td>
</tr>
<tr>
<td>BIO/PHY 2570: Environmental Issues and Ethics or ANT/BIO/CMM 2660: Planet Earth</td>
<td>3</td>
</tr>
<tr>
<td>VEDP</td>
<td></td>
</tr>
<tr>
<td>CHE 1550: College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>NSCI N SR VEDP</td>
<td></td>
</tr>
<tr>
<td>CHE 1560: College Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>NSCI N SR</td>
<td></td>
</tr>
</tbody>
</table>

**Degree Requirements**

<table>
<thead>
<tr>
<th>General Degree Requirements</th>
<th>21 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>BCOM H CENG</td>
<td></td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
</tr>
<tr>
<td>HUMA H CWRTVDP</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics and Sciences Electives up to 9 credits may need to be SUNY General Education-category specific.</td>
<td>9</td>
</tr>
<tr>
<td>(X-X) S (SR)</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences Electives (college level) 3 credits must be SUNY General Education-category specific.</td>
<td>3</td>
</tr>
<tr>
<td>MATH N CMAT</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Core Requirements</th>
<th>39 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1510: Introduction to Music</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>MUS 1570: Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS H</td>
<td></td>
</tr>
<tr>
<td>MUS 1580: Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>MUS 2570: Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>MUS 1610, 1620, 2610, 2620: Applied Music: Private Lessons</td>
<td>4</td>
</tr>
<tr>
<td>MUS 1630: Beginning Voice</td>
<td>3</td>
</tr>
<tr>
<td>ARTS</td>
<td></td>
</tr>
<tr>
<td>MUS 1670: Beginning Piano</td>
<td>3</td>
</tr>
<tr>
<td>ARTS</td>
<td></td>
</tr>
<tr>
<td>MUS 1690: Piano II</td>
<td>3</td>
</tr>
<tr>
<td>Music Ensembles</td>
<td>8</td>
</tr>
<tr>
<td>MUS 1930: Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 1940: Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 2930: Aural Skills III</td>
<td>1</td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1590, MUS 1680, MUS 1700, MUS 1710, MUS 1730, MUS 1890, MUS 2630, MUS 2640, MUS 2580, MUS 2890, MUS 2940</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3 credit hours</td>
</tr>
<tr>
<td>Total Credits: 63</td>
<td>30 33</td>
</tr>
</tbody>
</table>

**IMPORTANT POINTS:**
- Although the JCC program is endorsed by specific four-year colleges, schools of music will audition all entering freshman and transfer students from any other school in the following areas: solo performance,
aural skills, written theory, and, often, piano skills. JCC students should consult with their advisor and prospective transfer school(s) to ensure that they are offering these important areas as required.

- Students should consult with their advisor in their choice of additional music electives to better prepare for transfer or employment.

ASSOCIATE IN SCIENCE

Fine Arts: Studio Arts  
Curriculum code: 1445 | HEGIS code: 5610  
Minimum credit hours required: 60  
This degree program begins with a thorough foundation in drawing, design, and historical survey with additional study available in a variety of media. An integral part of the curriculum is involvement in the Weeks Gallery at JCC. Students are encouraged to participate in gallery operations and events and to utilize the gallery’s permanent collection which includes over 300 works on the Jamestown and Cattaraugus County campuses. Travel to other galleries and art centers in western New York and beyond is also important. Students wishing to take art courses for enjoyment rather than preparing for a career in art are also encouraged to enroll in JCC’s fine arts curriculum. Program completion will require students to attend some classes on the Jamestown Campus.

<table>
<thead>
<tr>
<th>General Degree Requirements</th>
<th>27 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>9</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3 BCOM</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3 HUMA</td>
</tr>
<tr>
<td>Humanities Electives (except visual arts)</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>9</td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>9 (X) S (SR)</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3 MATH</td>
</tr>
<tr>
<td>3 credits must be SUNY General Education-category specific</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences Electives</td>
<td>6 (X) N (SR)</td>
</tr>
<tr>
<td>up to 3 credits may need to be SUNY General Education-category specific</td>
<td></td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>30 credit hours</td>
</tr>
<tr>
<td>ART 1500: Introduction to Art</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>ART 1510: Drawing</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>ART 1520: Drawing II</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>ART 1530: 2-D Design &amp; Color</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>ART 1540: 3-D Design, Concepts, Materials</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>ART 1550: Survey of Visual Art (prehistoric-)</td>
<td>3 OCIV</td>
</tr>
<tr>
<td>ART 1560: Survey of Visual Art (rennaissance-)</td>
<td>3 OCIV</td>
</tr>
<tr>
<td>ART1730: Introduction to Computer Art/Design</td>
<td>3 ARTS</td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>6</td>
</tr>
<tr>
<td>ART 1570, ART 1590, ART 1600, ART 1610-1623, 2610-2623, ART 1740, ART 1750, ART 2510, ART 2520, ART 2570, ART 2600, ART 2730, ART 2750</td>
<td>39</td>
</tr>
<tr>
<td>Electives</td>
<td>3 credit hours</td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td>45</td>
</tr>
</tbody>
</table>

IMPORTANT POINTS:
- Students are strongly encouraged to take CMM 1610: Public Speaking, PHL 1570: Critical Reasoning, and POL 1510: American Politics as electives.

ASSOCIATE IN APPLIED SCIENCE

Human Services  
Curriculum code: 0604 | HEGIS code: 5501  
Minimum credit hours required: 60  
This degree program prepares students for transfer into baccalaureate programs in social work, human services, counseling, psychology, and other related fields. While providing a foundation of knowledge in generalist practice, students will choose electives and internship opportunities that match their career goals in fields such as mental health, gerontology, alcohol and chemical dependency, child protection, intimate partner violence, policy practice, community development, and developmental, intellectual, and physical disabilities. Students will prepare for transfer and future employment by completing a one-semester internship and additional liberal arts and sciences electives.
Enrollment in the human services program does not guarantee acceptance into a field placement agency. Students must complete an application for internship and approval of the placement. Students currently employed in an approved human services agency may, under certain circumstances, use employment experiences to partially fulfill the field placement requirement. Permission of the instructor and the agency is required. Details must be worked out prior to registration for the course with their human services advisor.

Students must be willing to obtain and pay for any necessary physical or medical examinations or tests which are required by some internship agencies.

Enrollment in the human services program does not guarantee acceptance into field placements in the human services program. A criminal history or indication of child maltreatment may jeopardize the student’s acceptance into a field placement agency.

Students must complete an application for internship and approval of the application is required for all field placement courses in human services. Some internship agencies require FBI or Child Abuse Registry checks. These processes can be lengthy and may require up to four months in order for approval to be obtained prior to placement.

## ASSOCIATE IN APPLIED SCIENCE

### Individual Studies

curriculum code: 0688 | HEGIS code: 5699
minimum credit hours required: 60

This degree program is designed for students who are pursuing career courses, but not in a specified career area. Program is also available online.

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Requirements</strong></td>
<td><strong>18 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
</tr>
<tr>
<td>English Electives (college level)</td>
<td>3</td>
<td>H</td>
<td>CWRT</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>3</td>
<td>S</td>
<td>SR</td>
</tr>
<tr>
<td><strong>Mathematics and Sciences</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>N</td>
<td>CMAT</td>
</tr>
<tr>
<td>Mathematics and Sciences Electives</td>
<td>3</td>
<td>N</td>
<td>SR</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>42 credit hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(at least 2 credits must be SUNY Liberal Arts &amp; Sciences specific)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 60

### Important Points:
- Plans for the A.A.S. in individual studies degree should be developed carefully and with the assistance of a counselor or advisor.

## ASSOCIATE IN SCIENCE

### Human Services

curriculum code: 1175 | HEGIS code: 5501
minimum credit hours required: 60

This degree program is designed to prepare students for transfer into baccalaureate programs in social work, human services, counseling, psychology, early care and education, and other related fields. While providing a foundation of knowledge in human services, students will choose electives that match their career goals in fields such as mental health; early care and education; gerontology; alcohol and chemical dependency; and developmental, cognitive, and physical disabilities and rehabilitation services.

Students will prepare for transfer and employment by completing a one-semester internship and additional liberal arts and sciences electives.

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Requirements</strong></td>
<td><strong>19 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>HUMA</td>
<td>H</td>
<td>CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1510: Introduction to Psychology</td>
<td>SOSC</td>
<td>S</td>
<td>SR</td>
</tr>
<tr>
<td>SOC 1510: Introduction to Sociology</td>
<td>SOSC</td>
<td>S</td>
<td>SR</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 1540: Elementary Statistics</td>
<td>MATH</td>
<td>N</td>
<td>CMAT</td>
</tr>
<tr>
<td>BIO 1500: Human Biology</td>
<td>NSCI</td>
<td>N</td>
<td>SR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Core Requirements</th>
<th><strong>23 credit hours</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HUS 1210: Introduction to Human Services</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS 1410: Generalist Practice Skills</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS 2210: Field Placement I</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS 2230: Interviewing and Counseling</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS 2550: Policy and Organization</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Electives</th>
<th><strong>6 credit hours</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Students taking HUS 1210 choose 9 credit hours, students taking EDU 2210 choose 10 credit hours of electives from the list below.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any additional HUS course beyond the Program Core Requirements, EDU 1250, EDU 1260, EDU 1290, EDU 1300, EDU 2150, EDU 2440, EDU 2450, EDU 2510, PSY 1550, PSY 2510, PSY 2520, PSY 2540, and SOC 2580</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 60

### IMPORTANT POINTS:
- The core requirements in this human services program include one field placement. Students currently employed in an approved human services agency may, under certain circumstances, use employment experiences to partially fulfill the field placement requirement. Permission of the instructor and the agency is required. Details must be worked out prior to registration for the course with their human services advisor.
- Students must be willing to obtain and pay for any necessary physical or medical examinations or tests which are required by some internship agencies.
- Enrollment in the human services program does not guarantee acceptance into field placements in the human services program. A criminal history or indication of child maltreatment may jeopardize the student’s acceptance into a field placement agency.
- Students must complete an application for internship and approval of the application is required for all field placement courses in human services. Some internship agencies require FBI or Child Abuse Registry checks. These processes can be lengthy and may require up to four months in order for approval to be obtained prior to placement.

ASSOCIATE IN APPLIED SCIENCE

### Individual Studies

curriculum code: 0688 | HEGIS code: 5699
minimum credit hours required: 60

This degree program is designed for students who are pursuing career courses, but not in a specified career area. Program is also available online.

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Requirements</strong></td>
<td><strong>18 credit hours</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
</tr>
<tr>
<td>English Electives (college level)</td>
<td>3</td>
<td>H</td>
<td>CWRT</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>6</td>
<td>S</td>
<td>SR</td>
</tr>
<tr>
<td><strong>Mathematics and Sciences</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>N</td>
<td>CMAT</td>
</tr>
<tr>
<td>Mathematics and Sciences Electives</td>
<td>3</td>
<td>N</td>
<td>SR</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>42 credit hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(at least 2 credits must be SUNY Liberal Arts &amp; Sciences specific)</td>
<td></td>
<td>(X)</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 60

### Important Points:
- Plans for the A.A.S. in individual studies degree should be developed carefully and with the assistance of a counselor or advisor.

ASSOCIATE IN SCIENCE

### Individual Studies

curriculum code: 0688 | HEGIS code: 5699
minimum credit hours required: 60

This degree program is designed for students who are pursuing a transfer degree but are undecided about a career path. This degree may be completed with 18 credit hours in one of the following liberal arts and sciences areas: humanities, social sciences, or mathematics/sciences. Program is also available online.
ASSOCIATE IN APPLIED SCIENCE
Information Technology
curriculum code: 1492 | HEGIS code: 5101
minimum credit hours required: 60
This degree program will help students develop both an in-depth understanding of computing technology fundamentals and the skills necessary for implementation in selected environments. Students complete several core courses and then select from a number of liberal arts and career electives. The wide range of electives provides flexibility for students as they select courses that further their technology-related career goals. Graduates are able to identify technology needs and specify appropriate systems. They have the skills to perform installation, configuration, maintenance, troubleshooting, and documentation services. Depending on their choice of electives, students are directly employable in the areas of computer support, application support, help desk support, and network and database support. Program is also available online.

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>18 credit hours</th>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
<td></td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
<td>HUMA</td>
<td>H</td>
<td>CWRT/VEDP</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td>Mathematics and Sciences</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>up to 6 credits may be SUNY General Education-category specific</td>
<td>(X-X)</td>
<td>S</td>
<td>(SR)</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>6</td>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>MATH</td>
<td>N</td>
</tr>
<tr>
<td>Mathematics and Sciences Electives</td>
<td>up to 3 credits may be SUNY General Education-category specific</td>
<td>(X)</td>
<td>N</td>
<td>(SR)</td>
<td></td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>12 credit hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A specialization of 12 additional hours beyond the general requirements (18 credits total) must be completed in either Humanities, Mathematics and Sciences, or Social Sciences.</td>
<td></td>
<td>(X)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>30 credit hours</td>
<td></td>
<td>(X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 12 credits may need to be SUNY General Education-category specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td></td>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ASSOCIATE IN SCIENCE
Liberal Arts & Sciences:
Adolescence Education
(Teacher Education Transfer)
curriculum code: 1804 | HEGIS code: 5649
minimum credit hours required: 60
JCC’s teacher education transfer degree programs provide students with knowledge, skills, theory, and hands-on educational experiences that will prepare them for transfer to a four-year institution with New York state teacher certification authority. Graduates will be able to transfer with full credit and junior status into participating SUNY four-year teacher education programs. Students will begin fulfilling their liberal arts specialization requirements along with courses in education theory and practice. Specialization areas include: biology, chemistry, earth science, English, modern language, general science, history/social studies, mathematics, and physics. This program is designed to prepare students for transfer to classroom teacher preparation programs in the areas of adolescence education (grades 7-12 subject area) at four-year institutions with New York state teacher certification authority. Students who plan carefully can normally be expected to transfer to a four-year institution as juniors. The transfer institutions may have differing requirements. Students should plan their programs with a transfer counselor and an academic advisor as soon as possible and preferably before beginning their first semester at JCC.

<table>
<thead>
<tr>
<th>General Degree Requirements</th>
<th>21-23 credit hrs</th>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>12-14</td>
<td></td>
<td>6-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Language Requirement</td>
<td></td>
<td>(choose from courses within the ARA, FRE, RUS, RHE disciplines)</td>
<td>FLAN</td>
<td>H</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1510: General Psychology</td>
<td>3</td>
<td>SOSC</td>
<td>S</td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td>PSY 2550: Psychology of Adolescence</td>
<td>3</td>
<td>SOSC</td>
<td>S</td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>3</td>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>MATH</td>
<td>N</td>
</tr>
<tr>
<td>Program Core Specialization Electives</td>
<td>12-18</td>
<td></td>
<td>(X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All New York state registered teacher education programs require the completion of a liberal arts specialization. Students should determine specialization areas prior to transferring to begin fulfilling specialization requirements. These courses should be selected with a transfer counselor or academic advisor and reflect the transfer institution’s requirements and the student’s area of academic specialization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>7-11</td>
<td>to supplement program specialization to 23 total credits: EDU 2210, EDU 2450, EDU 2460</td>
<td></td>
<td>(X-X)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>14-16 credit hours</td>
<td>Depending on student’s specialization choice, up to 16 credits may need to be SUNY general education specific to satisfy all 10 categories and 3 credits may need to be mathematics and sciences electives to earn at least 6 credits in the category.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td>30</td>
<td>30</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IMPORTANT POINTS:
• Students planning to transfer should work closely with a transfer counselor and an academic advisor. The degree requirements may be modified depending on the requirements of the specific transfer institution. Many transfer institutions also have specific overall GPA requirements.
• Students planning to transfer to a four-year SUNY institution to complete their teacher education baccalaureate degree must complete the entire SUNY General Education Requirements (SUNY-GER) plus an additional three credits of foreign language. Students must work closely with an
academic advisor when choosing the courses to fulfill SUNY General Education Requirements.

- EDU 1510, 2210, and 2460 all include a field component. The number of field hours varies by course. It is possible to achieve a total of 165 field hours through JCC coursework.

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences:
Childhood Education
(teacher education transfer)
curriculum code: 1802 | HEGIS code: 5649
minimum credit hours required: 60

JCC’s teacher education transfer degree programs provide students with knowledge, skills, theory, and hands-on educational experiences that will prepare them for transfer to a four-year institution with New York State teacher certification authority. Graduates will be able to transfer with full credit and junior status into participating SUNY four-year teacher education programs. Students will begin fulfilling their liberal arts specialization requirements along with courses in education theory and practice. Specialization areas include: biology, chemistry, earth science, English, modern language, general science, history/social studies, mathematics, and physics. This program is designed to prepare students for classroom teacher preparation programs in the areas of childhood education (grades 1-6) with middle school extension (grades 7-9 subject area) at four-year institutions with New York State teacher certification authority. Students who plan carefully can normally be expected to transfer to a four-year institution as juniors. The transfer institutions may have differing requirements. Students should choose from courses within the ARA, FRE, RUS, SPA disciplines.

IMPORTANT POINTS:
- Students planning to transfer should work closely with a transfer counselor and an academic advisor. The degree requirements may be modified depending on the requirements of the specific transfer institution. Many transfer institutions also have specific overall GPA requirements.
- Students planning to transfer to a four-year SUNY institution to complete their teacher education baccalaureate degree must complete the entire SUNY General Education Requirements (SUNY-GER) plus an additional three credits of foreign language. Students must work closely with an academic advisor when choosing the courses to fulfill SUNY General Education Requirements.
- EDU 1510, 2210, and 2460 all include a field component. The number of field hours varies by course. It is possible to achieve a total of 165 field hours through JCC coursework.

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences:
Early Childhood Education
(teacher education transfer)
curriculum code: 1803 | HEGIS code: 5649
minimum credit hours required: 60

JCC’s teacher education transfer degree programs provide students with knowledge, skills, theory, and hands-on educational experiences that will prepare them for transfer to a four-year institution with New York State teacher certification authority. Graduates will be able to transfer with full credit and junior status into participating SUNY four-year teacher education programs. Students will begin fulfilling their liberal arts specialization requirements along with courses in education theory and practice. Specialization areas include: biology, chemistry, earth science, English, modern language, general science, history/social studies, mathematics, and physics. This program is designed to prepare students for transfer to classroom teacher preparation programs in the areas of early childhood education (birth through grade 2) at four-year institutions with New York State teacher certification authority. Students who plan carefully can normally be expected to transfer to a four-year institution as juniors. The transfer institutions may have differing requirements. Students should choose from courses within the ARA, FRE, RUS, SPA disciplines.

IMPORTANT POINTS:
- Students planning to transfer should work closely with a transfer counselor and an academic advisor. The degree requirements may be modified depending on the requirements of the specific transfer institution. Many transfer institutions also have specific overall GPA requirements.
- Students planning to transfer to a four-year SUNY institution to complete their teacher education baccalaureate degree must complete the entire SUNY General Education Requirements (SUNY-GER) plus an additional three credits of foreign language. Students must work closely with an academic advisor when choosing the courses to fulfill SUNY General Education Requirements.
- EDU 1510, 2210, and 2460 all include a field component. The number of field hours varies by course. It is possible to achieve a total of 165 field hours through JCC coursework.

### General Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
<td>HUMA</td>
<td>CVRT</td>
</tr>
<tr>
<td>Modern Language Requirement</td>
<td>6-8</td>
<td>FLAN</td>
<td>H</td>
</tr>
<tr>
<td>(choose from courses within the ARA, FRE, RUS, SPA disciplines)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 1510: General Psychology</td>
<td>3</td>
<td>SOSC</td>
<td>SR</td>
</tr>
<tr>
<td>PSY 2520: Child Development</td>
<td>3</td>
<td>SOSC</td>
<td>SR</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>MATH</td>
<td>CMAT</td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU 1510: Foundations of Education</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Specialization Electives</td>
<td>12-18</td>
<td>(X)</td>
<td></td>
</tr>
<tr>
<td>All New York state registered teacher education programs require the completion of a liberal arts specialization. Students should determine specialization areas prior to transferring to begin fulfilling specialization requirements. These courses should be selected with a transfer counselor or academic advisor and reflect the transfer institution's requirements and the student's area of academic specialization.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>7-11</td>
<td>(X-X)</td>
<td></td>
</tr>
<tr>
<td>(to supplement program specialization to 23 total credits) EDU 2210, EDU 2440, EDU 2450, EDU 2460</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>14-16</td>
<td>(X-X)</td>
<td></td>
</tr>
<tr>
<td>Depending on student's specialization choice, up to 16 credits may need to be SUNY general education specific to satisfy all 10 categories and 3 credits may need to be mathematics and sciences electives to earn at least 6 credits in the category.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits:</td>
<td>60</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
ASSOCIATE IN ARTS

Liberal Arts & Sciences:

Humanities (General Degree)

Curriculum Code: 0212 | HEGIS Code: 5649

Minimum credit hours required: 60

This degree program prepares students for transfer to a four-year college or university to earn a baccalaureate degree in an area of the humanities. Humanities is one of the broadest of the academic disciplines and offers students a great deal of flexibility and significant freedom in course selections. Working with their faculty advisors, JCC students can focus on interest areas in art, English, philosophy, modern language, music, and theatre. Students can choose to earn the general degree or can choose to earn the degree with a specialization in English (a SUNY Transfer Path). Program is also available online.

General Degree Requirements: 24 credit hours

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
<td>HUMA</td>
<td>CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>(X-X)</td>
<td>S</td>
<td>(SR)</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>MATH</td>
<td>CMAT</td>
</tr>
<tr>
<td>Mathematics and Sciences Electives</td>
<td>(X)</td>
<td>N</td>
<td>(SR)</td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>18 credit hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Language Requirement</td>
<td>3</td>
<td>FLAN</td>
<td>H</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at least 12 credits must be numbered 2000 or higher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>18 credit hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 6 credits may need to be Liberal Arts and Sciences specific and up to 9 credits may need to be SUNY General Education category specific</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 60

ASSOCIATE IN SCIENCE

Mathematics & Sciences (General Degree)

Curriculum Code: 0645 | HEGIS Code: 5649

Minimum credit hours required: 60

This degree program parallels the first two years of course content for the Bachelor of Science or Bachelor of Arts degrees offered by many four-year colleges or universities. Working with faculty advisors, students can focus on interest areas in mathematics, biology, chemistry, geology, physics, and environmental science and forestry, which will prepare them for transfer into baccalaureate programs. Students interested in careers in pharmacy, medicine, dentistry, veterinary medicine, medical technology, and related areas can begin their studies in this degree program. It is very important for a student to learn the requirements of the first two years of any college to which he or she may wish to transfer. Students can choose to earn the general degree or can choose to earn the degree with a specialization in...
biology, chemistry, mathematics, or nutrition (each a SUNY Transfer Path).

### ASSOCIATE IN APPLIED SCIENCE
**Mechanical Technology**

Curriculum code: 0595  | HEGIS code: 5315  
Minimum credit hours required: 63

This degree program is for students desiring employment in the field of mechanical or industrial engineering technology. Graduates may qualify for positions such as machine tool, tool, and product designer; industrial laboratory technician; inspector; production control technician; sales, field, or safety technician; CAD operator; and other related positions. Graduates also have the option of transferring to four-year institutions offering the bachelor’s degree in mechanical technology. Students can choose from either the machine tool specialization or the design specialization and must complete all specialization requirements to earn the degree. Program completion will require students to attend some classes on the Jamestown Campus.

### Mechanics and Technology Education Program Details

**General Requirements**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Humanities</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>H</td>
</tr>
<tr>
<td>English Electives (college level)</td>
<td>3</td>
<td>H</td>
<td>CWRT</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>6</td>
<td>(X-X)</td>
<td>S</td>
</tr>
<tr>
<td><strong>Mathematics and Sciences</strong></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 1600: Precalculus (or higher)</td>
<td>4</td>
<td>MATH</td>
<td>N</td>
</tr>
</tbody>
</table>

**Program Core Requirements**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>16 credit hours</th>
<th>24 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Core Electives</strong></td>
<td>Any courses not already required numbered 1500 or higher within the AST, BIO, CHE, GLG, MAT (1540+), MET, and PHY (1600+) disciplines. **</td>
<td>(X)</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>up to 10 credits may need to be SUNY General Education-category specific</td>
<td>up to 6 credits may need to be SUNY General Education-category specific</td>
</tr>
</tbody>
</table>

**Total Credits: 60**

**Important Points:***
- A GPA of at least 2.0 in math/science coursework is required for graduation.
- CHE 1500 and CHE 1530 - only one may count as a program core elective. If both are taken, one will count as a program core elective and the other as an additional liberal arts & sciences and/or career elective.
- A maximum of four 1-credit hour (non-lab) courses may count as program core electives. If more are taken, the credit(s) will count as additional liberal arts & sciences and/or career elective(s).

**Design Specialization**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>63 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 1310: Introduction to World Wide Web</td>
<td>1</td>
</tr>
<tr>
<td>CSC 1320: Introduction to Word Processing</td>
<td>1</td>
</tr>
<tr>
<td>CSC 1330: Introduction to Spreadsheets</td>
<td>1</td>
</tr>
<tr>
<td>MCT 1240: Engineering Drawing with AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MCT 1270: Machine Theory and Operations</td>
<td>3</td>
</tr>
<tr>
<td>MCT 1280: Computer Numerical Control of Machine Tools</td>
<td>3</td>
</tr>
<tr>
<td>MCT 1380: Introduction to Solid Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MCT 2380: Advanced Solid Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MCT 2420: Manufacturing Process I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 63**

**Important Points:**
- To complete the program in two years, students must begin in a fall semester at the appropriate levels of math.
- CSC 1310-1330 are 5-week courses that represent a time commitment of 15 weeks equivalent to a full three credit hour course.
- With the appropriate mathematical background, students may elect to take MAT 1600 and/or MAT 1710.
- Students with appropriate background may opt for PHY 1610 or PHY 1710.
- MAT 1220 and MAT 1590 have a prerequisite of MAT 0600 or MAT 1210 or placement exam.

### ASSOCIATE IN SCIENCE
**Media Arts**

Curriculum code: 1732  | HEGIS code: 5012
Minimum credit hours required: 60

This degree program is intended for students interested in using digital media to communicate with others by creating visuals and sounds, as well as using the written and spoken word. The program prepares graduates for careers as media specialists, educators, and designers with skills in web design, digital filmmaking, photography and digital imaging, multimedia journalism, and electronic storytelling. Program completion will require students to attend some classes on the Jamestown Campus.

**General Requirements**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>27 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Humanities</strong></td>
<td>9</td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Humanities Electives**

Choose one of the following courses: ENG 2740: News Writing and Editing, ENG 2840: Film Study and Appreciation, or ENG 2540: Creative Writing

**Social Sciences**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences Electives</td>
<td>up to 6 credits may need to be SUNY General Education-category specific</td>
</tr>
</tbody>
</table>

**Mathematics and Sciences**

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>9</th>
</tr>
</thead>
</table>
Students are advised to select program electives after careful consultation with their advisors.

**ASSOCIATE IN APPLIED SCIENCE**

**Medical Office Technology**

Curriculum code: 1664 | HEGIS code: 5214

This degree program provides students with the skills employers in healthcare facilities demand. The medical profession is exciting but complex. The typical physician does not have the time to perform the administrative responsibilities of the office. Administrative tasks are those procedures used to keep a medical practice office running efficiently, including front desk procedures, scheduling, records management, billing, insurance, coding, and medical transcription. Today's medical office specialist must possess technical skills along with personal skills. The assistant must have excellent communication, computer, and organizational skills. Computers are used in every kind of healthcare setting for many different tasks. Computer programs handle word processing, financial spreadsheets, and databases. With these programs, office personnel can handle billing, scheduling, account updating, insurance processing, and medical transcription. Excellent interpersonal skills are essential for the medical office specialist, who is usually the patient's first contact with a busy office. Program is also available online.

<table>
<thead>
<tr>
<th>Program Core Requirements</th>
<th>30 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMM 1510: Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMM 1610: Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CMM 1710: Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>CMM 1750: Rhetoric of Vision and Sound</td>
<td>3</td>
</tr>
<tr>
<td>CMM 2610: Mass Communication and Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMM 2530: Writing for Electronic Media</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Core Electives**

<table>
<thead>
<tr>
<th>Program Core Electives</th>
<th>12 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1510, ART 1530, ART 1570, ART 1611, ART 1613, ART 1670, ART 1730, ART 1740, ART 1750, ART 2570, ART 2730, ART 2880, CMM 1630, CMM 1650, CMM 1710, CMM 2560, CSC 1530, MUS 1710, MUS 1730</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Electives</th>
<th>3 credit hours</th>
</tr>
</thead>
</table>

Total Credits: 60

**IMPORTANT POINTS:**
- Students are encouraged to consult with an advisor prior to selecting electives.

**ASSOCIATE IN APPLIED SCIENCE**

**Nursing**

Curriculum code: 0622 | HEGIS code: 5208.1

Minimum credit hours required: 64

Upon completion of the nursing program, the graduate will be educationally prepared to provide patient-centered care to individuals across the lifespan with diverse cultures who are experiencing disruptions in biophysical and psychosocial dimensions in a variety of healthcare settings. The graduate will provide care utilizing the National League for Nursing (NLN) Association Degree (AD) competencies, Quality and Safety Education for Nurses (QSEN) competencies; and practice within the three roles of the AD nurse. The graduate will be prepared to take the National Council of State Boards for Licensure Examination (NCLEX-RN) to become a nurse.

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>27 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Electives (college level)</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>3</td>
</tr>
<tr>
<td>Arts Electives</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mathematics Electives** (college level) 3 credits must be SUNY General Education-category specific

<table>
<thead>
<tr>
<th>Mathematics and Sciences Electives</th>
<th>6 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 3 credits may be SUNY General Education-category specific</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>3 credit hours</th>
</tr>
</thead>
</table>

Total Credits: 60-61

**IMPORTANT POINTS:**
- Students entering the nursing program may only have two opportunities to successfully complete Anatomy and Physiology I or II with a "C" grade or better. Students who have taken Anatomy and Physiology I or II more than twice will not be permitted to enter or continue in the nursing program.
- Prior to entrance into NUR 1510, students are required to present certification of completion of a course in Basic Life Support that includes infant, child, and adult CPR and AED. Students must present proof of required criminal background checks and receive health center clearance.
• BIO 2510: Anatomy and Physiology I must be completed with a minimum grade of "C" prior to taking NUR 1520. Students in NUR 1510 may not progress to NUR 1520 with a grade lower than a "C." Students receiving a grade lower than a "C" in either BIO 2510 or NUR 1510 will be administratively dropped from the nursing program and will be required to reapply for admission.

• BIO 2520: Anatomy and Physiology II must be completed with a minimum grade of "C" prior to taking NUR 2510. Students in NUR 1520 may not progress to NUR 2510 with a grade lower than a "C." Students receiving a grade lower than a "C" in either BIO 2520 or NUR 1520 will be administratively dropped from the nursing program and will be required to reapply for admission.

• A minimum grade of C is required in each nursing core course. A student will be permitted to repeat one nursing core course (NUR 1510, NUR 1520, NUR 2510, and NUR 2520) one time. Should the student be unsuccessful in repeating any nursing core course, he/she would be ineligible to continue in the nursing program. Students who are unsuccessful in more than one nursing core course and have already repeated one core course will not be eligible to repeat a second nursing core course. Withdrawal from a core nursing course after the first 30 calendar days will be considered a failure of the course for reapplication purposes. In case of illness or other extreme circumstances, the faculty may consider a one-time exception. A student wishing to be considered for a waiver to the two course limit should obtain letters of support from two faculty members, at least one of which must be from a nursing faculty member and submit them to the nursing program committee for consideration.

ASSOCIATE IN APPLIED SCIENCE
Occupational Therapy Assistant
curriculum code: 0665 | HEGIS code: 5210
minimum credit hours required: 64

Upon completion of the occupational therapy assistant program, the ASSOCIATE degree graduate will be educationally prepared to provide service to individuals having difficulties in living due to developmental deficits, physical injury and illness, psychological and social disabilities, and the aging process. The occupational therapy assistant works with and under the direction of a registered occupational therapist, and assists with the processes of client evaluation, goal setting, implementation of care, and documentation of occupational therapy services. The coursework includes a series of general education courses with an emphasis on the biological and psychological sciences. Professional studies focus on how human occupa-tional development is affected by illness and injury, and how function can be facilitated. Program completion will require students to attend some classes on the Jamestown Campus.

ASSOCIATE IN APPLIED SCIENCE
Office Technology
curriculum code: 0667 | HEGIS code: 5005
minimum credit hours required: 60

This degree program provides the student with skills necessary to prepare for employment in an office position. Training is available for those who have had no office preparation and for students with limited office skills who desire to enhance or update present skills. The program may also offer short-term training and development to those who may be seeking a career change or return to the job market. Students who value lifelong learning may also be attracted to the degree program. The program focuses on skill building in the areas of keyboarding, word processing, office communication, and office procedures. Courses in business management, computer courses, and a broad background in liberal arts will add to the student’s ability to develop decision-making skills. The ability to solve problems will be stressed throughout the program. Upon completion of the degree program, students will be able to enter the workplace or transfer credits to a four-year institution. Program is also available online.

IMPORTANT POINTS:
• MAT 1540 is recommended and most widely transferred into OT programs.
• ENG 1540 is recommended and needed for transfer.

See more important points at www.sunyjcc.edu/program-offering/occupational-therapy-assistant.

ASSOCIATE IN APPLIED SCIENCE
Occupational Therapy Assistant
Program Core Requirements
Total Credits: 60

General Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1520: English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 2510: Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 2520: Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 1540: Problem Solving with Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Applications for Living

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA 2520: Medical Specialties</td>
<td>3</td>
</tr>
<tr>
<td>OTA 1530: Occupational Skills of OTA I</td>
<td>1</td>
</tr>
<tr>
<td>OTA 1620: Psychosocial Concepts/Techniques</td>
<td>2</td>
</tr>
<tr>
<td>OTA 1630: Fundamental Skills of OTA II</td>
<td>1</td>
</tr>
<tr>
<td>OTA 1640: Therapeutic Interventions I</td>
<td>2</td>
</tr>
<tr>
<td>OTA 1650: Growing Years: Birth-Young Adult</td>
<td>3</td>
</tr>
<tr>
<td>OTA 1700: Introduction to Professional Practice I</td>
<td>1</td>
</tr>
<tr>
<td>OTA 2520: Adulthood and Aging</td>
<td>2</td>
</tr>
<tr>
<td>OTA 2540: Community Based Practice</td>
<td>1</td>
</tr>
</tbody>
</table>

Therapeutic Interventions II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA 2550: Technology and Environmental Applications for Living</td>
<td>3</td>
</tr>
<tr>
<td>OTA 2560: Therapeutic Interventions II</td>
<td>1</td>
</tr>
<tr>
<td>OTA 2570: Classroom to Clinic</td>
<td>2</td>
</tr>
<tr>
<td>OTA 2620: Physical Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>OTA 2700: Fieldwork IIA</td>
<td>5</td>
</tr>
<tr>
<td>OTA 2720: Fieldwork IIB</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Credits: 64

IMPORTANT POINTS:
• Students are encouraged to consult with an advisor prior to selecting electives.

ASSOCIATE IN APPLIED SCIENCE
Office Technology
Program Core Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1220: College Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1320: Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1410: Accounting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1420: Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1600: Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2320: Word Processing Production</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2420: Professional Development/Internship</td>
<td>5</td>
</tr>
<tr>
<td>BUS 2480: Business Electronic Communication</td>
<td>3</td>
</tr>
<tr>
<td>CSC 1500: Microcomputer Applications I</td>
<td>4</td>
</tr>
</tbody>
</table>

Any additional BUS course beyond the Program Core Requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1320: Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1410: Accounting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2320: Word Processing Production</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2420: Professional Development/Internship</td>
<td>5</td>
</tr>
<tr>
<td>BUS 2480: Business Electronic Communication</td>
<td>3</td>
</tr>
<tr>
<td>CSC 1500: Microcomputer Applications I</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits: 60

IMPORTANT POINTS:
• Students are encouraged to consult with an advisor prior to selecting electives.
ASSOCIATE IN SCIENCE
Physical Education Studies
curriculum code: 1659 | HEGIS code: 5101
minimum credit hours required: 60
This degree program focuses on courses in the liberal arts and physical education theory and activity with an emphasis on health awareness, sportsmanship, and professionalism. Students will graduate from the program with a specific knowledge base and experiences in the areas of movement, sport/athletics, recreation, and the life sciences. Individual and dual sports, fitness and conditioning, team sports, recreation, and health are among the areas that will be studied. Program completion will require students to attend some classes on the Jamestown Campus.

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>33 credit hours</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
</tr>
<tr>
<td>ENG 1540: Writing About Literature</td>
<td>3</td>
<td>HUMA</td>
<td></td>
<td>CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>9</td>
<td>(X-X-X)</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>up to 9 credits may need to be SUNY General Education-category specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Electives (college level)</td>
<td>3</td>
<td>MATH</td>
<td>N</td>
<td>CMAT</td>
</tr>
<tr>
<td>Sciences Electives</td>
<td>15</td>
<td>NSCI</td>
<td>N</td>
<td>SR</td>
</tr>
<tr>
<td>CSC courses may be applied, up to 3 credits may need to be SUNY General Education-category specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>12 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHE 1670: Introduction to Physical Education</td>
<td>3</td>
<td>VEDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any additional PHE course beyond the Program Core Requirements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>15 credit hours</td>
<td>(X)</td>
<td>(X)</td>
<td></td>
</tr>
<tr>
<td>up to 9 credits may need to be SUNY General Education-category specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td>30</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IMPORTANT POINTS:
- Requirements for bachelor’s degrees in this field vary widely. Selection of electives should be made in close consultation with an advisor and should be based on student career specialization and transfer college requirements.

ASSOCIATE IN APPLIED SCIENCE
Professional Piloting
curriculum code: 1494 | HEGIS code: 5302
minimum credit hours required: 60
This degree program prepares students to enter the field of aviation as a professional pilot. Students successfully completing the program will have earned the Federal Aviation Administration (FAA) certifications of Private and Commercial Pilot, with Instrument Rating, and either be a Certified Flight Instructor-Airplane or possess the multi-engine rating. All instruction occurs under Part 141 of the Federal Aviation Regulations (FARs). Graduates who earn the Certified Flight Instructor-Airplane rating will be able to log the same hours as their students, earn pay, and not pay airplane rental fees. Students planning to work for the commercial airlines are encouraged to earn a four-year degree. Program is also available online.

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>19 credit hours</th>
<th>SUNY</th>
<th>LAS</th>
<th>JCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II</td>
<td>3</td>
<td>BCOM</td>
<td>H</td>
<td>CENG</td>
</tr>
<tr>
<td>English Electives (college level)</td>
<td>3</td>
<td>H</td>
<td></td>
<td>CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 1520: World Regional Geography</td>
<td>3</td>
<td>SOSC</td>
<td>S</td>
<td>SR, VEDP</td>
</tr>
<tr>
<td>Social Sciences Electives</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 1590: College Algebra/Trigonometry</td>
<td>4</td>
<td>MATH</td>
<td>N</td>
<td>CMAT</td>
</tr>
<tr>
<td>MET 1510: Introduction to Meteorology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Core Requirements</td>
<td>28.5-31 credit hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1100: Aircraft Powerplants and Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1140: Private Pilot Ground School</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1150: Private Pilot Flight</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1200: Survey of Air Traffic Control</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1240: Instrument Pilot Ground School</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1250: Instrument Pilot Flight</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1340: Commercial Pilot Ground School II</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 1350: Commercial Pilot Flight I</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 2100: Aviation Safety</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 2120: Commercial Pilot Ground School II</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 2140: Commercial Pilot Flight II</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 2200: Advanced Aircraft Systems</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVN 2250: Certified Flight Instructor I- Airplane or AVN 2350: Multi Engine Flight</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>10-12.5 credit hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at least 1 credit must be SUNY Liberal Arts &amp; Sciences specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits: 60</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IMPORTANT POINTS:
- Ground and flight instruction are currently offered at Prior Aviation and Rochester Air Center.
ASSOCIATE IN APPLIED SCIENCE

Welding Technology
curriculum code: 1643 | HEGIS code: 5308
minimum credit hours required: 62

This degree program is for students desiring employment in the expanding field of welding and welding technology engineering. Graduates will have the opportunity to pursue careers such as welding technician, welding supervisor, inspector, and sales engineer, qualifying for technician level positions involved in testing and improving welding processes, procedures, and equipment. Graduates also have the option of transferring to four-year institutions offering the bachelor’s degree in welding engineering technology. Program completion will require students to attend some classes on the Jamestown Campus.

<table>
<thead>
<tr>
<th>General Degree Requirements</th>
<th>Degree Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 credit hours</td>
<td>SUNY LAS JCC</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>ENG 1530: English Composition II 3</td>
<td>BCOM H CENG</td>
</tr>
<tr>
<td>English Electives (college level) 3</td>
<td>H CWRT</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>Social Sciences Electives   6</td>
<td>S (VEDP)</td>
</tr>
<tr>
<td>Mathematics and Sciences</td>
<td></td>
</tr>
<tr>
<td>CHE 1500: Introduction to Chemistry 3</td>
<td>NSCI N SR</td>
</tr>
<tr>
<td>MAT 1220: Applied Math for Tech II or MAT 1500: College Algebra &amp; Trigonometry 4</td>
<td>MATH N CMAT</td>
</tr>
<tr>
<td>PHY 1250: Technical Physics I 4</td>
<td>N</td>
</tr>
<tr>
<td>PHY 1260: Technical Physics II 4</td>
<td>N</td>
</tr>
<tr>
<td>Program Core Requirements   35-36 credit hrs</td>
<td></td>
</tr>
<tr>
<td>WLD 1200: Safety and Cutting Processes 3</td>
<td></td>
</tr>
<tr>
<td>WLD 1350: Shielded Metal Arc Welding 3</td>
<td></td>
</tr>
<tr>
<td>WLD 1360: Gas Metal Arc Welding 3</td>
<td></td>
</tr>
<tr>
<td>WLD 1370: Gas Tungsten Art Welding 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2250: Advances SMAW 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2260: Advanced GMAW 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2270: Advanced GTAW 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2350: Fabrication 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2360: Alternate Processes 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2370: Metallurgy 3</td>
<td></td>
</tr>
<tr>
<td>WLD 2450: Capstone Project 2</td>
<td></td>
</tr>
<tr>
<td>Program Core Electives</td>
<td>3-4</td>
</tr>
<tr>
<td>CSC 1310 and CSC 1320 and CSC 1330, or CSC 1510, or CSC 1560</td>
<td>not required 27</td>
</tr>
</tbody>
</table>

IMPORTANT POINTS:
- To complete the program in two years, students must begin in a fall semester.
- With the appropriate background, student may elect to take MAT 1600 or MAT 1710; PHY 1610 and PHY 1620; or PHY 1710 and PHY 2710; or CHE 1550 as Mathematics and Sciences courses. Students should discuss course selection with their advisor.
ACADEMIC INFORMATION

ACADEMIC PROGRAMS: CERTIFICATE

CERTIFICATE

Computer-Aided Design & Computer Numerical Control
curriculum code: 1681 | HEGIS code: 5303
minimum credit hours required: 26
This certificate program prepares students for entry level manufacturing positions requiring skills in engineering drawing, computer-aided design, and computer numerical control. Students receive instruction on two CAD-based systems (AutoCAD and SolidWorks), a three-axis machining center, and a CNC turret lathe. Upon completion of the certificate, students will be prepared to compete for positions such as CAD operator, CAD designer, CNC operator, and CNC programmer. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements 15 credit hours

| Humanities | 3 |
| ENG 1510: English Composition I (or above) | 3 |
| Social Sciences | 3 |
| ECO 2610: Macroeconomic Principles recommended | 3 |
| Mathematics and Sciences | 3 |
| MAT 1210: Applied Math for Technology | 3 |

Program Core Requirements 17-18 credit hours

| MCT 1240: Engineering Drawing with AutoCAD | 3 |
| MCT 1270: Machine Theory and Operations | 3 |
| MCT 1280: CNC/Machine Tools | 3 |
| MCT 1380: Introduction to Solid Modeling | 3 |
| MCT 2380: Advanced Solid Modeling | 3 |

Program Core Electives 2-3

| MCT 1390: AutoCAD is recommended. | 2 |

Total Credits: 26-27

IMPORTANT POINTS:
- Due to prerequisite requirements for some courses, the minimum completion time of this certificate is three semesters (beginning with the fall semester).

CERTIFICATE

Corrections Officer Technology
curriculum code: 1660 | HEGIS code: 5505
minimum credit hours required: 32
This certificate program is designed to educate and train students for employment as corrections officers. In order to be enrolled in the core requirements of the certificate program and those that incorporate the training program of the New York State Department of Criminal Justice Services, students must be sworn corrections officers employed with a local correctional facility.

General Degree Requirements 9 credit hours

| Humanities | 3 |
| ENG 1510: English Composition I (or above) | 3 |
| Social Sciences | 3 |
| ECO 2610: Macroeconomic Principles recommended | 3 |
| Mathematics and Sciences | 3 |
| MAT 1210: Applied Math for Technology | 3 |

Program Core Requirements 17-18 credit hours

| MCT 1240: Engineering Drawing with AutoCAD | 3 |
| MCT 1270: Machine Theory and Operations | 3 |
| MCT 1280: CNC/Machine Tools | 3 |
| MCT 1380: Introduction to Solid Modeling | 3 |
| MCT 2380: Advanced Solid Modeling | 3 |

Program Core Electives 2-3

| MCT 1390: AutoCAD is recommended. | 2 |

Total Credits: 26-27

IMPORTANT POINTS:
- Students are advised to select program electives after careful consultation with their advisors.

CERTIFICATE

Digital Audio Production
curriculum code: 1781 | HEGIS code: 5008
minimum credit hours required: 31
This certificate program provides students a sequence of study that will offer them aesthetic and technical skills vital to the contemporary audio production workplace. The coursework is intended to provide suitable preparation for entry level employment in digital audio production; it also enables people currently employed in the field of audio recording a means to upgrade and expand their skills. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements 9 credit hours

| Humanities | 3 |
| ENG 1510: English Composition I (or above) | 3 |
| Social Sciences | 3 |
| PSY 1510: General Psychology or HIS 1540: US History Since 1865 | 3 |
| Mathematics and Sciences | 3 |
| CSC 1510: Introduction to Computer Science is recommended | 3 |

Program Core Requirements 22-23 credit hours

| CMM 1750: Rhetoric of Vision and Sound | 3 |
| MUS 1570: Music Theory I | 3 |
| MUS 1670: Beginning Piano | 3 |
| MUS 1710: Audio Recording | 3 |
| MUS 1730: Music and the Digital Studio | 3 |
| MUS 2890: Digital/Audio Seminar | 3 |

Program Core Electives 3

| MUS 1510: Introduction to Music or MUS 1590: American Music: Classical/Popular | 3 |
| Applied Music Electives | 1-2 |
| MUS 1750-2880, music ensembles are not required, but are suggested if eventually working towards an associate’s degree. | | |

Total Credits: 31-32

IMPORTANT POINTS:
- Students are advised to select program electives after careful consultation with their advisors.

CERTIFICATE

Digital Graphic Design & Publishing
curriculum code: 1782 | HEGIS code: 5012
minimum credit hours required: 33
This certificate provides students a sequence of study that will offer them artistic and technical skills vital to the contemporary media design workplace. The coursework is intended to provide suitable preparation for entry level employment in computer design and publishing; it also enables people currently employed in computer design and publishing a means to upgrade and expand their skills. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements 9 credit hours

| Humanities | 3 |
| ENG 1510: English Composition I (or above) | 3 |
| Social Sciences | 3 |
| PSY 1510: General Psychology or HIS 1540: US History Since 1865 | 3 |
| Mathematics and Sciences | 3 |
| CSC 1510: Introduction to Computer Science is recommended | 3 |

Program Core Requirements 24 credit hours

| ART 1510: Drawing I | 3 |
| ART 1530: 2-D Design & Color | 3 |
| ART 1730: Introduction to Computer Art & Design | 3 |
| ART 1740: Graphic Design, Layout, & Publishing | 3 |
| ART 1750: Graphic Design Applications | 3 |
| ART 2730: Web Design & Animation | 3 |
| ART 1611: Studio Problems - Computer Graphics | 3 |
Program Core Electives
choose one course from the following list:
ART 1500, ART 1550, ART 1560, ART 1570, ART 2611

Total Credits: 33

IMPORTANT POINTS:
• Students are advised to select program electives after careful consulta-
tion with their advisors.

CERTIFICATE

Early Childhood Development
curriculum code: 0968 | HEGIS code: 5503
minimum credit hours required: 35
This certificate program enables students to obtain the skills, values, and
knowledge necessary to work in entry level positions in early childhood
education/child care such as assistants in preschools, childcare centers
and family day care homes, and in school-age child care settings. In addition,
the program provides opportunities for those already employed in
child care facilities, including family care providers and those holding the
Child Development Associate (CDA) credential, to update and refresh their
knowledge and skills. The program also provides interested students the
opportunity to continue their education beyond the level of a certificate to
that of an Associate in Applied Sciences in human services with the added
possibility of transferring to a bachelor's level program in early childhood
education. This certificate can be used as part of a more complete career
ladder in early childhood education and care.

General Degree Requirements
6 credit hours
Humanities 3
ENG 1530: English Composition II 3
Social Sciences 3
PSY 1510: General Psychology is recommended

Program Core Requirements
29 credit hours
EDU 1250: Early Childhood Development 1
EDU 1260: Health, Safety & Nutrition in Early Childhood Development 3
EDU 1290: Introduction to Early Childhood Education Care 3
EDU 1300: Observation and Guidance of Young Children 3
EDU 2150: Infant/Toddler Development and Education 3
EDU 2210: Field Placement I - Education 4
EDU 2510: Philosophy and Techniques of Early Childhood Education 3
EDU 2440: Children's Literature 3
EDU 2450: Exceptional Children 3
PSY 2520: Child Development 3

Total Credits: 35

IMPORTANT POINTS:
• EDU 1250, 1260, and 1270 do not have an ENG 1530 eligibility prereq-
usite and are, therefore, ideal starting points for the student pursuing a
certificate in early childhood development.
• Individuals who have earned the Child Development Associate (CDA) will
receive these 10 JCC credits: EDU 1250, EDU 1260, EDU 1290, and EDU
2210.
• Early childhood development certificate courses are designed as a career
ladder leading to the associate degree. They therefore change according
to changes in New York state education requirements.
• Students must be willing to obtain and pay for any necessary physical or
medical examinations or tests, which are required by some internship
agencies.
• Enrollment in the program does not guarantee acceptance into field
placements in the program.
• Students must complete an application for EDU/HUS 2210: Field Place-
ment I, and approval of the application is required for the filed place-
ment to commence. For students pursuing a human services career path,
HUS 1210: Introduction to Human Services with a grade of C or better
is the prerequisite. EDU 1290: Introduction to Early Education and Care
with a grade of C or better is the prerequisite.
• Some internship agencies require FBI or Child Abuse Registry checks.
These processes can be lengthy and may require up to four months in
order for approval to be obtained prior to placement.
• Field placement will take place with children in an educational setting.

CERTIFICATE

Entrepreneurship
curriculum code: 2240 | HEGIS code: 5004
minimum credit hours required: 30
This certificate program provides you with an opportunity to develop
your entrepreneurial skills with an understanding of accounting, market-
ing, business law, and management as they relate to business ownership.
Through electives, you will have the opportunity to explore various areas of
business and add a more in-depth level of skill that you can use in becom-
ing a successful entrepreneur. Program is available online.

General Degree Requirements
9 credit hours
Humanities 3
ENG 1510: English Composition I (or above) 3
Social Sciences 3
Mathematics and Sciences 3
Mathematics and Sciences Electives 3

Program Core Requirements
21 credit hours
BUS 1430: Entrepreneurship I 3
BUS 2540: Business Law II 3
ENT 1440: Small Business Management 3
ENT 1450: Entrepreneurship Finance 3
CSC 1560: Microcomputer Applications I 4

Total Credits: 30

IMPORTANT POINTS:
• Mathematics courses are selected based on a student’s background. MAT
1230: Mathematics of Business, MAT 1500: Problem Solving with Math-
eatics, or MAT1540: Elementary Statistics are recommended electives.

CERTIFICATE

Individual Studies
curriculum code: 0987 | HEGIS code: 5699
minimum credit hours required: 30
This certificate program provides the student the opportunity to complete
concentrated study in a particular area of their choice. First-time, full-time
students are also required to take INT 1520: Student Success Seminar.
Students interested in earning the certificate in individual studies should
consult with their faculty advisors to insure proper selection of courses.
Program is also available online.

General Degree Requirements
9 credit hours
Humanities 3
ENG 1510: English Composition I (or above) 3
Social Sciences 3
Mathematics and Sciences 3
Mathematics and Sciences Electives 3

Program Core Requirements
21 credit hours
A specialization of 21 additional hours beyond the general requirements,
which may be any combination of electives.

Total Credits: 30

IMPORTANT POINTS:
• This certificate is not approved for Title IV financial aid. Students enrolled
in this certificate are not eligible to receive federal financial aid (PELL,
SEOG, or Direct loans).
CERTIFICATE
Industrial Equipment Technology
curriculum code: 2382 | HEGIS code: 5101
minimum credit hours required: 29
This certificate program prepares students with the necessary interdisciplinary background to troubleshoot, repair, and maintain electrical, mechanical, hydraulic, and pneumatic equipment used in a manufacturing or facilities environment. It will prepare students to obtain the necessary skills for entry-level positions in industrial maintenance as well as other entry-level manufacturing jobs. Job titles may include: Industrial Electrician, Industrial Machinery Mechanic, Installation Technician, Industrial Technician, and Building Maintenance Mechanic. The certificate will also allow personnel presently employed by industry to obtain a credential showing basic competence in the skills necessary for advancement. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements
6 credit hours
- Humanities 3
- ENG 1510: English Composition I (or above) 3
- Mathematics and Sciences 3
- MAT 1210: Applied Math for Technology (or MAT 1220, MAT 1590, or higher) 3

Program Core Requirements
24 credit hours
- ELC 1200: Fundamentals of Electricity 3
- ELC 1220: Industrial Automation using PLCs 3
- ELC 1230: Electric Motors and Control Systems 3
- MCT 1210: Applied Pneumatics and Hydraulics 3
- MCT 1240: Engineering Drawing with AutoCAD 3
- MCT 1270: Machine Theory and Operations 3
- MCT 1280: Computer Numerical Control of Machine Tools 3
- WLD 1240: Applied Welding 3

Total Credits: 30

IMPORTANT POINTS:
- Mathematics courses are selected based on a student’s background.
  Note that CSC 1590 has a corequisite of MAT 1590.
- Due to course prerequisites, it may take more than one year to complete this certificate program.
- Some upper level computer science courses are only offered online.

CERTIFICATE
Law Enforcement Technology
curriculum code: 2027 | HEGIS code: 5505
minimum credit hours required: 45
This certificate may be awarded to students who attend the Chautauqua County Law Enforcement Academy and complete the additional degree requirements listed. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements
9 credit hours
- Humanities 3
- ENG 1530: English Composition II 3
- Social Sciences 3
- PSY 1510: General Psychology or SOC 1510: Introduction to Sociology 3
- Mathematics and Sciences 3
- CSC 1510: Introduction to Computer Science 3

Program Core Requirements
36 credit hours
- CRI 1290: Physical Education for Criminal Justice 2
- CRI 2250: Law Enforcement Academy I 10
- CRI 2260: Law Enforcement Academy II 10
- CRI 2380: Law for the Law Enforcement Officer 3
- CRI 2420: Standardized Field Sobriety 3
- CRI 2470: Law Enforcement Practice 4
- PHE 2470: Defensive Tactics for Law Enforcement 2
- SPA 1500: Spanish in the Workplace 2

Total Credits: 45

CERTIFICATE
Machine Tool Technology
curriculum code: 2382 | HEGIS code: 5101
minimum credit hours required: 29
This certificate program provides foundation skills necessary for workforce personnel whose jobs require knowledge of machine tools. It will provide a credential that indicates to employers that the student has completed fundamental coursework in machine tools. Students will become proficient in the operation of basic machine tools such as lathes, milling machines, grinders, drill presses and precision measurement equipment. Basic courses are designed to build and strengthen knowledge of machine tool theory.

Courses in solid modeling and CNC programming are included to provide an introduction to two specific areas that are important for overall understanding of the field. Students will also develop skills in basic mathematics and writing appropriate to a machinist position. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements
9 credit hours
- Humanities 3
- ENG 1510: English Composition I (or above) 3
- Social Sciences 3
- Mathematics and Sciences Electives 3

Program Core Requirements
20 credit hours
- CSC 1330: Introduction to Electronic Spreadsheets 1
- MCT 1240: Engineering Drawing with AutoCAD 3
- MCT 1270: Machine Theory and Operations 3
- MCT 1300: Machine Tool Technology II 4
- MCT 1340: Manufacturing Drawing and GD&T 3
- MCT 1380: Introduction to Solid Modeling 3

Total Credits: 29
CERTIFICATE

Medical Office Technology
curriculum code: 1665 | HEGIS code: 5214
minimum credit hours required: 31
This certificate program provides the students with the specialized skills necessary to prepare them for employment in a medical office and to develop student’s office skills along with specialization directed toward medical terminology, medical insurance, and medical office procedures. The program may also offer short-term training to those seeking to increase their marketability or seeking a career change. The certificate program provides students with the basic core of work and problems-solving abilities and constitutes the first half of the associate degree in medical office technology. Program is also available online.

General Degree Requirements
- Humanities 6
- ENG 1530: English Composition II
- English Electives (college level) 3
- Social Sciences 3
- Social Sciences Electives
- Mathematics and Sciences 3
- Mathematics Electives (college level) 3

Program Core Requirements
- BUS 1220: College Keyboarding 3
- BUS 1320: Word Processing 3
- BUS 1410: Accounting Fundamentals 3
- CSC 1560: Microcomputer Applications I 4
- MOT 1410: Medical Terminology 3
- MOT 1420: Medical Office Procedures 3

Total Credits: 31

CERTIFICATE

Multimedia Production
curriculum code: 1785 | HEGIS code: 5012
minimum credit hours required: 33
This certificate program provides a sequence of study that offers students artistic and technical skills vital to the contemporary media design workplace. The coursework is intended to provide suitable preparation for entry level employment in multimedia design and production, one of the most rapidly growing employment areas in the country. It also enables individuals currently employed in multimedia design and production a means to upgrade and expand their skills. Program completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements
- Humanities 3
- ENG 1530: English Composition II
- Social Sciences 3
- PSY 1510: General Psychology or HIS 1540: US History Since 1865 3
- Mathematics and Sciences 3
- CSC 1510: Introduction to Computer Science is recommended 3

Program Core Requirements
- ART 1621: Studio Problems - Computer Graphics 3
- ART 1730: Introduction to Computer Art & Design
- ART 2730: Web Design and Animation
- CMM 1710: Digital Video Production
- CMM 1750: The Rhetoric of Vision and Sound
- CMM 2530: Writing for Electronic Media
- MUS 1730: Music and the Digital Studio 3

Program Core Electives
- ART 1530, ART 1750, ART 2621 3

Total Credits: 33

CERTIFICATE

Network Administration
curriculum code: 1507 | HEGIS code: 5103
minimum credit hours required: 36
This certificate program is designed primarily as a focused specialization for students earning a degree in computer science, computer technology, information technology, or computer information systems, but may also be obtained independent of these degrees. This certificate, built around a common set of core competencies and providing specialization through a minimum number of additional courses, is also an excellent complement to a degree in business administration or communication and media arts. Graduates of this certificate program are able to maintain the operation of a local area network (LAN), administer user accounts, implement and support LAN resources, monitor and Specialization LAN activity, design network configuration modifications, maintain LAN documentation, optimize LAN performance, resolve LAN hardware and software issues, and integrate a LAN into business processes for enhanced operations.

General Degree Requirements
- Humanities 3
- ENG 1530: English Composition II
- Social Sciences 3
- Social Sciences Electives
- Mathematics and Sciences 3
- MAT 1540: Elementary Statistics 3

Program Core Requirements
- BUS 1500: Introduction to Business 3
- BUS 2570: Principles of Management or BUS 2580: Management & Organizational Behavior 3
- CSC 1510: Introduction to Computer Science 3
- CSC 1570: Programming Concepts/Applications 3
- CSC 1580: Microcomputer Hardware & Systems Software 3
- CSC 2470: Network Administration 3
- CSC 2480: Advanced Networking and Computer Security 3
- CSC 2510: Introduction to Networks 3
- CSC 2540: Introduction to Systems Analysis 3

Total Credits: 36

IMPORTANT POINTS:
- Due to course prerequisites, it may take more than two semesters to complete this certificate program.
- Some upper level computer science courses are only offered online.

CERTIFICATE

Office Technology
curriculum code: 0981 | HEGIS code: 5005
minimum credit hours required: 31
This certificate program provides the student with skills necessary to prepare for immediate employment in an office position. Training is available for those who have had no office preparation and for students with limited office skills who desire to enhance or update present skills. The program may also offer short-term training and development to those who may be seeking a career change or return to the job market. The ability to solve problems will be stressed throughout the certificate program. This certificate provides a basic core of work that may be applied toward the associate degree requirements. Students often combine this certificate with two-year associate degree programs from other areas. The combination enhances employment opportunities. Program is also available online.

General Degree Requirements
- Humanities 6
- ENG 1530: English Composition II
- English Electives (college level) 3
- Social Sciences 3
- Social Sciences Electives
- Mathematics and Sciences 3
- Mathematics Electives (college level) 3

Program Core Requirements
- CSC 1560: Microcomputer Applications I 4
- BUS 1220: College Keyboarding 3
- BUS 1320: Word Processing 3

Total Credits: 33
CERTIFICATE

Web Design

curriculum code: 1846 | HEGIS code: 5104
minimum credit hours required: 26

This certificate program helps meet the growing demand by industry for people knowledgeable about web page design and Internet related issues. It provides the student with a strong base in computer technology, complemented by an understanding of design principles. Students who successfully complete the web design certificate meet entry level requirements for employment as a web designer or website support specialist.

General Degree Requirements

Humanities 3
ENG 1510: English Composition I (or above) 3
Social Sciences 3
Mathematics and Sciences 3-4
Mathematics and Sciences Electives (course must be numbered 1590 or higher) 3-4

Program Core Requirements

CSC 1530: Web Publishing 3
CSC 1570: Programming Concepts/Applications 3
CSC 1590: Computer Programming 4
CSC 1630: Web Technologies 3
CSC 2410: Web Programming 3
CSC 2660: Database Management 4

Total Credits: 26-27

IMPORTANT POINTS:
• Due to course prerequisites, it may take more than two semester to complete this certificate program.

CERTIFICATE

Welding Technology

curriculum code: 1922 | HEGIS code: 5308
minimum credit hours required: 31

This certificate program offers students the opportunity to pursue a specific educational specialization in the field of welding technology. Successful students will earn a certificate which includes coursework and hands-on experience in high technology welding as well as general education courses. This program is an excellent starting point for new students in welding technology and as a foundation for earning the A.A.S. degree in welding technology. Certificate completion will require students to attend some classes on the Jamestown Campus.

General Degree Requirements

Humanities 3
ENG 1510: English Composition I (or above) 3
Social Sciences 3
Mathematics and Sciences (MAT 1210: Applied Math for Technology I (or MAT 1220, MAT 1590, or higher) 3

Program Core Requirements

WLD 1200: Safety and Cutting Processes 3
WLD 1350: Shielded Metal Arc Welding 3
WLD 1360: Gas Metal Arc Welding 3
WLD 1370: Gas Tungsten Arc Welding 3
WLD 2250: Advanced SMAW 3
WLD 2260: Advanced GMAW 3
WLD 2270: Advanced GTA 3

Program Core Electives

CSC 1310, CSC 1320, CSC 1330 1

Total Credits: 31

IMPORTANT POINTS:
• To complete the program in two semesters, students must begin in a fall semester.
• CSC 1310, CSC 1320, and CSC 1330 are five-week courses that represent a time commitment of 15 weeks, equivalent to a full three-credit hour course. Students in the certificate program may choose to take one or more of the three courses. Students may also fill this requirement with CSC 1510 or CSC 1560.
• With the appropriate background, students may elect to take MAT 1600 or MAT 1710 as Mathematics and Sciences courses. Students should discuss course selection with their advisor.
COURSE DESCRIPTIONS

Descriptions of the college’s regular credit courses are listed on the following pages. The number of credit hours assigned to each course follows the description. Course numbers are designated as follows: 0000-0999 - imputed and developmental courses; 1000-1999 - freshman level courses; and 2000-2999 - sophomore level courses.

All courses required to earn a specific associate degree are normally offered with such frequency that a full-time student can earn the degree in a two-year period.

Each course description has designations indicating which semester and on which campus (Jamestown - J, Cattaraugus County Campus - C, or Online) the college intends to offer the course. Certain courses do not have a designation indicating which semester they are offered; these courses may or may not be offered on the specified campus(es) during the period 2015-2016. The college reserves the right to cancel course offerings if enrollment is insufficient. Current course, degree, and certificate information can be found at www.sunyjcc.edu.

JCC also offers credit-free courses, seminars, and workshops. For more information, contact the Center for Continuing Education.

Course Requisites

These terms explain the course requirements found at the end of each course description:

Prerequisite
A course a student has already successfully completed, or a demonstration of competence by achieving a placement test score above a specific cutoff level.

Corequisite
A course which a student takes during the same semester as the class in question. If a student has already successfully completed a corequisite, he/she does not need to take the course again.

Eligibility
A reference to eligibility to take English courses. All students must be tested for placement in English courses. The placement tests indicate which English course the student is eligible to take. For example, a student is eligible to take ENG 1530 when he/she has scored an 80+ on the Accuplacer and has demonstrated writing proficiency by successfully completing the college writing placement test with a score of 10-12 on the Writeplacer.

Placement test
JCC’s placement test assesses skills in mathematics, reading, and writing. If a student chooses to take any course for which there is a placement test prerequisite, he/she must take the appropriate test. As a rule, full-time students take the complete test after they have been accepted for admission to the college and prior to registration. New part-time students are strongly encouraged to take the test prior to registration. Part-time students must take the placement test prior to enrolling in any course which has a reading or writing prerequisite.

Permission of instructor
A course with this notation requires the student to meet with the course instructor to receive permission to take the course.

Waiver of Pre-/Corequisites
If a student feels qualified to take a course for which he or she does not appear to have the formal pre-/corequisite background, the student should contact the faculty member teaching the course or the assistant dean for the area. If, in the estimation of the faculty member or assistant dean, the student meets the pre-/corequisites in some other way, the faculty member or assistant dean may sign a waiver form which the student can then present to his advisor and/or the registrar. Students cannot register for courses for which they do not have a pre-/corequisite or a signed waiver form.

Current course, degree, and certificate information can be found at www.sunyjcc.edu.
COURSE DESCRIPTIONS

AMERICAN SIGN LANGUAGE

ASL 1510 Introductory Sign Language I Students will gain a working knowledge of manual communication, including sign language, finger-spelling, conceptualization, structure, and syntax of American Sign Language. An introduction to cultural and historical perspectives of the Deaf community is also emphasized. Eligibility: ENG 1510 and a score of 70+ on the Accuplacer test. J fall, spring; C fall, spring. 4 credit hours.

ASL 1520 Introductory Sign Language II Students will continue to sharpen their skill level and understanding of American Sign Language conceptualization, structure, and syntax. Students will expand their repertoire of American Sign Language vocabulary, including key phrases that are necessary for day-to-day interaction. Comprehension of cultural and historical perspectives of the Deaf community will progress and deepen. Prerequisite: ASL 1510. J fall, spring; C fall, spring. 4 credit hours.

ANTHROPOLGY

ANT 1510 Human Evolution and Prehistory Traces the physical and cultural evolution of the human species. Students will critically analyze fossils, stone tools, and other evidence for such human development and understand the meaning of the theory of evolution and apply those to the present status of humanity. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall; C fall. 3 credit hours.

ANT 1520 Introduction to Cultural Anthropology Examines the nature of the concept of cultural behavior. Students will understand the patterning of social and cultural systems among societies around the world and gain global and ethnic understanding. Students will also determine the universal as well as variations involved in each cultural system. ANT 1510 is not a prerequisite for this course. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J spring; C spring. 3 credit hours.

ANT 1530 Comparative Religion Students will examine cultural expressions of belief in the supernatural, focusing specifically on people’s ideas about magic, witchcraft, and religion. This course takes a wide-ranging and cross-cultural approach to studying religious beliefs and behaviors and incorporates “world religions” such as Christianity, Judaism, and Islam, as well as the “indigenous” religions of Africa, Asia, Australia, and the Americas. Students will have the opportunity to contrast other people’s beliefs and practices with their own and develop a deeper understanding of the role of religion in the human experience. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J summer. Variable credit hours.

ANT 2010 Anthropology Internship Students will assist in conducting an archaeological dig at the Fenton History Museum in Jamestown, NY. This dig is looking at the historical occupation of the Fenton Museum site. Activities will include excavation, washing, sorting, and cataloguing of artifacts. No prerequisites. J summer. Variable credit hours.

ANT 2020 Anthropology Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

ANT 2510 Indigenous Peoples/North America Students will study the cultural variations and developments of Native Americans primarily in North America with a focus on contemporary Indigenous Peoples. Students will demonstrate a general knowledge of culture areas in order to examine the historic and current effects of colonization. Students will also understand contemporary issues such as racism, language revitalization, land rights, and the exercise of Indigenous sovereignty. ANT 1520 is suggested but is not a prerequisite. Eligibility: ENG 1530. J occasionally; C spring. 3 credit hours.

ANT 2520 Peoples/Cultures of World Deals with the major types and varieties of societies in the world outside the Americas to further global and ethnic understanding. Students will consider varieties of cultural behavior such as initiation rites, warfare patterns, and social structure with a view to students developing the critical thinking skills to compare and evaluate such behaviors. A culture area such as Africa or Oceania is selected for such analysis. ANT 1520 is suggested but not a prerequisite. Eligibility: ENG 1530. J occasionally. 3 credit hours.

ANT 2560 Introduction to Forensic Anthropology Students will be introduced to the fundamentals of forensic anthropology. Forensic anthropology has historically been considered to be a sub-discipline within the broader context of physical anthropology, but now incorporates elements of osteology, archaeology, cultural anthropology, and other areas within anthropology. Forensic anthropologists work with medical teams, law enforcement, and government agencies to solve problems of medicolegal significance, which generally involve human bodies and the artifacts associated with them. Corequisite: ENG 1530. J spring. 3 credit hours.

ANT 2570 History of World Religions This interdisciplinary course examines the development and variety of religious belief in the past and present. Historical, prehistoric, and non-literate traditions are examined, including Native American, African, Asian, Indo-European, and Semitic beliefs. Special consideration is given to religious development, assimilation, diffusion, practices, and phenomena. Cross-cultural comparisons and the key tenets of today’s world faiths are also emphasized. Eligibility: ENG 1530. J occasionally. 3 credit hours.

ART

ART 1510 Introduction to Art Students will experience visual awareness and perceptual skills through lecture and studio assignments. Encourages exploration of individual components of the visual arts through the introduction of basic concepts and media in drawing, design, painting, printmaking, and sculpture. No prerequisites. J fall, spring; C fall, spring. 3 credit hours.

ART 1510 Drawing I Students will gain a working knowledge of foundation skills and abilities in artistic visual expression. Students are introduced to drawing media and concepts. Students learn to draw perceived objects and become able to discuss the drawings meaningfully. No prerequisites. J fall, spring. 3 credit hours.

ART 1520 Drawing II Students will further develop visual awareness and drawing skills in dry media with some wet media and in black and white with some color emphasis. Students perform object drawing, large scale drawing, media exploration, life drawing, and some portrait drawing. The human figure in well-designed compositions is emphasized. Prerequisite: ART 1510. J spring. 3 credit hours.

ART 1530 2-D Design and Color Students will experience studio activities which will help them recognize and manipulate visual qualities and relationships of design as they create two-dimensional forms in both black and white and color. Students will create projects that involve the effective use of visual elements, such as line, texture, and color, and visual manipulation principles.
such as balance, unity, and contrast. Students will study and practice problem solving in the visual world using a variety of two-dimensional color and media. Critical evaluation and discussion of projects is an integral part of the course. No prerequisites. J fall. 3 credit hours.

ART 1540 3-D Design/Concept/Materials
Students will experience studio activities which will help them understand and manipulate visual elements and principles while creating three-dimensional forms. Students will work in a variety of visual media with emphasis on selection of materials to promote concepts, and will experience basic fabrication techniques in the visual arts. Critical evaluation and discussion of projects is an integral part of the course. Prerequisite: ART 1530. J spring. 3 credit hours.

ART 1550 Survey Vis Art: Prehis-Medvl
Provides art and non-art majors with an overview of the historical evolution of the visual arts from the prehistoric through medieval periods. An overview of art from non-European cultures is also presented. Students will explore artistic philosophies, styles, media, materials, and the evolving function of art in society. Students are introduced to the formal structure of works of art and will study new methods and materials. Links between technical evolution and its relationship to stylistic change are explored. The influence of major philosophical shifts in culture-at-large on the arts is also emphasized. Material is presented through slide lectures, videotapes, classroom discussions, and readings. Course requires extensive reading, some writing, and participation in discussion groups. Corequisite: ENG 1530. J fall; C occasionally. 3 credit hours.

ART 1560 Survey Vis Art: Renai-Contem
Provides art majors and non-art majors with an overview of the historical evolution of the visual arts from the Renaissance through contemporary periods. Special lectures on technical development of the 19th and 20th centuries augment the historical progression. Additional material that extends the discussion of contemporary art is introduced. Students explore artistic philosophies, styles, media, materials, and the evolution of art’s function in society. Material is presented through slide lectures, videotapes, classroom discussions, and assigned readings. Course requires extensive reading, some writing, and participation in discussion groups. Corequisite: ENG 1530. J spring; C occasionally. 3 credit hours.

ART 1570 Basic Black/White Photography
Students will gain a working knowledge of the fundamental creative and technical base in photography. Students deal with developing, printing, and manipulating artwork. They are built on skills acquired in ART 1570. Extensions to other computer art/graphic courses is included. Designed to help students with technical growth and exploration of visual ideas. No prerequisites. J occasionally. 3 credit hours.

ART 1610/1611/1612/1613/1620/1621/1622/1623 Studio Problems
Students will build upon previous studio course experiences in advanced studio production courses under art faculty supervision. Students who have completed the basic and intermediate (as applicable) courses in drawing, ceramics, photography, electronic arts, design or painting, may register for one, two, or three hours of credit per semester in a studio course in that medium. Students are expected to spend two hours in studio work each week for each credit hour anticipated. Studio problem courses are student initiated with each student, together with the faculty member, creating an acceptable course outline and evaluation process for the work of the semester. In some cases, a group studio problem may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities assistant dean to take additional coursework (for credit) in art. Prerequisite: permission of instructor required. J occasionally. Variable credit hours.

ART 1670 Digital Photography I
Students in this fine arts and media arts studio course will establish a foundation in digital photography techniques, digital darkroom use, and management, output, and presentation techniques. Students will create images using digital cameras, enhance and manipulate images in the computer, manage and archive digital image files, and assemble a portfolio. Corequisite: ENG 1530 or Eligibility ENG 1530. J occasionally. 3 credit hours.

ART 1670/1671/1672 Digital Photography II
Students in this fine arts and media arts studio course will extend the discussion of contemporary art is introduced. Students explore artistic philosophies, styles, media, materials, and the evolution of art’s function in society. Material is presented through slide lectures, videotapes, classroom discussions, and readings. Course requires extensive reading, some writing, and participation in discussion groups. Corequisite: ENG 1530. J fall; C occasionally. 3 credit hours.

ART 1690 Layout and Page Design
Students will be introduced to techniques and problems of creating artwork and graphic design processes of creating artwork and graphic design. Using the computer. Students will get an overview of electronic image manipulation, illustration, and page layout and design. This course is a prerequisite to other computer art/graphic courses. No prerequisite. J fall, spring. 3 credit hours.

ART 1740 Graphic/Design/Layout/Publish
Students will focus on the development of graphic design, computer, and presentation skills needed to produce professional looking layouts suitable for print and web publishing for the student’s portfolio. Concepts are worked out and visually organized stressing the use of type and image through sketches. The artwork is recreated and refined on the computer in a page layout program such as Adobe InDesign, and is printed to create three-dimensional or mounted prototypes. Typography basics and course concepts are taught through projects that include problem solving exercises, software tutorials, lecture, review of work in progress, and critiques. Prerequisite: ART 1730. J spring. 3 credit hours.

ART 1750 Graphic Design Applications
Students will work on developing graphic design skills through exercises and projects. The creative process will be a main focus with artwork produced for the student’s portfolio using Adobe Photoshop and Adobe Illustrator. Technical skills required to run these software programs will also be learned, and an aesthetic understanding will be developed by incorporating design and color tips and theories into the assignments. Students enrolling in the course must have prior experience with Photoshop and Illustrator and must be able to further develop their computer skills in creating and manipulating artwork. Prerequisite: ART 1730. J fall, spring. 3 credit hours.

ART 2010 Art Internship
Students receive on-the-job experience consisting of between 45 and 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: At least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

ART 2150 Painting I
Students will create paintings in a variety of media and concepts as well as gain understanding of the potential of a visual creator. Students work in watercolor, gouache, acrylic, and oil on paper supports and are required to produce a portfolio of paintings with evaluation based on technical growth and exploration of visual ideas. No prerequisites. J occasionally. 3 credit hours.

ART 2520 Painting II
Students will continue Painting I experience with emphasis on individual exploration and ideas as well as different painting techniques. Technical approaches are discussed, but the course focus is on the student developing his/her own images in a personal, distinctive, and effective way. Prerequisite: ART 2510. J occasionally. 3 credit hours.

ART 2570 Inter Black/White Photography
Students are offered additional experiences which are built on skills acquired in ART 1570. Extensive work in fine black and white photography, studio photography techniques, and experimental techniques is included. Designed to help students who have established basic skills and interest in photography to grow as student photographers in an atmosphere of advanced performance. Prerequisite: ART 1570. J occasionally. 3 credit hours.

ART 2590 Interdisciplinary Photography
Combining traditional and non-traditional photographic processes with new technologies allow photographers to explore new opportunities and creative possibilities. This course enables students to communicate their ideas by combining photo-based mediums with computer-generated imagery, drawing, and painting. Classes include time in the darkroom and the computer graphics studio as well as lecture and discussion. All projects will be presented within an historical context. Students will study classic and contemporary art making; assignments include library research, viewing slides, and assigned readings. Prerequisite: ART 1570. J occasionally. 3 credit hours.

ART 2600 Ceramics II
Students will demonstrate further development of skills with potter’s wheel, hand building methods, glazing, decoration techniques, and kiln operations. Wheel throwing and pottery skill development will be emphasized throughout the course. Prerequisite: ART 1590. Must meet minimum college level reading score: Accuplacer 80+. J occasionally. 3 credit hours.
ART 2730 Web Design and Animation This studio production course is designed to advance the image creation skills and knowledge gained in the foundation media arts course, ART 1730: Introduction to Computer Art and Design. Students will create websites and 2-D animation using the industry standard software Flash and Dreamweaver. The course emphasizes understanding the needs of the audience as the motivation for creating effective web design and making appropriate aesthetic choices in designing those sites. Prerequisite: ART 1730. J fall, spring, 3 credit hours.

ART 2740 Adv/Digital/Image/Photo/Photoshop Students’ knowledge and skill base in digital imaging will be enhanced through in-depth instruction in the use of Adobe Photoshop. Students will become technically proficient at the capture, manipulation, and output of images using digital still cameras and flatbed scanners. A more sophisticated level of aesthetic understanding will be achieved as students create images that express their imagination. Prerequisite: ART 1730. Eligibility: ENG 1530. J occasionally. 3 credit hours.

ART 2750 Portfolio Seminar Students will complete their visual art portfolio containing artist’s resume and statement, 20 slides of personal work, and digital media of all portfolio components. Professional practice of the visual artist will be introduced. Research project, participation in juried show(s), and portfolio completion are required. Prerequisites: At least one studio art course, ART 1730 preferred. Eligibility: ENG 1530. J spring. 2 credit hours.

ART 2800 Interactive Design This studio production course advances the skills and knowledge gained in foundation media arts courses ART 1730, ART 2730, and CMM 1710. Students will create images, sound, and motion sequences using programs they are already familiar with for use in interactive design projects using Macromedia’s Director software. They will publish projects to CD-ROM, DVD, and/or the Internet. The course emphasizes an understanding of the audience as the motivation for creating effective interactivity and applying that understanding to production design. Corequisite: ENG 1530. J occasionally. 3 credit hours.

ASTRONOMY

AST 1510 Introduction to Astronomy Students will learn about the universe while learning the scientific way of looking at the world and life. There will be four fundamental recurring questions: What is out there? Why is it the way it is? How do we know? How sure are we that we are right? Students will learn that science is a process and will learn the connection between theory and observation. Students will demonstrate their knowledge by observations of the sky and by accessing astronomy sites on the World Wide Web. Prerequisite: MAT 0600; Eligibility: ENG 1530. J fall; C occasionally. 3 credit hours.

AVIATION

AVN 1100 Aircraft Powerplants/Systems Students are provided with instruction in the theory and operating principles of reciprocating engines and appropriate systems necessary for pilot understanding. While not intended to be an aviation mechanics course, students will study aircraft structure, airframe stresses, lubrication systems, and other related systems. Prerequisite: MAT 0600; Eligibility: ENG 1510. J fall. 3 credit hours.

AVN 1140 Private Pilot Ground School Students will receive theoretical training necessary to sit for the written portion of the Private Pilot Practical Test. This course will focus on aerodynamics, aircraft performance, cross-country navigation techniques, the application of the Federal Aviation Regulations (FARs), the use of the Airman’s Information Manual (AIM), and various aircraft maneuvers. Instruction is offered by FAA and college-approved instructors who are associated with local FAA-approved flight schools. Prerequisite: ENG 0430; Corequisite: AVN 1150; Eligibility: MAT 0600 and must meet minimum college level reading score: Accuplacer 80+; J fall, spring, summer. 3 credit hours.

AVN 1150 Private Pilot Flight Students will receive flight training necessary to sit for the flight portion of the Private Pilot Test. This course will offer students their first opportunity for actual flight training in accordance with Part 141 of the Federal Aviation Administration (FAA) Requirements. Dual instruction and supervised solo flight practice are conducted by FAA and college-approved instructors who are associated with local FAA-approved flight schools. Prerequisite: ENG 0430; Corequisite: AVN 1150; Eligibility: MAT 0600 and must meet minimum college level reading score: Accuplacer 80+; J fall, spring, summer. 3 credit hours.

AVN 1240 Instrument Pilot Ground School Students will focus on the fundamentals of flying an aircraft solely by reference to instruments and will become familiar with flight instruments and navigational aids. Topics include basic navigation systems such as VOR (Very High Frequency Omni Direction Range), ADF (Automatic Direction Finder), ILS (Instrument Landing System), as well as advanced navigation systems such as GPS (Global Positioning System), LORAN, INS, and RNAV. This is the ground school portion of the instrument pilot rating. Prerequisite: AVN 1140 and 1150, or Private Pilot Certificate; Corequisites: AVN 1250 and MAT 1590; Eligibility: ENG 1510; other: current FAA Third Class Medical Certificate. J fall, spring. 3 credit hours.

AVN 1250 Instrument Pilot Flight Students will receive instrument flight training in accordance with Part 141, Appendix C of the Federal Aviation Regulations (FAR). This course will focus on the fundamentals of flying an aircraft solely by reference to instruments. It consists of a minimum of 35 hours of dual flight instruction along with briefing and other matters related to instrument flight. Prerequisite: AVN 1140 and 1150, or Private Pilot Certificate; Corequisites: AVN 1240 and MAT 1590; Eligibility: ENG 1510; other: current FAA Third Class Medical Certificate. J fall, spring. 1.5 credit hours.

AVN 1340 Commercial Pilot Ground School This course, along with AVN 2140: Commercial Pilot Ground School II, prepares students for the FAA Commercial Pilot Written Exam. Topics covered include complex aircraft systems; aircraft performance and control; aerodynamics, air traffic control and the National Airspace System; Federal Aviation Regulations, radio navigation, meteorology, and the physiology of flight (including discussions of hypoxia, hyperventilation, middle ear and sinus problems, spatial disorientation, carbon monoxide poisoning, motion sickness, physiology of night flying, and the effects of alcohol and drugs including over the counter medications). Prerequisite: AVN 1140 and 1150, or Private Pilot Certificate; Corequisite: AVN 1350; Eligibility: ENG 1510; other: current FAA Third Class Medical Certificate. J fall, spring. 1.5 credit hours.

AVN 1350 Commercial Pilot Flight Students will receive commercial flight training in accordance with Part 141, Appendix D, of the Federal Aviation Regulations. FAA and college-approved instructors associated with local FAA-approved Fixed Base Operators (FBOs) conduct dual instruction and supervise solo flight. The course consists of a minimum of 49 hours of flight instruction along with briefing and other matters related to commercial piloting. The student will bear all expenses beyond the above flight and instructional time. This course is the first half of a training package (along with AVN 215) that prepares students for the FAA Commercial Pilot Practical Test ASEL (Airplane Single Engine Land). Prerequisite: AVN 1140 and 1150, or Private Pilot Certificate; Corequisite: AVN 1340; Eligibility: ENG 1510; other: current FAA Third Class Medical Certificate. J fall, spring. 1.5 credit hours.

AVN 2010 Aviation Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a
AVN 2100 Aviation Safety Students will develop an attitude and philosophy for accident prevention. Topics include: ideal, practical, personal, and organizational safety procedures and goals; safety philosophies; aircraft accident reports; human factors; and principles of accident investigation, accident prevention programs, and accident statistics. Prerequisite: AVN 1240 and AVN 1250 or instrument rating; Eligibility: ENG 1510. 3 credit hours.

AVN 2140 Commercial Pilot Ground School II This course, along with AVN 1340, prepares students for the FAA Commercial Pilot Written Exam. Topics covered include complex aircraft systems; aircraft performance and control; aerodynamics, air traffic control and the National Airspace System; Federal Aviation Regulations, radio navigation, meteorology, and the physiology of flight (including discussions of hypoxia, hyperventilation, middle ear and sinus problems, spatial disorientation, carbon monoxide poisoning, motion sickness, physiology of night flying, and the effects of alcohol and drugs including over the counter medications). Prerequisite: AVN 1340 and 1350; Corequisite: AVN 2150; Eligibility: ENG 1510; Other: current FAA Third Class Medical Certificate. J fall, spring. 3 credit hours.

AVN 2150 Commercial Pilot Flight II Students will receive commercial flight training in accordance with Part 141, appendix D, of the Federal Aviation Regulations. FAA and college-approved instructors associated with local FAA-approved Fixed Base Operators (FBOs) conduct dual instruction and supervise solo flight. The course consists of a minimum of 71 hours of flight instruction along with briefing and other matters related to commercial piloting. The student will bear all expenses beyond the above flight and instructional time. This course is the second half of a training package (along with AVN 1350) that prepares students for the FAA Commercial Pilot Practical Test ASEL (Airplane Single Engine Land). Prerequisites: AVN 1340 and 1350; Corequisite: AVN 2140; Eligibility: ENG 1510; other: current FAA Third Class Medical Certificate. J fall, spring. 3 credit hours.

AVN 2200 Advanced Aircraft Systems Students will focus on a more advanced presentation of aircraft systems than is covered in AVN 1100. Among the systems covered are electrical, hydraulic, anti-icing, instrument, pressurization, and fuel systems. Prerequisite: AVN 1100 or Private Pilot and Instrument Rating; Eligibility: ENG 1510. J fall. 3 credit hours.

AVN 2250 Cert-Flight Instructor-Airplane This course consists of a minimum of 65 hours of instruction - 25 hours of dual flight and 40 hours of classroom instruction - and prepares students for the FAA Certified Flight Instructor Airplane Practical Test. Flight instruction consists of a comprehensive review of private and commercial flight maneuvers. The class instruction includes an in-depth discussion of the fundamentals of instruction, including lesson plan preparation, laws of learning, and effective communication techniques. Aerodynamics, regulations, procedures, and other topics covered during the private and commercial phases of training are also reviewed. Prerequisites: commercial pilot certificate with instrument rating and current FAA Third Class Medical Certificate. J fall, spring. 3 credit hours.

AVN 2350 Multi-Engine Flight Provides advanced training in light twin-engine airplanes. Students will receive flight and ground instruction necessary for the FAA Commercial Pilot Practical Test AMEL (Airplane Multi-Engine Land). Corequisites: AVN 1340 and AVN 1350; Other: current FAA Third Class Medical Certificate. J fall, spring. 0.5 credit hours.

AVN 2450 Cert-Flight Instructor/Instrm Preparers students for the FAA Certified Flight Instructor-Instrument Practical Test. This elective course includes beginning and advanced topics necessary for instructing students in instrument flight. In addition to 15 hours of dual flight instruction, students will learn how to prepare lesson plans in instrument flight theory, methods for effective communication, the use of a variety of instructional methods, and how to evaluate performance during 20 hours of classroom instruction. Prerequisite: Certified Flight Instructor-Airplane rating; other: current FAA Second Class Medical Certificate. J fall, spring. 2 credit hours.

BIOLOGY BIO 1450 Emergency Medical Technology This course presents a contract offering limited to persons involved in the delivery of emergency medical care who intend to take the New York State Health Department’s certifying exam for emergency medical technicians. Students will learn about all major aspects of trauma, medical emergencies, cardiopulmonary resuscitation, victim extrication, transport, spinal injuries, shock, airway management techniques, and use of an anti-shock garment. In addition to 90 hours of classroom/laboratory work, students will complete one hour of observation and assistance in a hospital emergency room. Eligibility: MAT 0500 or greater; Must meet minimum college level reading score: Accuplacer 80+. J fall, spring. 7 credit hours.

BIO 1500 Human Biology This course covers basic structures and functions of the human body. Students will learn about the chemical basis of life, cellular structure and metabolism, tissues, and an overall survey of the organ systems of the body. An introduction to human evolution is presented. Recent developments in science, medicine, and health coupled with environmental issues and their impact on health are incorporated into the course. Laboratory exercises include use of the microscope, experimentation, and hands-on investigation of organ systems. Corequisite: ENG 1510. Reading score: ACCUPLACER 80+. J fall, spring; C fall. 4 credit hours.

BIO 1510 Health Science Students will investigate a variety of health-related topics, many of which are useful in planning a healthier lifestyle. Topics include stress, mental health, nutrition, accident prevention programs, and birth control, sexually transmitted and other diseases, cardiovascular health, cancer, drugs (including alcohol), and environmental health. This survey course is appropriate for non-science majors. Corequisite: ENG 0430 and ENG 0410; Reading score Accuplacer 70+. Note: Eligibility for ENG 1510 is strongly recommended. J fall, spring; C fall, spring. Online fall, spring. 3 credit hours.

BIO 1520 Biology of Birds In this introduction to birds, one of the most colorful and popular groups of animals on our planet, students will learn about basic anatomy and physiology, evolutionary history, classification and identification by sight and song, behavior, and ecological importance. Outdoor fieldwork is included. Eligibility: ENG 1510; Must meet minimum college level reading score: Accuplacer 80+. J fall, spring. 1 credit hour.

BIO 1540 Biology of Insects This course studies insects, the most abundant and diverse group of animals on our planet. Students will learn about basic anatomy and physiology, evolutionary history, classification and identification, behavior, and ecological and economic importance. Field trips and a small insect collection are required. Outdoor fieldwork included. Eligibility: ENG 1510; Must meet minimum college level reading score: Accuplacer 80+. J occasionally. 1 credit hour.

BIO 1560 Biology of Mammals This course studies mammals, the group considered to be the peak of animal evolution. Students will learn about physiology, evolutionary history, classification and identification, behavior, and ecological importance. Outdoor fieldwork included. Eligibility: ENG 1510; Must meet minimum college level reading score: Accuplacer 80+. J occasionally. 1 credit hour.

BIO 1570 Principles of Biology I Students will identify, understand, and interpret fundamental biological principles such as biodiversity, evolution, ecology, chemical foundations of life, cell structure and function, cellular metabolism, photosynthesis, respiration, cellular reproduction, and classical, human and molecular genetics. Laboratory may include one or more outdoor experiences. Prerequisite: high school chemistry or Corequisites: CHE 1500 or CHE 1530 and MAT 0600 and ENG 1510; Must meet minimum college level reading score. Accuplacer 80+. J fall, spring; C fall. 4 credit hours.

BIO 1575 Biology: A Molecular Approach Students will understand how science is actually performed, with a special emphasis on the interdisciplinary nature of science. Basic principles of biology will be taught in context of fundamental principles of chemistry and physics to broaden understanding of the natural world. Students will perform research projects that focus on gene expressions/cell biology and ecosystems to reinforce these basic principles. Additionally, through their authentic applications of scientific method, students will learn basic skills like laboratory relevant math, reagent preparation, lab notebook keeping skills, pipetting and micropipetting skills, etc. This course is intended for biotechnology majors or those with interest in pursuing a career in fields related to genetics, molecular biology or cellular biology (including medicine). Corequisites: ENG 1510. Prerequisite: MAT 0600 or higher, CHE1500 or CHE 1530 or permission of the instructor; minimum college level reading score 80+; J fall. 4 credit hours.
BIO 1580 Principles of Biology II Students will recognize, identify, describe, and classify representatives of the major phylogenetic and taxonomic groups of life on earth, surveying the three domains of life’s biodiversity and the archaea, bacteria, protist, fungi, plant, and animal realms. Students will study evolutionary history and mechanisms, reproductive strategies, morphology, anatomy, physiology, behavior, and ecological roles of representative organisms. Laboratory may include one or more outdoor experiences. This survey course is appropriate for both science and non-science majors. Prerequisite: BIO 1570 or BIO 1575; Eligibility: ENG 1530. J spring; C spring. 4 credit hours.

BIO 1570 Personal Health and Safety Designed for non-science majors, this course deals with emergency medical problems as they relate to sudden illness, accidents, environmental emergencies, and life threatening situations. Students will learn about legal responsibilities, bleeding, shock, soft tissue injuries, musculoskeletal injuries, syncope, diabetic emergencies, seizures, strokes, poisoning, and alcohol abuse. Successful course completion may possibly lead to American Red Cross certifications in both community CPR, first aid/rescuing to emergencies, and automatic external defibrillation (AED). Appropriate for non-science majors. Corequisite: ENG 0430 and ENG 0410; Reading score Accuplacer 70+. Note: Eligibility for ENG 1510 is strongly recommended. J occasionally. 3 credit hours.

BIO 1820 SURI: Biotechnology I Students will be exposed to authentic laboratory environments and the practice application of scientific method in context of research projects. The course is divided into laboratory experience and a weekly three-hour colloquium where students receive lectures on key topics and present scientific literature. Colloquium also trains students in lab notebook keeping, scientific presentation skills and reading/presenting biotechnology and biomedical literature. Students are divided into either Biotechnology I or Biotechnology II, depending on their level of experience, but are blended together in a single course. Biotechnology I students are required to understand and explain the methods used and data presented in scientific literature and in their own research. Research topics range from cancer biology and immunology to environmental biotechnology and deliberately use methods and interpretation of results unique to the field of biotechnology. Prerequisite: BIO 1570 or BIO 1575. J summer. 4 credit hours.

BIO 1830 SURI: Environmental I Students will participate in environmental research that pertains to their area of interest and/or requested by local environmental organizations. As part of this experience, students will read, interpret, and present published scientific research papers. Students will be responsible for experimental design, maintaining a laboratory journal, and acquiring the necessary laboratory and field research skills to complete their research and present their results. Students are divided into either Environmental I or Environmental II, depending on their level of experience, but are blended together in a single course. Environmental I students are expected to function as technicians. As such, they will learn how to function in a research setting, learn scientific record-keeping and how to design and perform a well-controlled experiment reproducibly. Prerequisite: BIO 1570. J summer. 4 credit hours.

BIO 2010/2011/2020 Biotechnology Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J fall, spring; C fall, spring. Variable credit hours.

BIO 2012 & 2022 Biotechnology Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J fall, spring; C fall, spring. Variable credit hours.

BIO 2013 & 2023 Environmental Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J fall, spring; C fall, spring. Variable credit hours.

BIO 2500 Conservation Biology Students will study, discuss, and present information related to the global loss of biodiversity. Traditional as well as modern conservation practices will be discussed emphasizing the ways in which the principles of genetics, ecology, and evolution-ary biology are being utilized to conserve and protect at-risk species and global biodiversity. The growing need for the application of ecological principles to our human role in the environment, including topics such as habitat alteration and land fragmentation, introduction of exotic species, ecological economics, the importance of diversity, and extinction will be discussed. Multiple field trips will be included outside of scheduled class time. Prerequisite: BIO 1570 or BIO 1575 and BIO 1580. Eligibility: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.

BIO 2520 Genetics Students will identify the fundamental concepts of heredity, including Mendelian principles and extensions, structure and replication of chromosomes, gene and chromosomal mutations, gene linkage and chromosome mapping, transcription and translation, regulation of gene expression, mechanisms of mutation, recombination and repair, population genetics, molecular evolution, cloning and recombinant DNA technology, and other contemporary topics. Prerequisites: BIO 1570 or BIO 1575; Corequisite: CHE 1530; Eligibility: ENG 1530. J occasionally. 4 credit hours.

BIO 2530 Microbiology - LAB Students will become skilled in appropriate techniques for handling bacterial cultures, identifying specimens and implementing and evaluating various standard diagnostic procedures. Prerequisite: BIO 1570 or BIO 1575, or BIO 2510; Eligibility: ENG 1530. J fall, spring; C fall, spring. 1 credit hour.

BIO 2550 Conservation Biology Students will study, discuss, and present information related to the global loss of biodiversity. Traditional as well as modern conservation practices will be discussed emphasizing the ways in which the principles of genetics, ecology, and evolution-ary biology are being utilized to conserve and protect at-risk species and global biodiversity. The growing need for the application of ecological principles to our human role in the environment, including topics such as habitat alteration and land fragmentation, introduction of exotic species, ecological economics, the importance of diversity, and extinction will be discussed. Multiple field trips will be included outside of scheduled class time. Prerequisite: BIO 1570 or BIO 1575 and BIO 1580. Eligibility: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.

BIO 2560 Microbiology Students will become skilled in appropriate techniques for handling bacterial cultures, identifying specimens and implementing and evaluating various standard diagnostic procedures. Prerequisite: BIO 1570 or BIO 1575, or BIO 2510; Eligibility: ENG 1530. J fall, spring; C fall, spring. 1 credit hour.

BIO 2570 Environmental Issues/ Ethics Students will gain critical understanding of the impacts of human activities as they affect the earth and the web of life it sustains from both ethical and scientific perspectives. Contemporary environmental issues such as methods and limitations of science and moral reasoning, global warming, ozone depletion, deforestation, animal rights, population growth, waste disposal, biodiversity, and species extinction will be discussed. This team-taught course is offered under biology for natural science credit (BIO 2570) or philosophy for humanities credit (PHL 2570). Prerequisites: BIO 1570 or BIO 1575 and ENG 1530. J occasionally. 3 credit hours.

BIO 2600 Planet Earth: Critical Topics Students will examine critical issues affecting humanity and the global environment, from an in-depth, three-part perspective. Students will investigate the science of selected topics of global environmental significance, explore their causes and consequences within contemporary culture,
and evaluate the impacts and importance of the mass media in public perception concerning these issues. Corequisite: ENG 1530 and a reading score of 80+. J occasionally; 3 credit hours.

BIO 2620 Tropical Biology Seminar Students will experience “hands-on” learning about South and Central American tropical habitats, including rainforests, coral reefs, mangrove swamps, and Caribbean coastal shore areas, via classroom lectures and travel to Costa Rica, Panama, or other biodiverse sites during spring recess. Animals and plants typical of both marine and terrestrial tropical communities will be explored and identified, and their various habitats will be investigated. Prerequisites: BIO 1570 or BIO 1575; permission of the instructor; Eligibility: ENG 1530. Rigorous physical activities, including swimming, snorkeling, and hiking are required. J occasionally; C occasionally. 3 credit hours.

BIO 2640 Animal Behavior Students will master a variety of topics including the nature of instinct, biological basis of aggression, social communication, animal navigation and migration, mating and reproductive behavior, and territoriality. Both classical and recent studies, including those that deal with human behavior will be represented. Field trips may be an additional part of the course. Prerequisite: a college biology or psychology course. J occasionally; C occasionally. 3 credit hours.

BIO 2660 Zoology In this introduction to the animal kingdom, students will be asked to identify and understand animal morphology, development, behavior, relationships with the environment, and the evolutionary history of numerous phyla and classes of animals. This course explains what animals are, what they do, and how they came to be. One or more field trips will be included. Prerequisite: BIO 1570 or BIO 1575; Eligibility: ENG 1530. J spring. 4 credit hours.

BIO 2670 Botany Using a classical taxonomic study of the botanical realm, students will gain an understanding of bacteria, phytoprotists, fungi, and the true plants, and explore the ecological, evolutionary, and economic significance of these organisms. Emphasis is placed on the morphology, anatomy, behavior, and ecology of the plant kingdom. Students will be introduced to basic classification and systematics that have developed out of the field of botany, and to methods of studying plants and interpreting results. Prerequisite: BIO 1570 or BIO 2531; or BIO 2560, OR BIO 2800. J summer. 4 credit hours.

BIO 2800 Cell and Molecular Biology This course examines the structure and function of living cells. The course extends and adds to the fundamental cell biology knowledge students acquire in BIO 1570, Principles of Biology I. In the lecture component of the course, students will learn about energy use by cells; cellular proteins and enzymes; DNA, chromosomes, and gene expression; membrane structure and transport; cellular organelles; cell communication; the cytoskeleton; and control of the cell cycle and cell death. In the laboratory portion of the course, students will learn how to perform contemporary methods used to manipulate cells and molecules within cells. Prerequisite: BIO 1570 or BIO 1575; Eligibility: ENG 1530. J occasionally; C occasionally. 4 credit hours.

BIO 2810 Biotechnology Research Students will be introduced to problem-solving using modern laboratory techniques in molecular biology that were first introduced in courses such as: Principles of Biology, Genetics, and Cell and Molecular Biology. Problem solving draws on the basic techniques of molecular biology used in the study of gene structure and function, including DNA/RNA and plasmid isolation, protein extraction, Southern blotting and Western blotting, PCR, gene cloning, and others. This course provides hands-on experience with the techniques and instrumentation used in the modern biotechnology laboratory. Prerequisite: BIO 2560; Corequisite: BIO 2800. J occasionally; C occasionally. 2 credit hours.

BIO 2820 SURI: Biotechnology II Students will be exposed to authentic laboratory environments and the practice application of scientific method in context of research projects. The course is divided into laboratory experience and a weekly three hour colloquium where students receive lectures on key topics and present scientific literature. Colloquium also trains students in lab notebook keeping, scientific presentation skills and reading/presenting biotechnology and biomedical literature. Students are divided into either Biotechnology I or Biotechnology II, depending on their level of experience, but are blended together in a single course. Biotechnology II students are required to understand and explain the underlying concepts in scientific literature and in their own research at an undergraduate level. This includes the methods, results, and conclusions drawn in the research. Research topics range from cancer biology and immunology to environmental biology and ecology. Students are introduced to basic biotechnology and deliberately use methods and interpretation of results unique to the field of biotechnology. Prerequisite: ENG 1530; BIO 1700 or BIO 2531 or BIO 2560, OR BIO 2800. J summer. 4 credit hours.

BIO 2830 SURI: Environmental II Students will participate in environmental research that pertains to their area of interest and/or as requested by local environmental organizations. As part of this experience, students will read, interpret, and present published scientific research papers. Students will be responsible for experimental design, maintaining a laboratory journal, and acquiring the necessary laboratory and field research skills to complete their research and present their results. Students are divided into either Environmental I or Environmental II, depending on their level of experience, but are blended together in a single course. Environmental II students are expected to function like an advanced student. In addition to Environmental I expectations, they are also expected to understand and communicate how the papers they present fit into the underlying science. Prerequisite: ENG 1530; BIO 1570; and BIO 1580, or BIO 1830, or BIO 2550 or BIO 2600, or BIO 2660, or BIO 2670. J summer. 4 credit hours.

BIO 2840 Immunology Students will study the mechanisms needed to establish normal immunity, as well as the biological problems that can arise in allergies, autoimmunity, and chronic inflammation. As such they will learn about diseases from which so many suffer. In addition, during laboratories, students will be engaged in individual research projects to learn invaluable standard operating procedures for laboratory work, like good note keeping, making reagents, etc. The research projects will be used as a vehicle for them to learn the important biotechnology techniques and concepts that have developed out of the field of immunology, as well as to prepare them for an undergraduate research experience should they choose. Special emphasis will be placed on the nexus between immunology, molecular biology, and pathophysiology. Prerequisite: BIO 2560 or BIO 2800. J occasionally; C occasionally. 4 credit hours.

BUSINESS

BUS 1220 College Keyboarding Students will master the keyboard and develop skills and techniques in accuracy, proofreading, speed, and document production. Basic letters, one-page reports, and a variety of business documents are introduced and keyed using the computer. Skill building is emphasized through individualized instruction. No prerequisites. J fall; spring; C fall, spring; Online fall, spring. 3 credit hours.

BUS 1320 Word Processing Students will learn to create, edit, save, and print documents. Preparation of business letters and reports will enhance basic and production skills and office simulation activities. The ability to produce and edit professional business documents is strengthened. The course provides hands-on training in word processing software. Prerequisite: BUS 1220. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

BUS 1410 Accounting Fundamentals Students will gain an understanding of the accounting principles and procedures used to record, classify, and summarize financial data. Students will become familiar with accounting terminology and many of the financial records, forms, and statements used in an electronic environment. No prerequisites. J spring; C spring. 3 credit hours.

BUS 1420 Office Procedures Students will prepare to learn and perform procedures to become effective in both the operation and managerial levels required in today’s and tomorrow’s office. A survey of the automated office and introduction to integrated office systems is emphasized. Students are given a perspective on the role of an office professional and an awareness of the technical developments that have affected the office professional. Course content includes theory and practice in time and work management, telephone techniques, planning/coordinate travel and meetings, and communication skills. No prerequisites. Online spring. 3 credit hours.

BUS 1430 Entrepreneurship I This course provides the student with skills and resources necessary to assess current personal, economic, social, and business environment for opportuni-
ties for new ventures. Students will assess their business ideas based on their own strengths and skills, by looking internally at prior experience, education and skills. In addition the student will begin an external analysis of area trends. Business ideas will be matched with the student’s skills, as well as personal, professional, and financial goals. Students will finalize their business concept and conduct a feasibility study of their local market. Eligibility: ENG 1510. J occasionally; C occasionally. Online occasionally. 3 credit hours.

BUS 1510 Introduction to Business Students will study the elements and characteristics of a free enterprise system and will be presented an overview of functional areas of business and basic concepts of the business world. Some topics include the environment of business, organization and management of the enterprise, management of human resources and production, marketing, finance, government’s role in business, social responsibility, and cultural diversity, as well as major societal issues facing today’s business executives. Recommended for beginning business students and non-business majors. Eligibility: ENG 1510. J fall, spring; C fall, spring; Online occasionally. 3 credit hours.

BUS 1510 Principles of Financial Accounting Students will gain a broad view of accounting’s role in satisfying society’s need for financial information. In an overview of the accounting profession, students will understand generally accepted accounting principles underlying the design, integrity, and effectiveness of accounting information systems. Providing relevant financial statements for the decision maker and the use of computers to generate financial information are outlined. Prerequisite: must meet minimum college level reading score: Accuplacer 80+. Eligibility: MAT 0600 or MAT 1500. J fall, spring; C fall, spring; Online occasionally. 4 credit hours.

BUS 1520 Principles of Managerial Accounting Students will demonstrate basic decision making and analyzing skills in management accounting. Financing a business through debt or capital structures, analysis of cash flows, financial ratios, manufacturing costs, budgeting, cost-volume-profit analysis, and current managerial accounting topics are covered. Prerequisite: BUS 1510. J fall, spring; C fall, spring; Online occasionally. 4 credit hours.

BUS 1610 Personal Finance Students will gain an appreciation of the need for personal financial planning and will learn how to apply such planning to goal setting and budgets. They will evaluate exposures to risk and how insurance fits into a risk management plan. Students will have the ability to coordinate income, assets, and spending into a comprehensive program that takes the planner through the various stages of their life cycle, from college to retirement. Eligibility: ENG 1510. J fall, spring; C occasionally. 3 credit hours.

BUS 1650 Global Business Students will learn how and why countries differ. More specifically, they will learn about the economics, politics, and global monetary system of international trade. Students will develop an understanding of the global marketplace, different cultures, and the role of management and labor in international business. (Previous knowledge of economic, business, geography, and world politics is helpful, but not a requirement.) Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J spring. 3 credit hours.

BUS 1660 Leadership Development Students will develop an understanding of leadership theory, an awareness of the moral and ethical responsibilities of leadership, and an awareness of one’s own leadership style and abilities. Students will be given an opportunity to develop essential leadership skills and to understand and practice productive leadership behavior. The course will use experiential methods of discussion, film, simulation, and group projects, including some from the humanities. Particularly appropriate for those currently in leadership positions or those wishing to gain skills for leadership roles. Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

BUS 2010 & 2020 Business Internship Students will receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty member and a supervisor at the job site. All guidelines in the original internship policy will be followed. Prerequisite: sophomore standing. J fall, spring; C fall, spring. Variable credit hours.

BUS 2270 Introduction to Taxation Introduces students to a broad range of tax concepts and types of taxpayers. The course will also emphasize the basic structure of the tax law and the process of performing tax research, as well as build on a foundation of the details of tax law that are most likely to be of long-term importance. Students will be exposed to tax research, tax planning, and tax compliance. Prerequisites BUS 1510-1520. J occasionally. 3 credit hours.

BUS 2320 Word Processing Production Students will refine basic skills mastered in word processing and practice more sophisticated features of Microsoft Word for multi-page documents including page formatting, footnotes, macros, merge, document assembly, sort, select, tables, and graphics. Documents similar to those encountered in business organizations are prepared. Project assignments simulate real-world applications. Reinforce word processing and desktop publishing skills. Prerequisite: BUS 1320 or equivalent experience. Online fall, spring. 3 credit hours.

BUS 2420 Professional Development/INT Students will learn to integrate theory and practice in a business setting by working 10 hours per week in a business organization. Student, instructor, and internship site supervisor will jointly plan the experience and help the student develop as a professional. A weekly, two-hour seminar focuses on topics related to the professionalism that is required in today’s business world. Prerequisites: sophomore standing and must be program major. J fall, Spring; C fall, spring; Online fall, spring. 3 credit hours.

BUS 2480 BUS-Electronic Communication Students will learn to design, create, and publish professional communication and marketing materials for businesses and organizations using presentation and publishing software. They will investigate other electronic communication tools used in business today such as electronic mail, audio and video conferencing, and the Internet. Prerequisite: sophomore standing. Online fall. 3 credit hours.

BUS 2510 Corporate Finance Students will apply computational, critical thinking, and financial analysis tools to data to make it useful for business decisions of a financial nature. The student will demonstrate an understanding of alternative forms of business organization, ratio analysis, risk-return tradeoffs, time value of money, debt versus equity financing, valuation of securities, and capital budgeting. Students learn to apply these tools in the context of maximizing shareholders’ wealth in working capital. Prerequisites: BUS 1510-1520. J occasionally; C occasionally. 3 credit hours.

BUS 2530 Business Law I Students will study and examine the legal environment of business using the case method in which law is applied to factual situations. In BUS 2530, students study court systems and procedural law, tort and criminal law, constitutional law, and contract law. In BUS 2540, students study the law related to personal property and bailments, real property, secured transactions and bankruptcy, business structure including partnerships and corporations, and the Uniform Commercial Code. Eligibility: ENG 1530. J fall; C fall. 3 credit hours.

BUS 2540 Business Law II Students will study and examine the legal environment of business using the case method in which law is applied to factual situations. In BUS 2530, students study court systems and procedural law, tort and criminal law, constitutional law, and contract law. In BUS 2540, students study the law related to personal property and bailments, real property, secured transactions and bankruptcy, business structure including partnerships and corporations, and the Uniform Commercial Code. Eligibility: ENG 1530. J spring; C spring; Online occasionally. 3 credit hours.

BUS 2550 Marketing Students will study the process of planning and putting into practice various activities involved in the marketing of products, services, or ideas, and analyze the theories involved in the flow of goods and services from the producer to the consumer. The dynamic nature of the American economy requires students to demonstrate a knowledge of the marketing concept, buyer behavior, product analysis, pricing factors, institutions and channels of distribution, and promotional strategies. Prerequisite: ENG 1530. J fall, spring; C spring. 3 credit hours.

BUS 2570 Prime of Management Students will learn the basic concepts, factors, functions, and techniques of management in organizations. Students will obtain specific knowledge of planning, organizing, directing, and controlling and the interconnectedness of these functions in productive organizations. Upon course completion, students will demonstrate a knowledge of the principles of good management in individual and team-based environments. Eligibility: ENG 1530 and sophomore standing. J fall; C fall. 3 credit hours.

BUS 2580 Mgmt / Organizational Behavior Students will develop an understanding of the basic concepts of behavioral sciences and their applications to performance of individuals working in organizations. Students will study key attitudes and behavior that affect productivity. Upon course completion, students will demonstrate an under-
standing of the factors that affect performance such as leadership, motivation, communication, absenteeism, and job satisfaction as well as a basic understanding of how diverse individual styles of interaction contribute to an organization. Eligibility: ENG 1530 and sophomore standing. J spring; C spring. 3 credit hours.

BUS 2590 Advanced Managerial Accounting

Students will develop techniques for internal reporting and analysis of accounting information to assist managers in their decision making processes. Students will demonstrate an understanding of various budgeting techniques and the responsibility of managers in the process. Upon course completion, students have a knowledge of the fundamental accounting concepts of planning and control. Prerequisites: BUS 1510-1520 and Eligibility: MAT 1590. J occasionally; C occasionally. 3 credit hours.

BUS 2630 Human Resource Management

Students will learn the basic functions of human resource management in organizations. Topics include organization of jobs, employment, training, labor relations, compensation, appraisal, and benefits. Eligibility: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CHEMISTRY

CHE 1500 Introduction to Chemistry Students will investigate fundamental concepts of chemistry from a theoretical approach using basic scientific tools of measurement and problem solving. Topics include atomic structure, nomenclature, bonding, periodic behavior, chemical equations, acids and bases, gases, liquids, solids, and properties of solutions. The course is for students with little or no chemistry background and/or who wish to continue in CHE 1550. Eligibility: ENG 1510; Corequisites: MAT 0600 or MAT 1500; must meet minimum college level reading score: Accuplacer 80+. J fall; C spring. 3 credit hours.

CHE 1520 Allied Health Chemistry Students will consider selected basic concepts from inorganic, organic, and biological chemistry which will be applied to allied health and biological fields. Topics include matter and measurements, chemical bonds and reactions, redox, states of matter, acids and bases, organic functional groups, and common macromolecules in biological systems. The course is for students with little or no chemistry background who are pursuing a degree in an allied health field or who wish to continue in CHE 1550. Eligibility: ENG 1510; Corequisites: MAT 0600 or MAT 1500; must meet minimum college level reading score: Accuplacer 80+. J fall; C spring. 3 credit hours.

CHE 1550 College Chemistry I Students will investigate fundamental concepts of chemistry from a theoretical perspective with an emphasis on problem solving. Through the laboratory students will attain and demonstrate qualitative and quantitative skills. The chemistry of elements and compounds will be studied through measurements, atomic structure, periodicity, chemical bonding, stoichiometry, reaction classification, redox, gases, liquids, and solids. The review class is strongly recommended as an opportunity to the practice problem solving, to ask specific questions, and to review returned quizzes and exams. Course content is designed for the science/engineering major who has already taken a chemistry course and who wishes to transfer to a four-year institution. Prerequisite: high school chemistry or CHE 1500 or CHE 1530; Corequisites: ENG 1510 and MAT 1590; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall. 4 credit hours.

CHE 1560 College Chemistry II A continuation of CHE 1550, students will investigate intermolecular forces in solids and liquids, solutions, kinetics, equilibrium, acids and bases, thermodynamics, electrochemistry, and nuclear reactions. Prerequisite: CHE 1550; Corequisite: ENG 1530 and MAT 1600. J spring; C spring. 4 credit hours.

CHE 2530 Organic Chemistry I Students will apply many concepts from college chemistry to the study of organic molecules. Students will be able to name and draw structures, assign properties, predict reaction products, synthesize and explain the reaction mechanisms for alkanes, alkenes, alkydes, ketones, carbanions, carboxylic acids and their derivatives, amines, phenols, amino acids, polymers, lipids, carbohydrates, and proteins, and nucleic acids. Labs (still microscale) will investigate a range of multistep reaction sequences, as well as a few short classic reactions. Prerequisite: CHE 2530. J spring. 4 credit hours.

CHE 2540 Organic Chemistry II A continuation of CHE 2530, students will extend their studies to the spectroscopic analysis of hydrocarbons. Additional topics include aromatic compounds, aldehydes, ketones, carbanions, carbonylic acids and their derivatives, amines, phenols, amino acids, polymers, lipids, carbohydrates, and proteins, and nucleic acids. Labs (still microscale) will investigate a range of multistep reaction sequences, as well as a few short classic reactions. Prerequisite: ENG 1530. J spring. 4 credit hours.

COMMUNICATION

CMM 1510 Introduction to Communication Students will be introduced to the theories, processes, and applications of verbal and non-verbal human communication and explore why and how people communicate (face-to-face, in public, through the mass media, etc.). Students will also examine the ways that new communication technologies are shaping private and public discourse. Students will gain the skills necessary to recognize and analyze communication failures and be able to apply those skills in the process of becoming more effective communicators. Corequisite: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall. 3 credit hours.

CMM 1610 Public Speaking Students will learn effective strategies for researching, preparing, and delivering informative and persuasive speeches to small groups. Students will be able to demonstrate methods for building confidence in speech delivery, supporting points with evidence, analyzing the audience, using media aids effectively, and refining delivery style. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring. 3 credit hours.

CMM 1630 Introduction to TV Production Students are introduced to the cameras and sound, lighting, mixing, recording, and graphic tools used to produce television programming. Working in teams to produce live-to-tape programs, students are given the opportunity to acquire producing, directing, writing for electronic media, and live editing skills. No prerequisites. J spring. 3 credit hours.

CMM 1710 Digital Video Production Students will be introduced to single camera, post-produced video making. Students will explore shot composition, using a digital video camera, film style shooting, sound recording, and lighting. They will learn how to conduct an audience analysis, write project treatments, and produce storyboards for projects that will be completed during the course. Projects are edited using digital video software and Macintosh computers. Corequisite: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall. 3 credit hours.

CMM 1750 Rhetoric of Vision and Sound This communication and media arts foundation course explores the vision and sound codes used in various forms of mediated communication. Students will examine films, television, radio, and the Internet to gain an understanding of the techniques employed by producers and directors to create meaning beyond content and script. Students will explore the grammatical elements which comprise the rhetoric of vision and sound: the use of light, color, two- and three-dimensional space, time, motion, and sound. In today’s media saturated environment, the ability to decode mediated messages is a valuable critical thinking skill for all citizens; students interested in becoming producers of media will find the knowledge they have gained in this course especially helpful to their production efforts. Corequisite: ENG 1530. J occasionally. 3 credit hours.

CMM 2100 Communication @ Work Students will be introduced to the necessary communication skills required to be successful in a professional environment. This practical course will emphasize communication concepts as they apply to the workforce. Students will actively apply oral, written, and digital communication skills throughout the semester including: the creation of a digital portfolio, email/phone/vocemai etiquette, business writing, networking, use of social media platforms, the interviewing process, and cover letter and resume writing for specific purposes. Students will enhance their digital and information literacy skills through completion of this course. Corequisite (or completion off): ENG 1530. J spring, fall. 3 credit hours.

CMM 2500 Interpersonal Communication Students will develop their ability to examine the interpersonal communication they are likely to encounter in their personal and professional lives. They will describe their interpersonal communication style, and understand the roles played by such factors as verbal and non-verbal cues, communication climate, intimacy, distance, and conflict. Students also learn to recognize obstacles to effective interpersonal communication and develop strategies for overcoming these obstacles. Corequisite: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C occasionally. 3 credit hours.

CMM 2510 Introduction to Public Relations Students will learn the definition of, theory behind, and application of public relations (PR)
and will be introduced to the role public relations plays in integrated marketing campaigns. The course will include a study of the strategic PR process; research, action and planning, communication and evaluation. Students will gain practical experience in writing news releases, market research, crisis management, and creative design. Corequisite: ENG 1530. J fall; C fall. 3 credit hours.

CMM 2530 Writing for Electronic Media This practical writing course offers students guidance and experience conceptualizing and writing for a variety of electronic media forms including radio, television, film, multimedia productions, and the Internet. The brief exposure to messages created for electronic media, as well as the interactive nature of some electronic media, makes writing for the media especially challenging. Students will learn how to cope with these challenges and become competent media writers. Prerequisite: ENG 1530. J spring. 3 credit hours.

CMM 2560, 2561, 2562, 2563, 2564, 2565 Com/ Media Arts/Internship Students will demonstrate a working knowledge of the media by participating in actual work experience for a communication or media arts organization. Students will negotiate internship dates with the organization's supervisor and with their faculty sponsor in the communication and media arts program. Students submit written logs of their experiences and a final report analyzing their internship experience, which contribute to their evaluation. Prerequisite: CMM 1510. J occasionally. 1 credit hour.

CMM 2570 Studio Production Practicum Students have the opportunity to expand the foundation of production skills acquired in CMM 1630. Producing, directing, writing for electronic media, and live editing skills are emphasized. Students will provide guidance and advice to production teams through live-to-tape programs and lab exercises. Prerequisite: CMM 1630. J occasionally. 3 credit hours.

CMM 2600 Planet Earth: Critical Topics Students will examine critical issues affecting humanity and the global environment, from an in-depth, three-part perspective. Students will investigate the causes and consequences of selected topics of global environmental significance, explore their causes and consequences within contemporary culture, and evaluate the impacts and importance of the mass media in public perception concerning these issues. Corequisite: ENG 1530 and a reading score of 80+. J occasionally. 3 credit hours.

CMM 2610 Mass Commun/Media Literacy Students will learn about the processes, industries, and issues involved in the mass communication media of books, magazines, newspapers, radio, TV, film, the Internet, and the newest media technologies. They will learn how media has evolved over time and will be able to analyze the coding embedded in mass mediated messages. Students will also study the impact media has on us as individuals, Americans, and world citizens. Prerequisite: ENG 1530. J spring. 3 credit hours.

Computer Science

CSC 1300 Computer Basics for the Novice Designed for the newcomer to computers, this course introduces personal computer hardware and software by presenting the fundamentals of a Windows operating system and provides an exposure to word processing, graphics, spreadsheets, databases, and other standard programs. Students may be concurrently enrolled in CSC 1510. This course will not count toward degree credits if the student has previously taken any other CSC course. No prerequisites. J occasionally; C occasionally. 1 credit hour.

CSC 1310 Introduction to the World Wide Web Students will learn to use a variety of browsers to access information on the Internet and work with its multimedia capabilities. This course is appropriate for students in any discipline and requires no prior computer experience. No prerequisites. J fall, spring; C fall, spring. 1 credit hour.

CSC 1320 Introduction Electronic Word Process Students will learn fundamental concepts of electronic word processing including creating, editing, formatting, printing, spell checking, and grammar checking documents. Students implement solutions to assigned problems using software such as Microsoft Word. This course is appropriate for students in any discipline and requires no prior computer experience. A student enrolled concurrently in or with prior credit in CSC 1560 cannot apply this course toward graduation. No prerequisites. J fall, spring; C fall, spring. 1 credit hour.

CSC 1330 Introduction Electronic Spreadsheet Students will learn fundamental concepts of electronic spreadsheets including design, formatting, and working with charts and functions. Students implement solutions to assigned problems using software such as Microsoft Excel. This course is appropriate for students in any discipline and requires no prior computer experience. A student enrolled concurrently in or with prior credit in CSC 1560 cannot apply this course toward graduation. Corequisite: MAT 0500. J fall, spring. 1 credit hour.

CSC 1510 Introduction to Computer Science Students will develop computer literacy by studying an overview of computing and a brief introduction to programming. Topics include a history of computers and computing, computer system components, data representation, the impact of computers on society, computer ethics, an introduction to data communications, networking, word processing, spreadsheets, programming in a structured language, and e-mail. Students will also use the Internet and a browser to access the World Wide Web. Less than 20% of class time is spent on lab exercises. No prerequisites. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

CSC 1520 Computer Programming Students will learn algorithm development and object-oriented program design using an object-oriented language such as Java. Topics include control structures, program debugging, documentation, user-defined methods, parameter passing, graphical user interfaces, arrays, and user-defined classes. Students spend a substantial amount of out-of-class time working on computer projects. Prerequisite: CSC 1570; Corequisite: MAT 1590; Must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C spring; Online spring. 3 credit hours.

CSC 1540 Computer Programming II Students will learn algorithm development and object-oriented program design using an object-oriented programing language such as Java. Prerequisite: CSC 1590; Corequisite: MAT 1600. J occasionally; C occasionally; Online occasionally. 4 credit hours.

CSC 1560 Microcomputer Applications I Students use application software such as Microsoft Office to study word processing, spreadsheets, database management, and presentation software. The integration and practical application of these topics is stressed throughout the course. Students will spend a substantial amount of out-of-class time working on computer projects. Prerequisite: MAT 0500 or higher; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring; Online fall, spring. 4 credit hours.

CSC 1570 Programming Concepts/App Students will learn the components of the programming cycle including problem analysis, algorithm development, design implementation, debugging, and acceptable documentation standards. Students will implement their algorithms using an object-oriented programming language. Corequisite: MAT 0600. J fall, spring; C fall, spring; Online fall, spring; 3 credit hours.

CSC 1580 Micro/Hard/Sys/Software Students will study the design, installation, configuration, and maintenance of hardware and software components of an IBM compatible microcomputer. Interior components covered include memory, disk drives, expansion cards, and power supplies. Other common I/O devices and peripherals such as printers and the mouse are studied. Major categories of system software, operating systems, and diagnostic utilities are covered. Prerequisite: computer knowledge equivalent to CSC 1510. J fall, spring; C spring; Online spring. 4 credit hours.

CSC 1590 Computer Programming Students will learn algorithm development and object-oriented program design using an object-oriented language such as Java. Topics include control structures, program debugging, documentation, user-defined methods, parameter passing, graphical user interfaces, arrays, and user-defined classes. Students spend a substantial amount of out-of-class time working on computer projects. Prerequisite: CSC 1570; Corequisite: MAT 1590; Must meet minimum college level reading score: Accuplacer 80+. J spring; C spring; Online spring. 4 credit hours.

CSC 1600 Data Structures This course continues the study of algorithm development involving data structures, data abstraction, recursion, sorting, and searching. Topics in data structures include stacks, queues, linked lists, and trees. Large programming systems with multiple modules are designed and implemented using an object-oriented programing language such as Java. Prerequisite: CSC 1590; Corequisite: MAT 1600. J occasionally; C occasionally; Online occasionally. 4 credit hours.

CSC 1630 Web Technologies Students will be introduced to utilizing a web content management system to develop websites. Students will manage and publish code to the “cloud” using tools consistent with the web CMS. Students will also explore embedding client-side scripts in web pages to dynamically alter the page contents, format styles, and page layouts using an object-oriented scripting language. This exploration of client-side script programming will include the incorporation of external toolkits and libraries in students’ programs. Students will spend a substantial amount of out-of-class time on computer projects which require a reliable Internet connection. Prerequisite: CSC 1530 and CSC 1570. J occasionally. 3 credit hours.

CSC 1680 Introduction to Visual Basic Students will learn to develop user-friendly, Windows-based business applications using Microsoft Visual Basic.Net. Topics include screen design,
COURSE DESCRIPTIONS

CSC 1560 Software Engineering I Students will work in a small team, typically with a faculty mentor or a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

CSC 2410 Web Programming Students will have some hands-on experience in developing an application using a relational database. Students will demonstrate knowledge of these topics and have the ability to work with these concepts. Students will have some hands-on experience in this course. Prerequisite: CSC 1580 and CSC 2510 or equivalents. J occasionally; C occasionally; Online occasionally. 3 credit hours.

CSC 2660 Database Management Students will learn about database design methodology, exploring various data models, particularly the relational model. Topics include relational algebra, query languages, design techniques, security considerations, and database implementation. Students will use a database management system such as Oracle or MySQL. Prerequisite: CSC 1590 or CSC 1760. J occasionally; Online occasionally. 4 credit hours.

CSC 2670 Computer Organization Upon course completion, students will demonstrate the ability to discuss the hierarchy of a computer system including digital-logic level, machine level, operating system level, and assembly level. Students will also be able to list major differences between various computer systems. Students work on projects that might include assembly language programming, internal organization of a typical PC, number systems, and digital logic. Prerequisite: CSC 1590 or equivalent programming experience. J occasionally; C occasionally; Online occasionally. 4 credit hours.

CSC 2680 Numerical Analysis III Students learn computer numerical methods to solve differential equations. Topics include one-step methods such as Euler and Runge-Kutta, multi-step methods such as Adams-Bashford and Milne-Simpson, extensions of the Runge-Kutta method to solve higher order equations and systems of differential equations, solving boundary value problems using shooting and finite difference methods, and solving certain partial differential equations. Students will use various analysis tools such as Excel, MAPLE, and/or Mathematica. Prerequisite: CSC 2650 or Corequisite: MAT 2650. J spring. 1 credit hour.

CRIMINAL JUSTICE

CRI 1290 Physical Fitness for CJ This is a specialized physical education program for criminal justice students and will emphasize an understanding of physical fitness and its direct application to the criminal justice profession. Specific instructions will cover wellness, physical fitness, and self-evaluation. The general requirements for the police physical agility portion of the civil service examination are explained and incorporated into this course. Prerequisite: criminal justice majors or permission of the instructor. J occasionally. 2 credit hours.

CRI 1310 Corrections Practicum During this 84-hour experiential format, the student/recruit will be placed in a correctional facility for on-the-job training. The student/recruit will be assigned to a full-time correctional officer. While applying their academic knowledge in a real world setting, students/recruits will learn and perform the requisite duties for daily operations of a correctional facility. All work experiences will be reduced to written form on a daily basis and evaluated by the assigned training officer. At the completion of the practicum, these evaluations will be used to assist in determining performance competency and certification potential. Prerequisites: Students must be a sworn corrections officer working in either a county jail or correctional facility. C occasionally. 2 credit hours.
CRI 1320 Introduction Law Enforcement Starting with the origins of American law enforcement, this course concentrates on contemporary law enforcement agencies and their function within the criminal justice system. Students will study police agencies at the local, county, state, and federal levels, and their operational techniques, as well as the law enforcement agents themselves within specific units of each agency. Eligibility: ENG 1510. Corequisites: CRI 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

CRI 1340 Introduction to Emergency Telecoms Provides the student with material related to handling a variety of emergency situations. Students also examine specialized equipment used for telecommunications, including biomedical telemarketing, alert paging, and mobile emergency radio systems. Prerequisite: permission of Sheriff’s Academy director. J occasionally; C occasionally. 3 credit hours.

CRI 1350 Corrections Academy This New York state mandated study surveys the correctional system and provides an in-depth academic and practical correctional officer experience. Students/recruits are required to learn, understand, and apply the requisite functions of a correctional officer as stated by the New York State Department of Corrections. Prerequisite: Student must be a sworn correction officer working in either a county jail or correctional facility. C occasionally. 10 credit hours.

CRI 1360 Legal Issues/Emergency Telecom Provides emergency telecommunicators with an overview of the legal system. Topics include criminal law, procedural law, and civil liability. Students are exposed to vehicle and traffic law and its application to emergency situations. Prerequisite: permission of Sheriff’s Academy director. C occasionally. 3 credit hours.

CRI 1370 Radar/LIDAR Operator This course provides the basic knowledge from which to prepare a student for the use of a police radar/lidar utilized by police agencies across New York state. Instruction in such topics as basic principles of radar and lidar, legal and operational considerations, collision avoidance, post-crash procedures, mock courtroom testimony, speed estimates and supervised field practicum. Prerequisite: student must be a certified police officer of a recognized law enforcement agency, or by permission of academy director. J occasionally. 3 credit hours.

CRI 1380 Emergency Medical Dispatch Provides students with materials related to medical emergencies which require a response from emergency telecommunicators. Students become familiar with recognition of medical emergencies, prioritizing emergencies, and selecting appropriate responses. Students must possess CPR certificates and New York state telecommunicator certification. Prerequisite: permission of Cattaraugus County corrections academy director. C occasionally. 3 credit hours.

CRI 1390 Breath Analysis Course This course provides a base of knowledge from which to prepare students for the use of breath analysis equipment currently utilized within New York State law enforcement agencies. Instruction will include such topics as: pharmacology of alcohol, alcohol properties, legal issues, current case law, Henry’s Law, Infrared Theory, Datamaster nomenclature and operation, court preparation, and lab exercises. Prerequisite: student must be a certified police officer of a recognized law enforcement agency, or by permission of academy director. J occasionally. 2 credit hours.

CRI 1410 Peace Officer Firearms This course is a requirement for New York state peace officers. It is a comprehensive study in the fundamental use of firearms. The student will be provided with detailed instruction in firearms safety, weapons nomenclature, shooting skills, ammunition, tactical situations, and the use of for purposes. A portion of the course will be practical application of learned skills on the firearms range. Prerequisite: students must be a sworn and properly registered peace officer as required by NYS statute. J occasionally. 2 credit hours.

CRI 1420 Report Writing in CJ Students will develop knowledge and skills necessary for concise, effective, and accurate report writing. The importance of the narratives required in reports generated by law enforcement personnel and other criminal justice vocations is emphasized. Prerequisites: CRI 1510 and permission of instructor; Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

CRI 1430 Inmate Classification This course provides a basic knowledge of the inmate classification program as mandated by the New York State Commission of Correction (minimum standard 7013). This course will prepare students to apply this knowledge in the workplace. Prerequisite: student must be a sworn correction officer working in either a county jail or correctional facility. J occasionally. 1 credit hour.

CRI 1440 Inmate Direct Supervision Students will gain a basic knowledge and understanding of the running of a direct supervision housing unit in a correctional facility. Direct supervision allows correctional officers to interact with inmates inside the housing unit, in order to manage their behavior. This course is designed to give students an overview of direct supervision philosophies: managing inmate behavior, managing difficult situations/inmates, planning, organizing, and running a housing unit. Prerequisite: student must be a sworn correction officer working in either a county jail or correctional facility. J occasionally. 2 credit hours.

CRI 1450 Latent Print Level I This course is designed to introduce students to the field of latent print work. The course will cover areas such as print patterns, SAFIS, Henry Classification System, NCIC classification, fingerprint verifications, criminal procedure laws, major print cases, crime scene procedure, print dusting procedures, print lifting procedures, latent print powders and chemicals, photography techniques, photography of print techniques, mock crime scene work, and a mock trial. Prerequisite: student must be a certified police officer of a recognized law enforcement agency or by permission of the academy director. J occasionally. 2 credit hours.

CRI 1450 Latent Print Level II This course is designed to introduce students to the field of latent print work. The course will cover areas such as print patterns, SAFIS, Henry Classification System, NCIC classification, fingerprint verifications, criminal procedure laws, major print cases, crime scene procedure, print dusting procedures, print lifting procedures, latent print powders and chemicals, photography techniques, photography of print techniques, mock crime scene work, and a mock trial. Prerequisite: student must be a certified police officer of a recognized law enforcement agency or by permission of the academy director. J occasionally. 2 credit hours.

CRI 1460 Basic Investigative Photography The Basic Investigative Photography course is a 35-hour course in basic and investigative photography with workshops interspersed with lectures. It is designed to enhance the photographic abilities of police officers by outlining techniques and methods used in crime scene photography. The latter portion of the course will go into a deeper methodology on lighting techniques used to bring forth the qualities of a piece of evidence secured at a crime scene. Prerequisite: student must be a certified police officer of a recognized law enforcement agency, or by permission of academy director. J occasionally. 1.5 credit hours.

CRI 1470 Crime Scene Evidence SPC This two-week course specializes in training as it relates to an officer who will be responsible for the detection, collection, and documentation of evidence at a crime scene. This aspect of law enforcement directly relates to crime scene Investigations and is intertwined with forensic laboratories, medical examiners offices and prosecutors. The instruction will include the collection of blood, bodily fluids, DNA, trace, and physical evidence. Prerequisite: student must be a certified police officer of a recognized law enforcement agency and must have successfully completed CRI 1460: Basic Investigative Photography. J occasionally. 4 credit hours.

CRI 1510 Introduction to Criminal Justice An interdisciplinary survey of the American criminal justice system with specific topical emphasis on crime, law enforcement, corrections, and courts. For anyone interested in correctional careers. Students must learn and discuss cogently the significance of legal and behavioral aspects of crime, the process of justice, various law enforcement entities within the United States, the need for various court structures, and various penological systems. For anyone interested in correctional careers. Corequisite: CRI 1510; Eligibility: ENG 1510. J occasionally; C occasionally. 3 credit hours.

CRI 1520 Introduction to Corrections Students will learn the philosophy, history, and development of the American correctional system. Students study contemporary penalties and the various successes and problems associated with those penalties, including prison life, prisoners’ rights, community corrections, and the death penalty. For anyone interested in correctional careers. Corequisite: CRI 1510; Eligibility: ENG 1510. J occasionally; C occasionally. 3 credit hours.

CRI 1550 Stress in Law Enforcement Students will learn about the stressors encountered in law enforcement which can have a significant impact on both the law enforcement professional and his or her family. The causes of stress, as well as both short-term and long-term reactions and effects of a stressful incident(s) will be examined. Students will also be exposed to methods of coping with the pressures of the law enforcement profession. Corequisite: ENG 1510; CRI 1320 or CRI 1510; Reading score 80+. J occasionally; C occasionally.

CRI 1560 Homeland Security Students will examine the history of international and domestic terrorism and the fundamental concepts of Homeland Security both Pre and Post 9/11. Students will be provided with an overview of the structures and functions of the governmental agencies responsible for protecting the United States from terrorism. Students will review the process of planning and preparation for the potential response to future attacks in the United States.
Corequisites: ENG 1510; CRI 1320 or CRI 1510; Reading score 80+. J occasionally; C, occasionally. 3 credit hours.

CRI 1610 Search and Seizure Students will study the laws and constitutional issues governing searches and seizures by law enforcement officers. Students will gain experience in the practical application of securing, executing, and court presentation of search warrants and evidence seized pursuant to a warrant. Prerequisites: CRI 1320 or 1510 and permission of criminal justice faculty. J occasionally; C occasionally. 1 credit hour.

CRI 1630 Motor Vehicle Stops Students will learn about the interaction of law enforcement personnel and citizens during traffic stops. The proper procedures applied during misdemeanor and felony motor vehicle stops are also examined. Prerequisites: Permission of criminal justice faculty. C occasionally; 1 credit hour.

CRI 1650 Hostile Situation Management Students will learn to recognize and resolve hostile situations in law enforcement which include domestic disputes, hostage situations, and routine calls for service. Students will also learn how to apply successful coping strategies during stressful conflicts. Prerequisites: Permission of criminal justice faculty. J occasionally; C occasionally 1 credit hour.

CRI 1670 Serial Killers This course focuses on the etiology and typologies of the phenomenon of a serial killer, what makes a serial killer, and what impact a serial killer has on society. A cross-section of serial killers is explored, identifying what is believed to have caused these individuals to kill. Prerequisite: must meet minimum college level reading score. Accuplacer 80+. J occasionally; C occasionally. 1 credit hour.

CRI 1690 Interview and Interrogation Students will learn current interview and interrogation techniques that can be applied in various accusatory and non-accusatory settings. Proper application of these techniques in accordance with the 5th Amendment (right against self-incrimination) as it applies to suspects and arrested persons and the 6th Amendment (right to counsel) is emphasized. Prerequisites: Permission of a criminal justice faculty member. J occasionally; C occasionally. 1 credit hour.

CRI 1710 CJ and Substance Abusers Students will learn how to identify and communicate with persons having an alcohol or drug problem who are being processed in the criminal justice system. Prerequisites: CRI 1510 and permission of instructor; Eligibility: ENG 1530; must meet minimum college level reading score. Accuplacer 80+. J occasionally; C occasionally. 1 credit hour.

CRI 1720 CJ and the Mentally Ill Students will learn how to identify and communicate with mentally ill persons who are being processed in the criminal justice system. Prerequisites: CRI 1510 and permission of instructor; Eligibility: ENG 1530; must meet minimum college level reading score. Accuplacer 80+. J occasionally; C occasionally. 1 credit hour.

CRI 1730 Gangs and Criminal Justice Students will learn the development and history of gangs in the United States which includes studying different criminal enterprises in which gangs are involved and solutions to the gang problems.

Corequisite: CRI 1320, CRI 1510, or CRI 1520. J occasionally; C occasionally. 1 credit hour.

CRI 2200 Instructor Development The experienced police officer has valuable knowledge, skills and abilities which are gained through on the job experiences. The goal of this course is to assist the candidate in developing the ability to research, prepare, and communicate that knowledge to other police recruits and hired officers. Training will focus on constructing instructional objectives, planning of training, factors which influence adult learning, factors that modify behavior, the development of communication skills, and the instructional process in developing and evaluating course effectiveness. Prerequisite: students must be a certified police officer of a recognized law enforcement agency, or by permission of the academy director. J occasionally. 5 credit hours.

CRI 2210 Law Enf Field Training Officer This course will provide the basic knowledge to prepare a student to become a field training officer. Prerequisite: must meet minimum college level reading score. Accuplacer 80+. J occasionally; C occasionally. 1 credit hour.

CRI 2220 Firearms Instructor This course is designed for the police instructor who wishes to expand his/her instructional skills to the area of firearms. The goal of this course is to assist the instructor candidate in developing their skills in relationship to fundamentals of marksmanship, firearms safety, course and curriculum design and the ability to diagnose shooter deficiencies and correct these actions. Topics of instruction will include: range safety, range maintenance, shooting fundamentals, instructional techniques, equipment maintenance, shooting course design, and legal issues. Prerequisites: CRI 2220; students must be a certified police officer of a recognized law enforcement agency, or by permission of the academy director. J occasionally. 2 credit hours.

CRI 2223 Law Enforcement Supervisor This course is mandated for any officer who has been promoted to a first line supervisor position. It is also recommended for any officer who aspires to become a first line supervisor. This course will cover topics in the area of: transition to supervisor, styles of leadership, roles of the supervisor, legal issues, incident management, community relations and contemporary police problems, review of written reports, search warrants, civil liability, constitutional law, use of force, stress management, child protective issues, domestic violence, media relations, and crime scene/incident management. Prerequisite: students must be a certified police officer of a recognized law enforcement agency, or by permission of the academy director. J occasionally. 4 credit hours.

CRI 2230 Law Enforcement Academy I This course is mandated for any officer who has been promoted to a first line supervisor position. It is also recommended for any officer who aspires to become a first line supervisor. This course will cover topics in the area of: transition to supervisor, styles of leadership, roles of the supervisor, legal issues, incident management, community relations and contemporary police problems, review of written reports, search warrants, civil liability, constitutional law, use of force, stress management, child protective issues, domestic violence, media relations, and crime scene/incident management. Prerequisite: students must be a certified police officer of a recognized law enforcement agency, or by permission of the academy director. J occasionally. 7 credit hours.

CRI 2250 Law Enforcement Academy I This New York state mandated study surveys the criminal justice system and provides an in-depth academic and practical law enforcement experience. Students are required to learn, understand, and apply the requisite functions of a recruit police officer as stated by the New York State Division of Criminal Justice Services and the Municipal Police Training Council. Such functions include, but are not limited to, criminal justice systems; proper handling of various weapons; crime investigation; traffic enforcement; accident investigation; defensive driving; community policing; emergency medical procedures; criminal law, civil liability; and police ethics. Prerequisite: Successful completion of New York state mandated law enforcement application process (see Chautauqua County Sheriff’s Academy’s application instructions and format); Corequisites: CRI 2380, PHE 2460, and CRI 2470. J fall. 10 credit hours.

CRI 2260 Law Enforcement Academy II This New York state mandated study surveys the criminal justice system and provides academic and practical law enforcement experience. Students are required to learn, understand, and apply the requisite functions of a recruit police officer as required by the New York State Division of Criminal Justice Services and the Municipal Police Training Council. Such functions include, but are not limited to; juvenile law and procedures, crime scene investigations, critical incident management, counterterrorism, crisis preparation, interview and interrogation, arrest processing, civil disorder, injury and death investigations. Eligibility: student must be current Chautauqua County Sheriff’s Academy recruit. J occasionally. C occasionally. 10 credit hours.

CRI 2270 Law Enforcement Academy III This course is encapsulated in the basic police course and areas of instruction will be based on strict standards mandated by the NYS DCJS. Recruits who need recertification as police officers must successfully complete the entire police refresher course. Individuals who enroll in this course will receive instruction in basic patrol functions, firearms, emergency medical services, vehicle operations, and physical fitness training. All mandated training is on a case-by-case basis and will be determined after an evaluation by DCJS of the students past training records and the amount of time since they graduated from the basic police academy. Prerequisite: Students must have a prior NYS basic police certification which has lapsed or is in need of additional training hours as mandated by the Division of Criminal Justice Services of New York state. Students must be appointed and placed on the police roster in Albany by a NYS recognized law enforcement agency and must have met the basic academy requirements prior to application. Students must meet DCJS requirements as they relate to the police refresher course. J occasionally; C occasionally. 5 credit hours.

CRI 2280 Law Enforcement Academy IV This course is encapsulated in the basic police course and areas of instruction will be based on strict standards mandated by the NYS DCJS. Recruits who need recertification as police officers must successfully complete the entire police refresher course. Individuals who enroll in this course will receive instruction in basic patrol functions, firearms, emergency medical services, vehicle operations, and physical fitness training. All mandated training is on a case-by-case basis and will be determined after an evaluation by DCJS of the students past training records and the amount of time since they graduated from the basic police academy. Police Refresher I is a continuation of Police Refresher I. Students must pass both Refresher I and II in sequential order before they can receive a certificate to work as a police officer. Refresher
CRI 2330 Criminal Procedural Law Studies the criminal law processes necessary for successful criminal investigation including physical and testimonial evidence gathering, arrest, and presentation of an accused to court for trial proceedings. Students are required to apply contemporary U.S. Supreme Court decisions relevant to such topics as arrest, search and seizure, and interrogation. Prerequisites: CRI 1510 and Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2340 Law/Law Enforcement Officer Students are required to learn and understand constitutional law and criminal procedural law as determined by the New York State Criminal Code. Students also study New York state vehicle and traffic laws and various New York state civil disturbance laws. Corequisites: CRI 2250, CRI 2460, CRI 2470, and compliance with New York state regulations. J fall. 3 credit hours.

CRI 2410 Criminal Law Concentrates on contemporary principles of administration and their applications to the internal organization and management of law enforcement agencies. Students apply traditional management models/theories to various managerial concerns including planning, staffing, human resources, and leadership styles, as well as other proactive actions dealing with collective bargaining, future trends, and internal/external problem-solving. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2500 Ethics in Criminal Justice Studies the evolution of organized crime in America from the 19th century to the present. Students will demonstrate knowledge of different types of organized crime, how they affect our economy, and will become familiar with the government’s response to criminal organizations. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2550 Organization and Management of Law Enforcement Students will study the traditional method of providing police services, along with problem-oriented and community-based policing. Students will discuss the interpersonal and intergroup relations between police and the public. Required topics include police ethics, stereotypes, minority relations, peer relations, and the role of technology in providing police services and crime prevention. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2550 Organized Crime in the US Studies the evolution of organized crime in America from the 19th century to the present. Students will develop the ability to remember sequences of movement. No prerequisites. J occasionally. 2 credit hours.

CRI 2570 Organized Crime in the US Students will explore many of the ethical problems confronting law enforcement and corrections personnel, including police, lawyers, judges, and corrections personnel. Course materials will focus on ethical systems, the concepts of law and justice, and various real-life ethical dilemmas. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2570 White Collar Crime Using historical and current incidents, this course will discuss White Collar Crime in various areas that are pertinent to the student. Areas such as unsafe products, environmental crime, securities fraud, fiduciary fraud, governmental crime, medical crime, and computer crime will be studied to show the student how these activities originated and how they are currently being used to fleece consumers and taxpayers. The core of the class will be on current criminal activity such as Enron, Adelphia Cable, and MCI WorldCom. The course will address whichever scandal is currently being debated at the time of the class offering. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2600 American Judicial System Focuses on the dynamics of the courthouse. Students study lawyers and their participation in the criminal court arenas. Issues such as how and why cases move from one court to another, sentencing, and proposals for reforming the court process are discussed. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2650 Juvenile Justice System Students will study various causes and categories of juvenile crime and delinquency and explores the unique structure and processes of the separate legal system for juveniles. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

CRI 2790 White Collar Crime Using historical and current incidents, this course will discuss White Collar Crime in various areas that are pertinent to the student. Areas such as unsafe products, environmental crime, securities fraud, fiduciary fraud, governmental crime, medical crime, and computer crime will be studied to show the student how these activities originated and how they are currently being used to fleece consumers and taxpayers. The core of the class will be on current criminal activity such as Enron, Adelphia Cable, and MCI WorldCom. The course will address whichever scandal is currently being debated at the time of the class offering. Prerequisite: CRI 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

DANCE DAN 1510 Beginning Ballet Students will gain an understanding of body alignment and the importance of health for the dancer. Students learn basic ballet techniques, including barre work and ballet dance combinations, and are introduced to understanding rhythm and a brief history of ballet. No prerequisites. J occasionally. 2 credit hours.

DAN 1530 Modern Dance Technique Students will experience training the body for dance as a performing art. Students develop increasing strength, flexibility, and endurance while improving mind/body coordination and muscle control. Students will develop the ability to remember sequences of movement. No prerequisites. J occasionally. 2 credit hours.
DAN 1570 Jazz Dance Techniques Students will prepare to perform modern jazz dance and dance in musical theatre. Students will experience a daily warm-up to increase strength, flexibility, and endurance, and a dance combination. Students are introduced to the history of jazz dance and kinesiology. No prerequisites. J occasionally. 2 credit hours.

ECONOMICS
ECO 1530 Contemporary Economic Problems Students will analyze current economic problems while critically evaluating solutions to these problems. Students integrate basic economic concepts and terminology to problems surrounding such issues as the environment, distribution of resources, health care, crime, market power, poverty, discrimination, government policies, and international trade. This course is not a substitute for ECO 2610-2620. Corequisite: ENG 1510. J occasionally; C occasionally. 3 credit hours.

ECO 2610 Macroeconomic Principles Students will be introduced to the US economy functions as part of an open economy, as it relates to international trade and finance. Students will learn to recognize the role of supply and demand, different economic systems, the private and public sectors, and evaluate unemployment, inflation, and Gross Domestic Product as indicators of economic activity. Students will evaluate matters of fiscal policy, monetary policy, and conflicting economic opinions. Prerequisites: sophomore standing and ENG 1530; Eligibility: MAT 1590. J fall, spring; C fall, spring; Online occasionally. 3 credit hours.

ECO 2620 Microeconomic Principles Students will examine principles of supply and demand with an applied analysis of consumer demand, sensitivity to price changes (elasticity), and utility. Using cost and revenue information, students will demonstrate the theoretical market of perfect competition and monopolies along with realistic alternative markets like monopolistic competition and oligopolies. Students will recognize the role of comparative advantage and specialization in international trade. Prerequisites: sophomore standing and ENG 1530; Eligibility: MAT 1590. J fall, spring; C fall, spring; Online occasionally. 3 credit hours.

EDUCATION
EDU 1250 Early Childhood Development Students will examine the developmental stages of young children including their physical, intellectual, and social-emotional capabilities, emphasizing the wide variation in abilities and behaviors in children. The basic concepts of developmental characteristics of children from birth through eight years of age are to be understood as a foundation for planning appropriate activities for children and establishing appropriate expectations of young children. Eligibility: must meet minimum college level reading score: Accuplacer 80+. J fall; C occasionally. 3 credit hours.

EDU 1290 Introduction Early Childhood Ed/ Care Students will be introduced to the field of early childhood care and education. An overall view of the field includes history and theory; social, emotional, physical, cognitive, and creative development of young children; how early childhood professionals and early childhood programs meet the needs of young children and their families; and models of early childhood programs. This course introduces materials and student experiences of the early childhood profession. Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

EDU 1300 Observ/Guidance/Young/Children Students will develop observational skills as a method of understanding and assessing children's development and behavior. Various methods in recording observations are used by students observing in local early childhood programs. The focus is on preschool children, but the skills can be applied to any age level. The topic of ethics will be included. Prerequisite: EDU 1250. Corequisite: ENG 1510 or Eligibility: ENG 1530; Must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

EDU 1310 Family, School, & Community Pa Students will examine the diversity of families and factors that influence parenting in contemporary society, focusing on strategies to develop working partnerships with parents. Students will study ways to design parent-teacher conferences, parent education, and parent involvement programs. The importance and nature of relationships between schools and community agencies will also be explored. Corequisite: ENG 1530. J fall; C spring. 3 credit hours.

EDU 1510 Foundations/Education-Tchg Pro Students will be provided with information and experiences that will be helpful in deciding whether or not a career in education seems to be an appropriate choice. This course explores the philosophical and socio-cultural roots of education. Students will also examine the political, economic, legal, and ethical basis of American education. Contemporary issues facing education will be examined within the context of teachers, students, schools, and curriculum. Students will also complete a 20 hour internship in a local school. Corequisite: ENG 1530. J fall, spring; C spring. 3 credit hours.

EDU 1510 Foundations/Education-Tchg Pro Students will be provided with information and experiences that will be helpful in deciding whether or not a career in education seems to be an appropriate choice. This course explores the philosophical and socio-cultural roots of education. Students will also examine the political, economic, legal, and ethical basis of American education. Contemporary issues facing education will be examined within the context of teachers, students, schools, and curriculum. Students will also complete a 20 hour internship in a local school. Corequisite: ENG 1530. J fall, spring; C spring. 3 credit hours.

EDU 2210 Field Placement I-Education Students will gain practical experience participating in a minimum of 100 hours of supervised work in a public school or other appropriate educational setting. Students will also participate in a weekly seminar which focuses on developing knowledge of how schools and classrooms work and teamwork within the educational setting. The seminar also focuses on students’ experiences, problems, and special interests. The student, faculty coordinator, and school supervising teacher work together to develop an appropriate learning experience for the student. Students are responsible for assigned readings and a weekly written log of the field experience in addition to other assignments. Prerequisites: EDU 1510 with a C or better, a minimum of 3 credits of education electives with a C or better, and permission of the education faculty. Application required; must be a program major. PLEASE NOTE: For those students enrolled in the Early Childhood Certificate Program, EDU 1510 may be replaced with EDU 1290 to satisfy the prerequisite. J fall, spring; C fall, spring. 4 credit hours.

EDU 2220 Field Placement II Students will gain practical experience participating in a minimum of 75 hours of supervised work in a different school or educational setting than they used in EDU 2210. Students will also participate in a weekly seminar which focuses on learning to further develop their interpersonal teaching skills. Students are responsible for assigned readings and a weekly written log of the field experience in addition to other assignments. Prerequisites: EDU 2210 with a C or better and permission of the education faculty. Application required; must be a program major. J spring; C fall, spring. 3 credit hours.

EDU 2340 Working with Adolescents Students will explore the characteristics, problems, and needs of adolescents, with emphasis on the techniques and skills necessary for working with them in a variety of settings - recreational, educational, and therapeutic. Topics include a look at treatment facilities, mental health, substance abuse, and the dynamics of delinquency. Corequisites: ENG 1530 and PSY 1510 or HUS 1210; must meet minimum college level reading score: Accuplacer 80+. J occasionally. 3 credit hours.

EDU 2440 Children’s Literature Students will develop a comprehensive knowledge of children’s literature with emphasis on identification and familiarization of the different types of children’s literature, the influence that literature can have on children’s and adults’ lives, and the development of effective and creative methods of using literature with children. Use of current technology is included. Prerequisite: ENG 1530. J fall, spring; C spring. 3 credit hours.

EDU 2450 Exceptional Children Students will develop knowledge and understanding of exceptional children and youth, the ways they are served in public schools, appropriate attitudes toward human viability, and individual differences. Current legal and instructional issues and methods are discussed. Prerequisites: PSY 1510 or PSY 1520 and ENG 1530. J occasionally; C occasionally. 3 credit hours.
EDU 2460 Field Exp/Exceptional Child Students will spend four to five hours per week in an educational setting working one-on-one or in small groups with students with identified disabilities as well as those at risk for academic failure. A regularly scheduled on-campus seminar is part of the course. Students spend a minimum of 45 hours in their educational setting the semester in addition to the seminar. Designed primarily for students who plan to transfer to a four-year institution to complete a baccalaureate degree in teacher education. Prerequisites: PSY 1510 and ENG 1530; students should be concurrently enrolled in EDU 2450. J occasionally; C occasionally. 1 credit hour.

EDU 2500 Literacy in the Classroom Students will develop a basic foundation in literacy instruction. The five components of reading, basic reading disabilities, and applications to curriculum and instruction will be explored. In addition, students will examine the basics of literacy approaches including the collection and interpretation of data. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

EDU 2510 Philsphy/Techqs-Early Childhood Students will examine the basic concepts of a child’s psychological and intellectual development in relation to early care and education programs. Developmentally appropriate practices will be emphasized as they apply to the skills used with young children (birth to age 8), individually and in groups. Participation in observations and practice will be required. Prerequisite: ENG 1530 or PSY 2520 or EDU 1250 and EDU 1260. J occasionally; C occasionally. 3 credit hours.

ELECTRICITY/ELECTRONICS ELI 1200 Fundamentals of Electricity Students will gain basic background knowledge of DC and AC circuits. Circuit analysis, circuit wiring, understanding schematics, and using measuring instruments for troubleshooting skills will be developed on an ongoing basis throughout the course. Corequisite: MAT 0600. J fall. 3 credit hours.

ELC 1200 Industrial Automation/PLC Students will investigate the principles and applications of programmable logic controllers and how they are used in manufacturing automation. PLC hardware, SLC - 500 programming using ladder logic, and PLC applications will be emphasized. Prerequisite: EL 1200. J spring. 3 credit hours.

ELC 1230 Electric Motors/Control System Students will learn the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students will be able to properly select, connect, and troubleshoot motors and control circuits. Prerequisites: ELC 1200 or permission of the instructor. J spring. 3 credit hours.

ENGLISH LANGUAGE INSTRUCTION ELI 0500 ELI - Composition I Students will work with simple and complex sentences, guided paragraphs and will be introduced to essay writing with topic sentences and supporting details of evidence and examples. An introduction to expository writing and a targeted composing process is examined. Academic vocabulary is introduced.

ELI 0550 ELI - Composition II Students will continue to develop academic writing skills, focusing on the specifics of English grammar and syntax. Students will continue developing essay writing skills, such as developing and supporting a thesis, transitional statements, and introductions and conclusions. Academic vocabulary continues to develop. Prewriting skills including brainstorming and developing supporting details continue to be explored as well as revision of produced work. Prerequisite: ELI 0500. J occasionally. 3 imputed credit hours.

ELI 0600 ELI - Reading I Students will build reading strategies to include scanning, skimming, and clustering techniques. Identifying topics, main ideas, supporting details, and making basic inferences are introduced and expanded upon. Coursework will include building passive and active vocabulary from context, introduction of word families, distinguishing fact and opinion, understanding vocabulary from context clues, decoding skills, and recognizing transitions. This course is intended for students with a greater level of proficiency in a language other than English. Course requirements: TOEFL, Accuplacer, and/or interview. J occasionally. 3 imputed credit hours.

ELI 0650 ELI - Reading II Students will continue to develop reading strategies to include scanning, skimming, and clustering techniques. Identifying topics, main ideas, supporting details, and making basic inferences are introduced and expanded upon. Coursework will include building passive and active vocabulary from context, introduction of word families, distinguishing fact and opinion, understanding vocabulary from context clues, decoding skills, and recognizing transitions. This course is intended for students with a greater level of proficiency in a language other than English. Prerequisite: TOEFL, Accuplacer, and/or interview. J occasionally. 3 imputed credit hours.

ELI 0700 ELI - Speak & Listen I Students will improve vocabulary building, pronunciation, and intonation. Based on student level, development of accuracy and fluency in listening and speaking skills including correct word order in spoken English, and further develops life skills vocabulary. Students also will gain assistance in building aural and oral communication skills and focusing on note taking and dictation. There is a requirement of two hours of conversational time each week outside of class time which will be arranged individually. This course also targets academic vocabulary and an introduction to simple gerunds and infinitives. Prerequisite: ELI 0700. J occasionally. 3 imputed credit hours.

ENGLISH ENG 0190 Essential Reading Skills Students will obtain the basic reading skills needed to begin working toward their educational objectives. Topics include word recognition skill work, vocabulary development, and the mastery of basic comprehension patterns in reading. Grading is credit/fail. Prerequisite: admission by placement score. J fall, spring; C fall, spring. 3 imputed credit hours.

ENG 0410 Develop Reading Versatility Students will develop more versatile reading and study skills such as greater speed and comprehension of varied reading materials, improved retention of subject matter, skimming, and scanning of textbooks and magazine articles, improved vocabulary and word recognition, and greater enjoyment and understanding of literature. Prerequisite: admission by placement score: Accuplacer 57-79. J fall, spring; C fall, spring. 3 imputed credit hours.

ENG 0430 Essential Writing Skills Students will develop the skills to write effective, organized standard written English. Emphasis will be on clarity and correctness, particularly in accomplishing the sort of short in-class writing tasks required of college students. Prerequisite: admission by placement score: Accuplacer Writeplacer 1-3. J fall, spring; C fall, spring. 3 imputed credit hours.

ENG 1510 English Composition I Students will learn to write precise, clear, substantive essays. Students will work with multi-page papers, organization, and mechanics. Emphasis will be placed on critical thinking, reading, and writing. Prerequisite: admission by successful completion of ENG 0430 or placement score: Accuplacer Writeplacer 4-6; Accuplacer reading 70+. Students who have not met the minimum College Level Reading score (Accuplacer 80+) must be registered for ENG 0410. J fall, spring; C fall, spring. 3 credit hours.

ENG 1530 English Composition II Students will learn to write precise, clear, substantial, and logical essays. They will develop critical thinking and writing skills required in higher education, employment, and life. Students will also learn to conduct research and write a research paper. Prerequisite: admission by successful completion of ENG 1510 or placement score: Accuplacer Writeplacer 7 or 8. Students must meet the minimum College Level Reading score (Accuplacer 80+). J fall, spring; C fall, spring. 3 credit hours.

ENG 1540 Writing About Literature Students will learn to write precise, clear, substantial, and logical essays about fiction, poetry, and drama. Prerequisite: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.

ENG 1560 English For Careers Students will develop the writing skills necessary for communi-
cation in the workplace, including such products as business letters, reports, proposals, e-mail, memos, resumes, cover letters, and applications. Specific skills include writing with correctness, professionalism, and tone appropriate to audience. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

ENG 2510 World Literature - Enlightenment Students will read, discuss, and analyze some of the most enduring and important works of literature up to the 17th century. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2520 World Literature since Enlightenment Students will read, discuss, and analyze some of the most enduring and important works of literature from the 17th century to modern times. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2540 Creative Writing Students will develop and practice creative written expression. Emphasis on poetry or prose may vary with instructors, but primary attention is placed on the development of a student's writing style. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2550 American Literature before Civil War Students will study key works of early American literature (pre-1865) in their literary, cultural, and historical contexts. Students will be asked to explore what “American” means and what major ideas were at work to create a cultural definition for that term. In addition to studying the traditional texts of authors such as Hawthorne, Whitman, Fuller, Emerson, Bradstreet, Franklin, Bradford, etc., students will be exposed to literature outside of the New England canon including Native Americans, French and Spanish colonizers, and African slaves. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2560 American Literature since Civil War Students will study key works of American literature from 1865 to the present as well major literary movements such as regionalism, naturalism, realism, modernism and beyond. American writing will be approached in both historical and artistic context. In addition to studying texts of major authors such as Twain, James, Chopin, Chestnut, London, Cather, Faulkner, Frost, Sandburg, Ginsberg and O’Connor, as well as contemporary authors including Morrison, Silko, Erdrich, Kingston, and Updike, students will study other works that focus on the rich diversity of voices and styles of American literature. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2580 The Modern Novel Students will discuss and analyze some of the great novels in the period from 1900 to the present day. Students will learn to understand the novel as a separate genre and recognize the characteristics distinguishing the modern novel from earlier fiction. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2590 Science Fiction Students will read and discuss a variety of important and typical works by major authors in the historical development of science fiction from its remotest beginnings to the present. Students will gain the understanding of relationships with other literature, with science, with society, and from the view points of both reader and writer. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2610 Brit Literature since Shakespeare Students will read, discuss, and write about ideas prompted by the British literature of the Middle Ages and Renaissance. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 1.5 credit hours.

ENG 2620 Brit Literature since Shakespeare Students will read, discuss, and write ideas prompted by the British literature post Shakespeare up through the 20th century. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2650 Award Winning Young Adult Literature Students will discuss and prepare to teach a wide variety of young adult literature in various cultural settings as they examine the defining components of the adolescent experience. This course will be of particular interest to students majoring in secondary education as well as those students who enjoy reading young adult literature as the class is a study of the variety of texts written for and about adolescents. Students will read and discuss a range of assigned and self-selected award-winning books. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2740 Newswriting and Editing Students will discuss and prepare to teach a wide variety of young adult literature in various cultural settings as they examine the defining components of the adolescent experience. This course will be of particular interest to students majoring in secondary education as well as those students who enjoy reading young adult literature as the class is a study of the variety of texts written for and about adolescents. Students will read and discuss a range of assigned and self-selected award-winning books. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2850 Literature of the Bible Students will read, discuss, and analyze some of the most enduring and important works of literature up to the 17th century. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2870 The Romance of Arthur Students will trace the historical and literary roots of the legend of King Arthur: Readings, films, and discussions center on the evolution of Arthur and notable features of his world: Avalon, Camelot, Merlin, Morgan Le Fay, Guinevere, Lancelot, Gawaine, and Mordred. In poems, chronicles, tales, and romances, major Arthurian images and themes will be examined, such as courtly love, chivalry, the sword of power, the Round Table, the Fisher King, and the Holy Grail. Among several works, the course examines the bardic traditions of the Brythonic Celt as well as the romance cycles of Chretien de Troyes and Sir Thomas Malory. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENG 2890 Advanced Prose Writing Communication program students and others who have satisfied the prerequisites will experience a more advanced program of reading and writing. Students will read, discuss, and write about issues of culture raised by contemporary authors of nonfiction, and they will develop their stylistic options for a variety of rhetorical contexts. Prerequisites: ENG 1530-1540. J occasionally; C occasionally. 3 credit hours.

ENGINEERING

ENR 1560 Introduction Engineering & ENR Design This course provides a first experience for students choosing an engineering career and is divided into three segments. Part one covers the engineering design process. Part two introduces the student to computer-aided design. Part three introduces the student to the engineering fields and advances in high technology. Field trips and speakers are used to help the student select a major field and a transfer institution. Corequisite: MAT 1590. J fall. 3 credit hours.

ENR 2010 Engineering Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.
ENR 2020 Engineering Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. 3 credit hours.

ENR 2510 Thermodynamics Students will continue investigations into mechanics with extensive study of thermodynamics. Students will analyze and solve problems involving fluid dynamics, energy conservation, and thermodynamic processes. Prerequisite: PHY 1610 or 1710 and MAT 1720. J fall. 4 credit hours.

ENR 2550 Mechanics-Statics Students will study rigid body mechanics including forces, force systems, their resultants, and conditions for equilibrium. Other topics include equivalent force systems, equilibrium of rigid bodies, structural mechanics to include trusses, frames and beams, shear and bending moment diagrams, friction, and properties of areas and volumes. Prerequisites: MAT 1720 and PHY 1710; Corequisite: MAT 2650. J fall. 3 credit hours.

ENR 2560 Mechanics-Dynamics Students will study time derivatives of vectors using Cartesian, cylindrical, and path coordinates. The dynamics of a particle from a single frame of reference including rectilinear and central force problems are stressed. Other topics are conservation of energy and momentum as applied to dynamic problems. Rigid body rotations and Coriolis acceleration are studied in detail. Prerequisite: ENR 2550; Corequisite: MAT 2680. J spring. 3 credit hours.

ENR 2580 Strength of Materials Students will be able to explain the concepts of stress and strain and the relationships between them in the solution of problems such as beams, columns, torsional members, connections and combined loading (Mohrs circle). Stress concentrations, thin-walled pressure vessels, and beam deflections are covered. Laboratory experiences include standard tests to determine properties of various materials when subjected to normal stress, bending, shear impact, and torsion loading. Hardness tests and non-destructive testing procedures are used. Prerequisites: MAT 2560 and ENR 2550. J spring. 4 credit hours.

ENR 2740 Analysis/Linear Elec Circuits Students will gain expertise in the techniques of elementary circuit analysis. DC resistive circuits are first analyzed using Ohms and Kirchhoff's laws, voltage and current division, resistance and source combinations, and superposition. Basic techniques are expanded to include dependent sources, mesh analysis, nodal analysis, Thevenins and Nortons theorems, and the maximum power transfer theorem. Sinusoidal, exponential, and damped sinusoidal forcing functions are then introduced along with inductance and capacitance. LaPlace transforms are used to obtain complete solutions for first and second order RL, RC, and RLC circuits. Prerequisite: MAT 1250 or Corequisite: MAT 1720. J fall. 3 credit hours.

ENTREPRENEURSHIP

ENT 1440 Entrepreneurship Operations Students will have an opportunity to develop the knowledge and skills needed by the business owner in the areas of marketing, management, and communications. Students will learn to identify potential customers, define target markets, and plan appropriate promotional strategies. In the area of business management, students will learn about employee behavior, motivation, leadership, building effective teams, interpersonal relationships, and employment laws and regulations. Other issues to be discussed will include personal image, professionalism, and customer service as well as effective networking, information and communication technology, and effective business writing. Students will be required to complete a segment of the business plan as it relates to this course. Eligibility: ENG 1510. Online. Fall. 3 credit hours.

ENT 1450 Entrepreneurship Finance Students will examine basic accounting practices and tax issues with emphasis on applications for business ownership. Topics include the purpose, design, and use of various financial documents; costs and inventory control; the creation and use of financial statements; tax liability and consequences; forms of revenue, costs, depreciation, and investments; daily operations and tax planning. Emphasis will be given to planning and managing assets, budgeting and control, debt versus equity financing, managing short and long term funds, capital budgeting techniques, and cost of capital to the firm. Students will be required to complete a segment of the business plan as it relates to this course. Eligibility: ENG 1510. Online occasionally. 3 credit hours.

ENT 1460 Family Owned Businesses This course is designed for students who will be entering a family-owned business, or expect to someday establish a business which they can leave to their children. Some of the topics covered include succession planning, handling conflict, dealing with non-family members, reinvention of the business, management styles, strategy, leadership, and the evolution of the enterprise from the first generation entrepreneurial stage into the family business to the second, third, and succeeding generations. Eligibility: ENG 1510. Online occasionally. 1 credit hour.

ENT 1470 Retail Mgm/Franchise Ownership This course covers major retailing topics, including consumer behavior, information systems, store location, operations, service retailing, the retail audit, retail institutions, franchising, human resource management, computerizations, and retailing in a changing environment. Its decision-making orientation provides a real-world approach focusing on small retailers. Eligibility: ENG 1510. Online occasionally. 3 credit hours.

ENT 1480 Entrepreneurship Internship Students will receive on-the-job experience consisting of 135 hours of supervised activity in a local business. Students work in conjunction with a faculty member and a supervisor at the job site. All guidelines in the original internship policy will be followed. Eligibility: ENG 1510. J occasionally. 3 credit hours.

FRENCH

FRE 1510 Introductory French I Students will learn French language vocabulary and structure by completing a series of activities designed for realistic communication, both written and spoken. They will learn the reading and writing of the French alphabet. Through reading, dialogue, and associated study, students will develop an understanding of the language and cultural distinctions of French speakers worldwide. Eligibility: ENG 1510. J occasionally; C occasionally. 4 credit hours.

FRE 1520 Introductory French II Students will learn French language vocabulary and structure by completing a series of activities designed for realistic communication, both written and spoken. They will learn the reading and writing of the French alphabet. Through reading, dialogue, and associated study, students will develop an understanding of the language and cultural distinctions of French speakers worldwide. Prerequisite: FRE 1510 or two years high school French; Eligibility: ENG 1510. J occasionally; C occasionally. 4 credit hours.

FRE 2510 Intermediate French I Students will continue their French language study, including a review of basics covered in FRE 1510-1520.

FRE 2520 Intermediate French II Students will continue their French language study, including a review of basics covered in FRE 1510-1520.

GEOGRAPHY

GEO 1520 World Regional Geography Students will study and evaluate interrelationships of location, climate, landforms, and natural resources with the cultural, economic, and political systems of the world's political and cultural regions. Other topics include population trends, impact of technology and culture upon the natural environment, and patterns of economic development as they relate to regions of the world: Europe, Russia, Middle East, Asia, Africa, and the Americas. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

GEOLOGY

GLG 1510 Physical Geology In this classical introduction to geology, students will identify and explain the geologic processes operating on and beneath Earth's surface, including mineral and rock formation, plate tectonics, deformation, orogeny, weathering, erosion, transport, and deposition. Landforms resulting from geologic processes will be interpreted. Laboratory projects and field trips correlate with lecture topics. Corequisite:
on common fossil groups and the interaction of organisms with their diverse environments. This is an introductory course for students with little or no science background. Corequisite: ENG 1530. J occasionally. 3 credit hours.

GLG 1720 Geologic Hazards This course explores the dangerous and fascinating world of earthquakes and volca- nos. Students will study the geologic settings that produce these phenomena, specific hazards associated with each, and the immediate and long term effects of natural dis-asters of this magnitude. Risk assessment, human mitigation, and ways to minimize the devastating consequences of earthquakes and volca- noses will be covered. Eligibility: ENG 1530. J spring. C occasionally. 1 credit hour.

GLG 1740 Catastrophic Weather Students will be introduced to the field of meteorology and explore general weather principles and the where, when, why, and how of catastrophic weather events such as thunderstorms and lightning, tornadoes, hurricanes, floods, and drought. Methods to prepare and protect you and your family against these natural disasters are also covered. Eligibility: ENG 1530. J occasionally. C occasionally. 1 credit hour.

GLG 1760 Petroleum Geology Petroleum resources constitute a major source of energy for our transportation, home, and industrial needs on a national and global basis. Students will gain an insight into the geology of petroleum (oil and gas), and develop an understanding of its origin, occurrence, and geologic controls. Students will increase their knowledge of economic, environmental, and geopolitical considerations as related to petroleum prospect development. Practice in prospect analysis will be obtained through a series of exercises which demonstrate basic use of wire-line logs and subsurface maps. Eligibility: ENG 1530. J occasionally. 1 credit hour.

GLG 1810 Introduction to Oceanography Students will learn basic oceanographic concepts including the physical, chemical, geological, and biological processes operating in the oceans, how they interact, and their effects on terrestrial systems. Additional topics include mankind’s relationship with the sea, the resources we receive from it, the impacts we have on it, and how it infiltrates our culture. Demonstrations and hands-on activities will reinforce lecture content. Corequisite: MAT 0600 or higher; ENG 1510. J fall. 3 credit hours.

GLOBAL STUDIES

GLS 1500 Introduction to Global Studies Students will learn about the study of global processes and examine interactions and changes that have affected our view of globalization over time. This includes understanding the interconnectedness of people, places, institutions, and circumstances around the world. Students will bring together different insights from social sciences, humanities, and natural sciences, while emphasizing the role of the individual and his/her relationship to the larger global community. Corequisite: ENG 1510; must meet minimum college level reading score 80+. It is not necessary to take HIS 1510 before HIS 1520. HIS courses are reading and writing intensive. J fall, spring; C fall. 3 credit hours.

HISTORY

HIS 1510 World History Before 1500 Students will examine the foundations of major cultures of today’s world from the beginning of recorded history to the early modern age, with an emphasis on how these developments continue to shape the human experience. They will utilize methods of the social sciences by researching, interpreting, and communicating an understanding of primary and secondary historical sources. The factual and interpretive content of this course will emphasize the comparisons of key historical developments, their chronology, interaction, and the diffusions of the world’s major cultures amid increasing global interconnection. Corequisite: ENG 1510; must meet minimum college level reading score 80+. It is not necessary to take HIS 1510 before HIS 1520. HIS courses are reading and writing intensive. J fall, spring; C spring. 3 credit hours.

HIS 1530 World History Since 1865 Students will be introduced to the history of the United States from the European Encounter through the Civil War. Using the methodology of the social sciences, students will learn and evaluate the major historical, social, cultural, scientific-technological, economic, and natural developments that shaped the United States during its formative years; when the American republic was expanded and tested by division. Students will give special attention to the unique contributions made by diverse peoples and institutions, and the responsibilities of educated citizens today. Corequisite: ENG 1510; must meet minimum college level reading score 80+. It is not necessary to take HIS 1530 before HIS 1540. HIS courses are reading and writing intensive. J fall, spring; C fall, spring. 3 credit hours.

HIS 1540 US History Since 1865 Students will examine the history of the United States from the conclusion of the Civil War to the present. Using the methodology of the social sciences, students will learn and evaluate the major political, social,
cultural, scientific-technological, economic, and natural developments that have shaped the recent American experience. Students will give special attention to the unique contributions made by diverse peoples and institutions, and will better understand the responsibilities of educated citizens today. Corequisite: ENG 1510, must meet minimum college level reading score 80+. It is not necessary to take HIS 1530 before HIS 1540. HIS courses are reading and writing intensive. J fall, spring. C fall, spring. 3 credit hours.

HIS 2100 The American Civil War Students will survey the American Civil War and the subsequent Reconstruction Era. The specific topics to be covered include: the causes of the war; the political, economic, military, and diplomatic execution of the war; the problem of waging war in a democracy; the constitutional issues raised by the war; the reasons the South lost the Civil War; the impact of the war and reconstruction on American history; and the reconstruction policies of Lincoln, Johnson, and the Radical Republicans. Lectures will focus on the military aspects of the war. Prerequisite: ENG 1530. J spring; C occasionally. 3 credit hours.

HIS 2560 History of World War II Students will examine and evaluate the world at war with emphasis on the role of the United States from the battlefields to the homefront. Multiple factors of the aftermath of World War I, the rise of fascism, Japan’s expansion in Asia, the alliance of Britain, America, and the USSR, and the strategies of each side in the war are studied. Implications of the surrender of Germany and Japan, the use of nuclear bombs, and the interests of the U.S. and USSR in creating a new world after the war are assessed. Prerequisite: ENG 1530. J occasionally. 3 credit hours.

HIS 2570 History of World Religions This interdisciplinary course examines the development and variety of religious belief in the past and present. Historical, pre-historic, and non-literary traditions are examined, including Native American, African, Asian, Indo-European, and Semitic beliefs. Special consideration is given to religious development, assimilation, diffusion, practices, and phenomena. Cross-cultural comparisons and the key tenets of today’s world faiths are also emphasized. Eligibility: ENG 1530. J occasionally; C occasionally. 3 credit hours.

HIS 2590 Native American History Students will examine the prehistory and history of Native North Americans through the present. Culture, religion, intertribal affairs, and Indian-European relations from a Native point of view are studied. The history of the Iroquois, particularly in New York state, is emphasized. Eligibility: ENG 1530. J occasionally; C occasionally. 3 credit hours.

HIS 2600 Global History through Food Students will explore the global past through an analysis of a variety of foods and foodways, focusing on the political, economic, social, and cultural impacts of food and beverages on the world’s peoples, their identities, and historical development. Students will discover how the quest for food and food security led to the rise of civilization, fueled imperialism, inspired industrialization, and contributed to globalization. Corequisite: ENG 1530. Occasionally. 3 credit hours.

HUMANITIES

HMT 1200 Philosophy Goes to the Movies Students will learn about some of the major ideas in philosophy and philosophical thought via the media of film. No prerequisites. J occasionally. 2 credit hours.

HMT 2530 Humanities/Western Culture-MdA Students will examine the ideas and ideals which characterize the moral, intellectual, and aesthetic activities from early civilization through the Medieval Period. By considering the literature, art, philosophy, and religion of various ages, students will learn how these interrelated disciplines define a people and a time. Students will also gain an overview of individuals and works in the humanities which are fundamental to early Western culture. Prerequisite: ENG 1530. C occasionally. 3 credit hours.

HMT 2540 Humanities/Western Culture-Ren Students will examine the ideas and ideals which characterize the moral, intellectual, and aesthetic activities from the Renaissance to the 20th century. By considering the literature, art, music, philosophy, and religion of various ages, students will learn how these interrelated disciplines define a people and a time. Students will also gain an overview of individuals and works in the humanities which are fundamental to recent Western culture. Prerequisite: ENG 1530. Occasionally. 3 credit hours.

HUMAN DEVELOPMENT

HUM 0340 Student Development Addresses the role that student development plays in college success. Students will identify factors affecting their development and success as students. Students will become familiar with Arthur Chickering’s theory of student development and will assess their development in four of Chickering’s developmental areas. Students will formulate appropriate goals for their growth and development based on Chickering’s model. Grading is credit/fail. No prerequisites. J fall, spring, 3 imputed credit hours.

HUM 1300 On Course for Success Students will learn a number of proven strategies for creating greater academic, professional, and personal success, and discover how to create a rich, fulfilling life by examining their beliefs and developing new skills and behaviors. Students will focus on empowering themselves to make wise choices in their academic and personal life which will lead to improved experiences and outcomes. No prerequisites. J fall, spring, C fall, spring, 3 credit hours.

HUM 1510 Achievement And Self Students will develop a greater self-understanding and self-awareness with emphasis on personal strengths, interpersonal skill, and achievement style. Students will identify their objectives for growth and change and learn specific goal setting and goal acquisition techniques. Lectures and experiential activities will be included. Eligibility: ENG 1510. J fall, spring, C fall, spring, 3 credit hours.

HUM 1550 Life/Career Planning Students will increase their understanding of their abilities, strengths, values, needs, interests, and personality as related to planning life and career goals. They will be able to locate and use various sources of occupational, career planning, and educational planning information. Students will identify career goals and objectives as well as action steps to be achieved in reaching their objectives and goals. They will become aware of the importance of a self-empowered attitude in achieving life and career goals. Eligibility: ENG 1510. J fall, spring; C fall. 2 credit hours.

HUM 1660 Leadership Development Students will develop an understanding of leadership theory, an awareness of the moral and ethical responsibilities of leadership, and an awareness of one’s own leadership style and abilities. Students will be given an opportunity to develop essential leadership skills and to understand and practice productive leadership behavior. The course will use experiential methods of discussion, film, simulation, and a variety of readings, including some from the humanities. Particularly appropriate for those currently in leadership positions or those wishing to gain skills for leadership roles. Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

HUMAN SERVICES

HUS 1210 Introduction to Human Services Students will examine the philosophy and goals of human services: social welfare, social work, and early childhood education, and be introduced to the historical, political, and social perspectives of human services. Programs designed to meet common human needs and alleviate social problems are identified and differences among programs including those of other countries are discussed. Methods and theories of intervention are studied with an emphasis on diversity of target populations. Through case studies, guest speakers, and agency visits, students are introduced to the human service career and generalist practice. Corequisite: ENG 1510 or Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring, 3 credit hours.

HUS 1220 Poverty/Social Class/America This course examines the nature and extent of poverty in the United States, including the causes of poverty, poverty measurement, and beginning intervention strategies for individuals, communities, and professionals. Students will analyze a framework for understanding socio-economic diversity, and use the strengths perspective to improve instruction and service delivery to populations in need. This course is appropriate for anyone working with people in generational poverty, including those in the fields of education, human services, criminal justice, and the health care professions. This course integrates theory with practical intervention strategies. Eligibility ENG 1510 and a score of 70+ on the Accuplacer test. J occasionally; C occasionally. 1 credit hour.

HUS 1280 Introduction to Family Systems Students will examine the systems theory approach to
HUS 1210. Students will also participate in a weekly seminar which focuses on learning to develop a helping relationship. Students will learn about the characteristics of the helper and client, and techniques of helping that are appropriate to their agency situations. Opportunities for analysis of personal characteristics and development of skills in the helping relationship will be provided during both practitioner and seminar. Students are responsible for assigned readings and a weekly written log of the field experience in addition to other assignments. Prerequisites: HUS 220 with a C or better and permission of the human services faculty. Application required: must be a program major. J fall, spring. 5 credit hours.

HUS 2230 Interviewing and Counseling Students will develop entry level interviewing skills appropriate for work in human services agencies. Counseling theory and techniques of interviewing are emphasized. Students will learn about the therapeutic relationship, non-verbal and verbal communication, multicultural interviewing, and crisis intervention. A variety of clinical techniques are discussed through role playing and case discussions. Prerequisites: PSY 1510, PSY 1520, or HUS 1210. Corequisites: ENG 1510 or Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall, spring. C fall, spring. 3 credit hours.

HUS 2250 Policy and Organization Expanding on concepts introduced in HUS 1210, the student will demonstrate knowledge of the development and analysis of social policy. Current issues and problems in the organization and delivery of social services to diverse populations are examined with linkage to the historical perspectives. Comparisons with European social welfare programs will be made. The relationship of social and professional values to policy formulation and analysis is stressed. As part of student research teams, students will produce a written policy analysis of a major social welfare/education policy. An Internet research refresher session is included. Prerequisites: ENG 1530, HUS 1210, and sophomore standing. Should be taken with or following an internship. J fall, spring; C spring. 3 credit hours.

HUS 2340 Working with Adolescents Students will explore the characteristics, problems, and needs of adolescents, with emphasis on the techniques and skills necessary for working with them in a variety of settings - recreational, educational, and therapeutic. Topics include a look at treatment facilities, mental health, substance abuse, and the dynamics of delinquency. Corequisites: ENG 1530 and PSTY 1510 or HUS 1210; must meet minimum college level reading score: Accuplacer 80+. J occasionally. 3 credit hours.

HUS 2350 Mental Illness/Class/Intervention Students will learn information on the historical and current classification of mental illnesses including the current Diagnostic and Statistical Manual (DSM) and will explore assessment techniques and beginning evidence based clinical interventions for various mental health populations. Students will use the DSM to analyze and diagnose an individual and identify the roles of human service professionals within the mental health field. Prerequisites: PSY 1510 or PSY 1520; Corequisites: ENG 1510 or Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J spring; C spring. 3 credit hours.
exceptions for certain programs. Prerequisite: 26 college credits with a 2.5 GPA or better. J fall, spring. Variable credit hours.

INTERDISCIPLINARY STUDIES

INT 1500 Master Student Students will develop the skills necessary to reach their educational goals, including improved study skills, communication skills, and time management skills. Students will examine life issues faced by college students and will understand the significance of personal responsibility in achieving their goals. Eligibility: ENG 0410 and ENG 0430. J fall, spring; C fall, spring. 2 credit hours.

INT 1520 Student Success Seminar Designed to acclimate and orient students to higher education. Students will develop an understanding of the academic and personal demands of college life, and the attitudes, behaviors, and skills which successful students exhibit. Students will become familiar with the resources available at this college to help them succeed. No prerequisites. J fall, spring; C fall, spring; Online occasionally: 1 credit hour.

INT 1750 Arts in the Apple Arts in the Apple is intended to provide art, music, theatre, communication, and media arts students with a field-based learning experience using a trip to New York City, during which students will visit museums, cultural institutions, theatres, and attractions. A final project, researched in New York City, will be produced as a result of the course experience. Eligibility: ENG 1530. J fall. 3 credit hours.

INT 2600 Planet Earth: Fieldwork (HONORS) A learning contract for experiential learning is created for each individual internship. That document, program specific learning outcomes are outlined as agreed upon by the faculty sponsor and the student. The contract must be approved by the assistant dean in charge of the discipline area prior to beginning the internship experience. Corequisite: ENG 1530 and reading score of 80+. J occasionally. 1 credit hour.

INT 2800 Science Connections A science outreach opportunity for science majors, students in this course design and present hands-on science investigations for third grade students in physical science, biology, chemistry, and earth science. Prerequisite: science major with sophomore standing and permission of instructor; must meet minimum college level reading score: Accuplacer 80+. J spring. 1 credit hour.

Library

LIB 1500 Library Research Skills Students develop basic skills in library research techniques using both print and electronic tools. Focus is on location and retrieval of information from major reference sources, print indexes, and electronic databases. Especially designed for freshmen and returning adult students. No prerequisites. J occasionally; C occasionally. 1 credit hour.

LIB 1600 Electronic Library Resources Students will be introduced to the latest online free and subscription databases, as well as web-based library catalogs. Students gain a working knowledge and learn basic operating procedures in a variety of electronic databases. Lectures, demonstrations, and hands-on assignments are featured. No prerequisites. Online fall, spring, summer. 1 credit hour.

LIB 2010 Library Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or a semester completion in an appropriate certificate program. J occasionally; C variable credit hours.

MATH FOR EDUCATORS

MAE 2510 Math for Elementary Teachers Students will develop the skills necessary to effectively teach mathematics at the elementary school level. Topics of study will include problem solving, operations in the base-ten whole number system (as well as other bases), operations with fractions, operations with integers, operations with decimals and percent’s, and ratios and proportions. While there will be review of the basic mathematics used at the elementary school level, the emphasis of this course will be for students to understand why those mathematical procedures work and how to construct appropriate lessons and activities to illustrate the ideas to elementary students using a variety of concrete methods. Prerequisites: ENG 1510 and fulfillment of the math requirement in the student’s degree program, and sophomore standing. J fall. 3 credit hours.

MATHEMATICS

MAT 0350 Prealgebra: Extended Time Students will improve their basic mathematical skills. Topics include integers, real numbers, fractions, decimals, percents, and ratios and proportions. Applications are emphasized throughout to help students improve their ability to handle everyday mathematics. Students are introduced to variables and other elementary algebra topics throughout the course in preparation for MAT 0500. No prerequisites. J fall, spring. C fall, spring. 5 imputed credit hours.

MAT 0400 Prealgebra Students will improve their basic mathematical skills. Topics include integers, real numbers, fractions, decimals, percents, and ratios and proportions. Applications are emphasized throughout to help students improve their ability to handle everyday mathematics. Students are introduced to variables and other elementary algebra topics throughout the course in preparation for MAT 0500. No prerequisites. J fall, spring, C fall, spring. 3 imputed credit hours.

MAT 0500 Elementary Algebra Students will learn basic algebraic skills necessary for further study in mathematics and many other disciplines which involve quantitative problems. Topics include polynomial arithmetic, factoring, rational and radical equations and expressions, properties of rational exponents, solutions to quadratic equations, and unit analysis. Problem-solving and applications are emphasized. Prerequisite: MAT 0300 or placement exam. J fall, spring; C fall, spring. 3 imputed credit hours.

MAT 1210 Applied Math for Technology I Students will learn how to solve technology-related problems using algebra, geometry, and trigonometry. Special emphasis will be placed on applications to machine tool work, welding, and similar disciplines. This course is designed to meet the specialized needs of students in technology-related disciplines and is not recommended for engineering or mathematics majors. Prerequisite: MAT 0500 (or higher) or Algebra 40+. J summer, O spring. 3 credit hours.

MAT 1220 Applied Math for Technology II Students will learn applications for algebra, trigonometry, complex numbers, exponential, sinusoidal and logarithmic functions, vectors, and determinants. Illustrative examples are provided for the electrical, mechanical, computer technology and physics disciplines. This course is designed to meet the specialized needs of technology students and is not recommended for engineering or mathematics majors. Prerequisite: MAT 0600 or MAT 1210 or placement exam. J occasionally. 4 credit hours.

MAT 1250 Applied Technical Calculus Students will learn applications of derivatives and integrals. Illustrative examples are provided for the electrical, mechanical, computer technology and physics disciplines. A computer algebra system such as Derive is incorporated into the course. The course is designed to meet the specialized needs of technology students and is not intended for engineering or mathematics majors. Prerequisite: MAT 1220 or MAT 1300. J occasionally. 4 credit hours.

MAT 1500 Problem Solving w/Mathematics Students will develop problem solving skills through a detailed study of topics such as financial mathematics, linear and exponential modeling, and geometry, in concert with specific problem solving strategies such as drawing diagrams, making systematic lists, looking for patterns, identifying sub-problems, and working backwards. Solution presentations and communication are emphasized. Prerequisite: MAT 0500 or placement exam; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

MAT 1540 Elementary Statistics Students will investigate various topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability, random sampling, correlation and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. A significant part of the course is taught in a laboratory setting using a software package such as Minitab. Prerequisite: MAT 0600 or MAT 1500 or placement exam; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

MAT 1590 College Algebra/Trigonometry Students will learn algebra and trigonometry topics necessary to prepare them for the study of precalculus. Topics include one-to-one functions
and their inverses and graphs, polynomial and rational functions and their applications, radicals and exponents, complex numbers, and trigonometric functions, including graphs and basic identities. Problem-solving and applications are emphasized. An approved graphing calculator is required. Prerequisite: MAT 0600 or placement exam. J fall, spring; C fall, spring; Online fall, spring. 4 credit hours.

MAT 1600 Precalculus Students will learn topics necessary for studying calculus and discrete mathematics. Algebra topics include rational and polynomial functions. Trigonometry topics include graphs, identities, half and double-angle formulas, and inverse trig functions. Other topics include exponential and logarithmic functions, and an introduction to limits. An approved graphing calculator is required. Prerequisite: MAT 1590 or placement exam. J fall, spring; C fall, spring; Online fall, spring. 4 credit hours.

MAT 1610 Calculus/BUS/Social Science I Students will study an introduction to differential calculus of functions of a single variable with applications to the behavioral, management, and social sciences. Topics include limits, continuity, derivatives, and applications of derivatives for algebraic, exponential, and natural logarithmic functions. Prerequisite: MAT 1530 or MAT 1600 or high school precalculus or equivalent. A student cannot receive graduation credit for both MAT 1610 and MAT 1710. J occasionally; C occasionally. 3 credit hours.

MAT 1640 Calculus/BUS/Social Science II Students will study an introduction to integral calculus for functions of a single variable and the calculus of functions of several variables. Techniques of integration and differentiation and applications of these techniques to the behavioral, management, and social sciences are studied. Prerequisite: MAT 1630 or MAT 1710. A student cannot receive graduation credit for both MAT 1640 and MAT 1720. J occasionally; C occasionally. 3 credit hours.

MAT 1670 Discrete Mathematics Students will master fundamental concepts of discrete mathematics that are essential for further studies in mathematics and computer science. Topics include symbolic logic and deductive reasoning, methods of proof, set theory, combinatorics, Boolean algebra, number theory, relations, and graph theory. Prerequisite: MAT 1600 or high school precalculus or equivalent. J spring; C spring; Online occasionally. 3 credit hours.

MAT 1710 Calculus/Analytic Geometry I Students will study the fundamental concepts of calculus. Topics include an introduction to analytic geometry, functions, limits and continuity, and derivatives and integrals and their applications. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course. Prerequisite: MAT 1600 or high school precalculus or equivalent. J fall, spring; C fall, spring. 4 credit hours.

MAT 1720 Calculus/Analytic Geometry II Students will further their study of calculus. Topics include applications of the definite integral such as volume, surface area and arc lengths, logarithmic and exponential functions, trigonometric and hyperbolic functions, techniques of integration, polar coordinates, parametric equations, improper integrals, and sequences and series including power series and Taylor series. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course. Prerequisite: MAT 1710. J fall, spring; C spring. 4 credit hours.

MAT 2010 Mathematics Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

MAT 2650 Calculus/Analytic Geometry III Students will continue their study of calculus. Topics include solid analytic geometry, calculus of functions of several variables, multiple integration, 2- and 3-dimensional vectors, and vector calculus (including Green’s Theorem and Stokes’ Theorem). A computer algebra system such as Mathematica is incorporated into the course. Prerequisite: MAT 1720. J fall. 4 credit hours.

MAT 2670 Linear Algebra Students will learn the algebra and geometry of finite-dimensional vector spaces and their linear transformations, the algebra of matrices and determinants, characteristic values and vectors, and diagonalization. Electives may include computer algebra system such as DERIVE is incorporated into the course. This course is intended for students majoring in mathematics, computer science and engineering. Prerequisite: MAT 1720. J fall. 3 credit hours.

MAT 2680 Ordinary Differential Equation Students will study differential equations of the first and higher order, systems of linear differential equations, and Laplace transforms. Applications are stressed throughout the course. The course is intended for students majoring in mathematics, computer science, and engineering. Prerequisite: MAT 1720. MAT 2650 strongly recommended. J spring. 3 credit hours.

MECHANICAL TECHNOLOGY

MCT 1210 Applied Pneumatics & Hydraulics Students will be introduced to the basics of hydraulic and pneumatic machinery. They will study the basic components of these systems, such as pumps, valves, and actuators. This course will include a combination of laboratory activities and computer-based simulations. Students will also discuss safety standards for pneumatic and hydraulic systems. No prerequisites. Campus & Term: J spring. 3 credit hours.

MCT 1240 Engineering Drawing w/AutoCAD Students will focus on engineering drawing fundamentals, incorporating both manual and computer-aided drafting. Topics include freehand sketching, principles of applied geometry, orthographic projections, dimensioning, section views, pictorials, conventional drawing practices, standards, tolerancing, and an introduction to 2-D wire frame software such as AutoCAD. Students will create and modify CAD geometry, text, and dimensions. Eligibility: Must meet minimum reading score: Accuplacer 70+. J fall. 3 credit hours.

MCT 1250 Statics for Technology Students will study rigid body mechanics including forces, force systems, their resultants, and conditions for equilibrium (including friction). Topics include equivalent force systems, equilibrium of rigid bodies, and structural mechanics (trusses, frames, beams, properties of areas, and volumes). Prerequisite: PHY 1250; Corequisite: MAT 1220 or MAT 1590 or higher. J spring. 3 credit hours.

MCT 1270 Machine Theory and Operations Students will learn the function and operation of basic shop producing machine tools such as lathes, drills, milling machines, saws, and grinders. Prerequisite: MAT 0600. J fall. 3 credit hours.

MCT 1280 CNC/Machine Tools Students will learn the programming and operation of Computer Numerically Controlled (CNC) machine tools. Manual programming of two and three axis mills and lathes using canned cycles will be covered. Topics discussed will include CNC machine components, absolute and incremental programming, preparatory functions (G-codes), miscellaneous functions (M-codes), work piece offsets, tool length offsets, cutter compensation and cutting tools and workholding methods for CNC. Lab projects provide hands-on experience for students on CNC controllers. Prerequisite: MCT 1270; Corequisite: MAT 1220 or MAT 1590 or higher. J spring. 3 credit hours.

MCT 1300 Machine Tool Tech. II Students will gain exposure to setup and running manual machine tools such as lathes, mills, and drill presses. In this course, the students will concentrate on more hands-on applications of set-up and machining of more complex parts using the manual equipment in the MTI lab. Prerequisites: MCT 1240 and 1270 and MAT 1220, or MAT 1590 or higher. J spring. 4 credit hours.

MCT 1340 Manufacturing Drawings & GD&T Students will gain further exposure to actual manufacturing drawings and other information provided. The first part of the course will cover the ability to read, interpret, and construct manufacturing drawings. The second part will introduce the students to geometric tolerance and dimensioning. Prerequisite: MCT 1240. J spring. 3 credit hours.

MCT 1380 Introduction to Solid Modeling Students will be introduced to 3-D solid modeling software. Much of the course is spent on application of a parametric solid modeler such as Solid Works. Students will learn to create and sketch geometry and parametric solids. Students will also be introduced to detailing and assembly modeling. Emphasis is placed on establishing constraints that correctly convey the design intent. Prerequisite: MCT 1240 or equivalent experience. J spring. 3 credit hours.

MCT 1390 AutoCAD Students will learn the concepts and fundamental principles of computer-aided drafting using AutoCAD software. Through both lecture and laboratory assignments, students will apply the commands and functions used in industry to create working mechanical drawings. Prerequisite: MCT 1240. J fall. 2 credit hours.

MCT 2010 & 2020 Technology Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunc-
used in PC based CAD/CAM part programming

gain exposure to the principles and procedures of Computer-Aided Manufacturing

MCT 2410 Computer Aided Manufacturing

3 credit hours.

are also featured.

CAM, analysis package, and other CAD systems require students to create a small factory that uses new manufacturing techniques. Emphasis of the project is on quality, reduced work in process, and the team approach. Prerequisites: MCT 1280, MCT 1380, and sophomores technology standing. J spring. 3 credit hours.

METEOROLOGY

MET 1510 Introduction to Meteorology

Students are introduced to the basic concepts and processes of atmospheric science. Topics include atmospheric moisture, vertical and horizontal air pressure patterns, thermal patterns, clouds, atmospheric circulation and winds, air masses, fronts, fog, ice formation, thunderstorms, turbulence, and sub-tropical weather. Students will study weather data including surface and pressure maps, surface weather data, and a variety of computerized weather data banks throughout the U.S. and selected areas of the world. The relationship of meteorological phenomena to aeronautical conditions will be included. Prerequisite: MCT 1280 and MCT 1450. J fall. 3 credit hours.

MOT 1420 Medical Coding II (ICD-10-CM)

Students are introduced to ICD-10-CM coding classification systems. Students will learn how diagnostic coding procedures relate to medical reimbursement and office operations. Prerequisites: MOT 1410 and MOT 1420. C fall; J fall. 3 credit hours.

MUSIC

MUS 1510 Introduction to Music

Guides the student's search for musical enjoyment and understanding. A survey of classical and popular music is presented through listening and written examples. Students will gain knowledge of music literature and the art of music and its relationship to society. No prior musical experience or skills required. Eligibility: ENG 0430; must meet minimum college level reading score: Accuplacer 80+. J fall. 3 credit hours.

MUS 1570 Music Theory I

Introduces the student to the basic fundamentals of reading and writing music. Students will work with elements of common practice theory and harmony through written assignments and aural skills training. No previous musical experience or skills required. No prerequisites. J fall. 3 credit hours.

MUS 1580 Music Theory II

In this continuation of Music Theory I, students gain further mastery of the structure of music through written work in more complex chordal structure, compositional techniques, and aural skills. Prerequisite: MUS 1570. J spring. 3 credit hours.

MUS 1590 American Mus/Classic/Popular

This course is designed as an overview of American music, past to present, classical and popular. Music will be considered chronologically from Native American through current musical influences. Topics will include music of the classical, folk, Hispanic, blues, jazz, rock, and music theatre literature. No prior music experience or skills required. This course is a good companion course to MUS 1510. Prerequisite: ENG 0430, Must meet minimum college level reading score - Accuplacer 80+. J spring. 3 credit hours.

MUS 1610/1620/2610/2620/2630/2640 Applied Music

Private Lessons Provides for private study for the beginner or more advanced student on instruments, voice, composition, or other areas of music. Students gain musical skills and artistry through individual instruction. Sessions are arranged through the director of music. Public performance is optional. A studio fee is required. May be taken for a total of 6 credit hours. No
MUS 1630 Beginning Voice
Singers of all levels of experience from the beginner on can take this course. Students will improve their vocal performance for singing or speaking by dealing with written and class exercises. Vocal production, vocal pedagogy, artistic interpretation of song, working with accompanists, stage usage, acoustics, and the use of sound equipment will be considered. Recommended for those interested in performing arts, communications, education, public speaking, and related areas. No prerequisites. J fall, spring, 3 credit hours.

MUS 1650 Business of Music
Students will gain an understanding of the various means of entering the music business, learn the important role of the songwriter and terms of music publishing contracts and arrangements. Students will also learn how to gain attention from a record label. Eligibility: ENG 0410 and ENG 0430. J fall, spring, 3 credit hours.

MUS 1670 Beginning Piano
Offers group instruction in piano for the beginner. Through work at the keyboard and written work in music theory, students gain improved ability to perform at the piano or other keyboard instruments. Recommended for those interested in careers in therapy, recreation, education, music performance, music education, and other related fields. No prerequisites. J fall, spring; C occasionally. 3 credit hours.

MUS 1680 Beginning Guitar
Offers group instruction in guitar for the beginner. Through work on the instrument and written work in music theory, students gain improved ability to perform on the guitar. Recommended for those interested in careers in therapy, recreation, education, music performance, music education, and other related fields. No prerequisites. J fall, spring; C occasionally. 3 credit hours.

MUS 1690 Piano II
Students will receive further study in class piano. Aspects of keyboard technique, sight reading, improvisation, artistry, and repertoire will be emphasized. Prerequisite: MUS 1670. J spring. 3 credit hours.

MUS 1700 Guitar II
Students will receive further study in class guitar. Aspects of guitar technique, sight reading, improvisation, artistry, and repertoire will be emphasized. Prerequisite: MUS 1680. J occasionally. 3 credit hours.

MUS 1710 Audio Recording
Provides an introductory experience in audio recording and sound engineering. Audio recording is helpful for individuals considering audio as a career or as a personal interest. Through work with the college’s audio studio, students will gain a knowledge of studio techniques, as well as the aesthetics and styles of music in relation to sound recording. Additional studio hours will be scheduled. No prior studio or musical skills are necessary. Recommended for those pursuing music, education, communications, multimedia, or performing arts. Eligibility: ENG 0410 and ENG 0430. J fall, spring, 3 credit hours.

MUS 1720/1750/1830/1850/1870 Music Ensemble I
Students will participate in a music ensemble, gain a greater understanding of music literature and styles, and grow in musical expression through performance. Students will perform in the ensemble during a concert at the end of each semester. Since JCC music ensembles are non-audition, it is expected that first-time instrumentalists be at high school levels on their instruments. Chorus members must be able to sing in tune. No prerequisites. J fall, 2 credit hours.

MUS 1730 Music and Digital Studio
Appropriate for students with a personal or career interest in this area. No prior music or studio knowledge is required. Through course work and experience in the college’s digital studio, students will be introduced to and gain an understanding of the new music technology including music software, music sequencing, sound sampling, synthesizers, effects, drum machines, and other related equipment. Emphasis will be placed on aesthetics and style in the music produced. Additional studio hours are required. Recommended for those pursuing education, communications, Internet production with regard to audio, multimedia, education, performing arts, or music related fields. Eligibility: ENG 0410 and ENG 0430. J occasionally. 3 credit hours.

MUS 1740/1760/1840/1860/1880 Music Ensemble II
Students will participate in a music ensemble, gain a greater understanding of music literature and styles, and grow in musical expression through performance. Students will perform in the ensemble during a concert at the end of each semester. This course is the second in the sequence and will cover new and different music literature. Prerequisite: MUS 1720. C occasionally. 2 credit hours.

MUS 1890 Guitar Maintenance/Repair
With a major course emphasis on guitar maintenance and repair, students will concentrate on proper stringing, tuning, set-up, and maintenance. Electric, acoustic, and MIDI Controller instruments will be considered. Purchase considerations for new and used instruments will be discussed. No previous music or repair experience required. Application to other stringed instruments will be included as appropriate. No prerequisites. J occasionally. 1 credit hour.

MUS 1930 Aural Skills I
This course focuses on rhythmic, melodic, and harmonic recognition and dictation, sight reading, solfeggio, and Kodaly hand signals. Students will have access to computer-assisted practice sessions in the theory studio. Strongly recommended for students wishing to improve their musical abilities. No previous musical experience required. No prerequisites. J fall. 1 credit hour.

MUS 1940 Aural Skills II
Provides further study in concepts emphasized in MUS 1930. Students will have access to computer-assisted practice sessions in the theory studio. Strongly recommended for students wishing to improve their musical abilities. Prerequisite: MUS 1930. J spring. 1 credit hour.

MUS 2570 Music Theory III
Students will receive a continuation of music theory instruction. Form and analysis, chromaticism, aspects of choral and instrumental arranging will be considered. Prerequisite: MUS 1580. J fall. 3 credit hours.

MUS 2580 Music Theory IV
Further consideration of form and analysis, composition, and arranging will be offered in this continuation of Music Theory III. Aspects of Twentieth Century composition will be considered. Prerequisite: MUS 2570. J occasionally. 3 credit hours.

MUS 2720/2750/2830/2850/2870 Music Ensemble III
Students will have the opportunity to participate in a music ensemble, gain a greater understanding of music literature and styles, and grow in musical expression through performance. This course is the third in the music ensemble series of courses and will cover new and different music literature. Prerequisite: MUS 1740. Must meet minimum college level reading score: Accuplacer 80+. J occasionally. 2 credit hours.

MUS 2740/2760/2840/2860/2880 Music Ensemble IV
Students will participate in a music ensemble, gain a greater understanding of music literature and styles, and grow in musical expression through performance. Students will perform in the ensemble during a concert at the end of each semester. This course is the fourth in the sequence and will cover new and different music literature. Prerequisite: MUS 2720. C occasionally. 2 credit hours.

MUS 2890 Digital/Audio Studio Seminar
Students will have the opportunity to work in the audio and digital studios. Students will design a project or series of projects encompassing the two facilities. Class participation is required. Further instruction in audio and digital studio techniques, recording, and sound reinforcement will be presented. Prerequisite: MUS 1710 or MUS 1730. J occasionally. 3 credit hours.

MUS 2930 Aural Skills III
More complex harmonies, chordal structure, and rhythmic dictation will be covered in this continuation of MUS 1940. Tonal and atonal sight singing will be studied. Prerequisite: MUS 1940. J occasionally. 1 credit hour.

MUS 2940 Aural Skills IV
Advanced tonal and atonal dictation and sight singing will be studied in this continuation of MUS 2930. Prerequisite: MUS 2930. J occasionally. 1 credit hour.

NURSING
NUR 1510 Foundations of Nursing
Students will be introduced to the National League for Nursing (NLN) Associate Degree (AD) Competencies (professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaborating, and managing care), the three roles of the AD nurse (provider of care, manager or care and member within the discipline), and Quality and Safety Education for nurses (QSEN) competencies. Students will provide safe, holistic, patient-centered care to adult and geriatric individuals with diverse cultures experiencing basic disruptions in biophysical and psychosocial dimensions in a variety of healthcare settings. Students will learn the preparation and administration of non-paren- teral medications. Select ethical-legal principles are introduced. Prerequisite: Eligibility for MAT 1500. Co-requisites: BIO 2510 and ENG 1530. J fall; C fall. 7 credit hours.

NUR 1520 Health Restoration
Students will continue to develop National League for Nursing (NLN) Associate Degree (AD) Competencies (professional behaviors, communication, assessment, clinical decision making, caring interven- tion, teaching and learning, collaborating and
managing care), the three roles of the AD nurse (provider of care, manager of care, and member within the discipline), and Quality and Safety Education for Nurses (QSEN) competencies. The student will provide safe, holistic, patient-centered care across the life span of diverse cultures. The clinical experience emphasizes individuals experiencing simple/acute health disruptions in biophysical and psychosocial dimensions. Prerequisites: NUR 1520 and BIO 2510 and PSY 1510. J occasionally. 8 credit hours.

NUR 1540 Summer Nursing Clinical Experience Students will develop a higher level of clinical performance for a student moving from the freshman to sophomore nursing level during this course. Students participate in supervised medical-surgical clinical experience in an acute health care agency setting with an instructor present. Students will further develop the National League of Nursing (NLN) Associate Degree (AD) competencies (professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaborating and managing care), the three roles of the AD nurse (provider of care, manager of care, and member within the discipline, and Quality and Safety Education for Nurses (QSEN) competencies. The student will provide safe, holistic, patient-centered care across the life span of diverse cultures. The clinical experience emphasizes individuals experiencing simple/acute health disruptions in biophysical and psychosocial dimensions. Prerequisites: completion of NUR 1520 and BIO 2510 with a grade of C or better. J summer; C summer. 1 credit hour.

NUR 2050 Nursing Internship Students receive on-the-job experience consisting of 45 hours of supervised activity in a health care agency setting. Students work in conjunction with a faculty mentor and a supervisor at the job site. Individual goals and objectives will be developed between student, faculty, mentor, and agency supervisor. Prerequisites: Successful completion of NUR 2510 with a grade of C+ or better and permission of the instructor. J spring; C spring. 1 credit hour.

NUR 2060 Nursing Internship Students receive on-the-job experience consisting of 90 hours of supervised activity in a health care agency setting. Students work in conjunction with a faculty mentor and a supervisor at the job site. Individual goals and objectives will be developed between student, faculty, mentor, and agency supervisor. Prerequisites: Successful completion of NUR 2510 with a grade of C+ or better and permission of the instructor. J spring; C spring. 2 credit hours.

NUR 2350 Pharmacology For Nurses I Students will be introduced to essential information which promotes the knowledge and skills of safe medication therapy to clients/patients across the lifespan. The course will present the study of the pharmacological action of medications and the care of the client/patient using the nursing process. The course focuses on the medication for patients with alterations in the following: oxygenation, perfusion, sensory-perception, tissue integrity, cellular regulation and psycho-social. Prerequisite: NUR 1520 and successful completion of BIO 2510 and BIO 2520 with a grade of C or better. J spring; summer; C spring, summer. 1.5 credit hours.

NUR 2360 Pharmacology For Nurses II Students will continue to be introduced to essential information which promotes the knowledge and skills of safe medication therapy to clients/patients across the lifespan. The course will present the study of the pharmacological action of medications and the care of the client/patient using the nursing process. The course focuses on the medication for patients with alterations in the following: oxygenation, perfusion, sensory-perception, tissue integrity, cellular regulation and psycho-social. Prerequisite: NUR 2350 and successful completion of BIO 2510 and BIO 2520 with a grade of C or better. J spring; summer; C spring, summer. 1.5 credit hours.

NUR 2510 Health Restoration/Maint I Students will continue to develop National League for Nursing (NLN) Associate Degree (AD) competencies (professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaborating and managing care), the three roles of the AD nurse (provider of care, manager of care, and member within the discipline), and Quality and Safety Education for Nurses (QSEN) competencies. Course work emphasizes individuals experiencing complex acute and chronic biophysical and mental health deviations. Using a variety of healthcare settings, the student provides quality, safe, holistic, culturally competent patient centered care across the life span. Emphasis will be placed on the care of patients with the following alterations: psychosocial, sensory-perception, cellular regulation, mobility, nutrition, perfusion, and elimination. Students will learn the preparation and administration of intravenous medications. Prerequisite: NUR 1520, PSI 1510, BIO 2520 with a grade of C or better; Co-requisites: NUR 2550, NUR 2530 Part I, BIO 2531, BIO 2532, and PSI 2510. J fall; C fall. 8 credit hours.

NUR 2520 Health Restoration/Maint II Students will continue to develop National League for Nursing (NLN) Associate Degree (AD) competencies (professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching, and learning, collaborating and managing care) and Quality and Safety Education for Nurses (QSEN) competencies and the three roles of the Associate Degree (AD) nurse as provider of care and manager of care with an emphasis on the role as manager of care. Course work emphasizes individuals experiencing complex acute and chronic biophysical and mental health deviations. Using a variety of healthcare settings, students will provide safe, holistic, culturally competent patient centered care across the life span. Emphasis will be placed on the care of patients with the following health alterations: oxygenation, perfusion, sensory perception, tissue integrity, cellular regulation, and psychosocial. Prerequisites: NUR 2510, NUR 2520. Co-requisites: NUR 2360, NUR 2560, ENG Elective, and MAT 1540. J spring; C spring. 8 credit hours.

NUR 2550 Pathophysiology I Students will study physiological and psychological changes that occur as a result of disease processes. Emphasis will be placed on the nursing assessment and the analysis of clinical manifestation development. Students will integrate concepts from chemistry, anatomy and physiology, and microbiology, and focus on their application to clinical practice. The course emphasizes the pathophysiology of clients/patients with disruptions in the following: cellular regulation, nutrition, elimination, and tissue integrity. Prerequisite: NUR 1520 and completion of BIO 2520 with a grade of C or better. J fall; C fall. 1.5 credit hours.

NUR 2560 Pathophysiology II As a continuation of Pathophysiology I, students will study the physiological and psychological changes that occur as a result of disease processes. Emphasis will be placed on the nursing assessment and the analysis of clinical manifestation development. Students will integrate concepts from chemistry, anatomy and physiology, and microbiology, and focus on their application to clinical practice. The course focuses on the pathophysiology for clients/patients with disruptions in the following: oxygenation, perfusion, sensory-perception, cellular regulation and tissue integrity. Prerequisite: NUR 2510, NUR 2550, and NUR 2350 Part I. J spring; C spring. 1.5 credit hours.

NUR 2970 Health Assessment Students’ knowledge, skills, and expertise will increase in all aspects of nursing health assessment: obtaining health histories; performing physical assessments; recognizing normal assessment findings and deviations from the normal; and recording accurate, concise, and clear data. Emphasis is on performing systematic health assessments of adults, incorporating developmental principles and psychological, sociological, and cultural aspects. To a lesser degree, child assessment is integrated into the course. Laboratory for integration of theory and skill mastery is included. At the end of the semester, each student will perform a health assessment on a selected client and record findings. Prerequisite: NUR 1510 or RN or LPN licensure. J fall, spring, summer; C fall, spring, summer. 3 credit hours.

Occupational Therapy Assistant OTA 1510 Foundation/Occupation/Therapy Students will be introduced to the history, development, function, and philosophy of the occupational therapy profession and the occupational therapy assistant. Students will learn about relevant theories, frames of reference, and models of practice that influence the occupational therapy process. In addition, students will identify how sociopolitical, economic, and geographic factors influence current occupational therapy practice. Students will also demonstrate their ability to locate, select, and interpret evidence-based practice research that supports ethical occupational therapy practice. Prerequisite: acceptance into OTA program. J fall. 3 credit hours.

OTA 1520 Medical Specialties Students will understand the effects heritable diseases, genetic conditions, disability, trauma, and injury to physical and mental health have on an individual. Students will explore the effects disabling conditions have on the occupational performance of a person. Students will learn about normal development.
COURSE DESCRIPTIONS

OTA 1520 Professional Behaviors
Students will be introduced to current occupational therapy and psychological models of care to address the complex needs of individuals with psychiatric and neurobehavioral disorders. Content surrounding mental health theories and trends, diagnoses and medications will be explored. Occupation-based assessment and intervention techniques will be explored and practiced in this course. Through hands-on experiences, students will develop individual and group treatment sessions in clinical environment that mirror best practices in mental health. Prerequisite: OTA 1510, OTA 1520. J spring. 2 credit hours.

OTA 1630 Functional Skills of OTA II
Students will build upon the knowledge gained from OTA 1530 to further develop skills necessary for professional practice. More application and evaluation of the following skills will occur: application of the OT process, treatment planning, activity analysis, computer skills, assessment use and techniques, cultural sensitivity, and portfolio development. Prerequisite: OTA 1530. J spring. 1 credit hour.

OTA 1640 Therapeutic Interventions I
Students will be introduced to the occupational therapy continuum of therapeutic interventions. Students will structure, plan and implement individual and group interventions that are reflective of contemporary occupational therapy practice in pediatric and psychosocial settings. Various frames of reference and models of practice will be used to guide student planning. Prerequisite: OTA 1510. J spring. 2 credit hours.

OTA 1650 Growing Years: Birth-Young Adulthood
Students will learn the major developmental disabilities across the lifespan and how a disability adversely affects the development and engagement in life roles (i.e.: student, sibling, friend, etc.). Theories of human development and occupation will be linked to provide a deeper understanding of the acquisition of functional skills and social roles of children and adolescents for the first time. Occupation-based assessment and intervention techniques will be reviewed. Learning about treatment delivery models of children with disabilities will emphasize naturalized environments and family centered models. Prerequisites: OTA 1510 and OTA 1520. J spring. 3 credit hours.

OTA 1700 Introduction to Professional Practice
Students will be introduced to and will practice professionalism skills both in the classroom and in professional and ethical behavior, review AOTA, NBCOT and licensure requirements, develop a resume and cover letter, and begin preparation for job searching. Prerequisite: successful completion of OTA 1620, 1630, 1640, 1650, and 1700 with a “C-” or better. J fall. 2 credit hours.

OTA 2620 Physical Rehabilitation
Students will be introduced to concepts and techniques needed to provide care to patients with neurological, orthopedic, and muscular-skeletal conditions. Students will refine transfer and goniometry techniques, while developing skills with manual muscle testing, mobility, and the application of treatment approaches relevant to the physically disabled population. Prerequisite: OTA 1520. J fall. 3 credit hours.

OTA 2700 Fieldwork IIA: Principles/Practise
Students will participate in the first of two level II fieldwork experiences required for the program. An in-depth experience in the delivery of occupational therapy services will be provided in one of a variety of clinical placement sites. This experience shall develop and expand the students’ repertoire of occupational therapy practice in an effort to develop competent, entry-level prepared occupational therapy assistants that are skilled in applying the OT process to client care. Students will be mentored through this experience by a qualified OT Practitioner. In addition, students will participate in an online portion of the course with student learning focusing on the regulation of the profession of occupational therapy at the local, state, and federal levels. Principles of occupational therapy ethics/dispute resolution systems will be explored and applied to personal and professional conflicts. Students will explore roles and responsibilities of various team members while reflecting on their own responsibilities of working in the profession of Occupational Therapy. Psychosocial factors that influence engagement in occupation will be integrated into student learning. Level II fieldwork must be completed within 12 months of academic preparation. Prerequisite: successful completion of all OTA courses with a “C-” grade or better. J spring. 5 credit hours.

OTA 2720 Fieldwork III B: Service Mgmt
Students will participate in their second of two level II fieldwork experiences which are required for the program. An in-depth experience in the delivery of occupational therapy services will be provided in one of a variety of clinical placement sites. This experience shall further develop and expand students’ repertoire in order to develop competent, entry-level prepared occupational therapy assistants that are skilled in applying the OT process to client care. Students will be mentored through this experience by a qualified OT Practitioner. In addition, students will participate in an online component to the course which will challenge students to identify and discuss trends and issues facing the profession in a variety of service contexts. Service delivery concepts will be explored with topical areas to include, but not limited to, management concepts, reimbursement, quality improvement, supervision, and leadership. Level II fieldwork must be completed within 12 months of academic preparation. Prerequisite: OTA 2700. J spring. 5 credit hours.
COURSE DESCRIPTIONS

Physical Education

PHE 1480 Personal Trainer Cert Prep
Student gain theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructor safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming. Prerequisites: Eligibility: ENG 1510 and Reading Score 80+. J fall, spring. 3 credit hours.

PHE 1500 Care/Prevent Athletic Injuries
Students will be introduced to methods of conditioning, prevention, recognition, treatment, and rehabilitation of athletic injuries, administrative procedures, and other major concerns conducted in an athletic training setting. The application of skills and knowledge in the clinical experience in the athletic training room will be emphasized. Corequisite: BIO 2510 recommended. Eligibility: ENG 0430. J fall, spring. 3 credit hours.

PHE 1501-1508 Athletic Part-FR
Student athletes, who successfully complete participation in a NJCAA sport season, will learn about the competitive fundamentals of participation in a NJCAA certified sport. Students will be involved in a variety of learning experiences in the classroom, on the practice field, and during athletic contests. Through hands-on applications, students involved in team sports will learn group dynamics, problem solving, and time management skills. The course of study will focus on physical training and statistical and skill analysis which is sport specific. No prerequisites. J occasionally; C occasionally. 1 credit hour.

PHE 1510 Introduction to Fitness
Students will explore the basic areas of health related fitness, body composition, cardiovascular fitness, flexibility, muscular endurance, and strength conditioning. Exposes students to each of the components of fitness through a combination of lectures and hands-on experiences. Students will identify their fitness status and develop, together with the instructor, an individualized program. No prerequisites. J occasionally; C occasionally. 2 credit hours.

PHE 1520 Zumba
Students will learn basic principles of aerobic, interval, and resistance training to maximize caloric output, cardiovascular benefits, and total body toning. This class format combines fast and slow rhythms that tone and sculpt the body in an aerobic/fitness fashion to achieve a unique blended balance of cardio and muscle-toning benefits. Students will be introduced to basic anatomy, kinesiology, and exercise physiology. No prerequisites. J fall, spring. 2 credit hours.

PHE 1530 Fundamentals of Movement
Students will gain a better understanding of physical and recreational movements of the human body. Fundamentals of Movement will introduce kinesiology for muscle function, flexibility, and endurance. Students will practice proper alignment, balance, and flexibility. This course will include a series of drills to increase coordination and gain personal range of motion while gaining muscle strength and control. Corequisite: ENG 1510. J occasionally. 2 credit hours.

PHE 1540 Core Concepts
Students will learn that Core Concepts is an easy-to-follow workout that will increase strength as an alternative to a weight room workout. It will address core strength, muscle endurance, range of motion and joint stability. Students who complete a core-training workout regularly will help reduce the risk of injury and enhance athletic performance in most sports. The class will include the use of floor work, hand weights, stability balls, medicine balls, and rubber tubing, along with other equipment. No prerequisites. J spring. 2 credit hours.

PHE 1550 Promotion In Sport
Students will be introduced to the engaging field of sport promotion and to aspects of successful promotions with topics not limited to foundation of sport promotions, promotions vs. Marketing, promotional agendas, structuring and implementing the 7-step incentive plan and other topics leading to effective promotions within the sports industry. Corequisite: ENG 1510 or eligibility: ENG 1530. J occasionally. 3 credit hours.

PHE 1560 Yoga I: Yoga/Relax Techniques
Students will learn and demonstrate an understanding of the art of Hatha yoga and relaxation techniques. Students will learn how to relieve stress and emotional tension through the systematic training of guided imagery, breath awareness, and breath awareness. The course includes lectures on yoga philosophy, postures, diets, meditation, and relaxation techniques. Hatha yoga is a human science that takes into consideration bodily pains, poor posture, faulty breathing, and incorrect walking, and teaches greater awareness of the body as a whole without separating it from the mind and the influences of all senses. Eligibility: ENG 0430. J fall, spring; C occasionally. 2 credit hours.

PHE 1590 Principles/Fitness/Wellness
Students will be introduced to the basic concepts and benefits of physical activity, adequate nutrition, and positive lifetime patterns as a means to promote better health. Combines a series of lectures and labs to disseminate practical information that will enable students to make judgments about their lifestyle choices. Eligibility: ENG 0430. J occasionally. 3 credit hours.

PHE 1610 Introduction to Aerobic Exercise
Students will perform flexibility, muscular strength, muscular endurance, and cardiovascular exercises continuously for a 30-minute period accompanied by popular music. Students are instructed in proper pulse monitoring techniques and are responsible for maintaining heart rates within their target heart rate zone. Exercise sessions will include a warm-up period and cool-down periods. No prerequisites. J fall, spring. 2 credit hours.

PHE 1620 Fitness Concepts/Applications
Introduces the new concept of flex-time physical education which allows students to enroll in either a weight training or cardiovascular conditioning program without traditional day and time schedule restrictions. Topics will include cardiovascular conditions, weight training, injury prevention, nutrition, weight control, body composition, lower back care, and relaxation techniques. No prerequisites. J occasionally; C occasionally. 2 credit hours.

PHE 1630 Beginning Karate
Students will demonstrate the basic skills and techniques of preliminary exercises, sparring exercises, punches, blocks, and stances. Students will also learn karate history, methods, theories, and promotion systems. Eligibility: ENG 0430. J fall, spring. 2 credit hours.

PHE 1640 Introduction to Pilates
Students will learn about a total body conditioning exercise method which combines flexibility and strength. The purpose of Pilates is to develop mind and body uniformity; provide balance, flexibility, and strength; improve posture; and strengthen the abdomen, lower back, and buttocks. No prerequisites. J fall, spring. 2 credit hours.

PHE 1650 Fundamental of Basketball
Students will learn offensive and defensive fundamentals through drill work with an emphasis on shooting the basketball. The course is taught in a team type of atmosphere and structured to meet the needs and capabilities of the competitive as well as the beginning student. No prerequisites. J fall, spring. 2 credit hours.

PHE 1660 Introduction to Life Fitness
Students will be introduced to The Life Fitness system of strength development. The course will introduce students to the Life Fitness philosophy of strength development, concepts of form and individual strength program development. Eligibility: ENG 0430. J fall, spring. 2 credit hours.

PHE 1670 Introduction to Physical Education
Through class discussions, research assignments, and “in the field” observations students will develop an understanding of the various career opportunities in the field of physical education. The course is primarily suited for students pursuing a career in physical education or education. Eligibility: ENG 0430. J fall. 3 credit hours.

PHE 1680 Beginning Weight Training
Students will use universal and free weights to develop strength and muscular endurance. The course will introduce concepts of form, repetition sequences, and provide a basic understanding of muscle function and training techniques. No prerequisites. J fall, spring. 2 credit hours.

PHE 1690 Water Aerobics
Students will perform uniquely designed exercises for specific muscle groups in the water. Students will become more fit through an exercise form that incorporates repetition and resistance combined with normal body movements. Music and games will add variety and interest to the program. No prerequisites. J occasionally. 2 credit hours.

PHE 1700 Specific Sport Training
Students will develop and implement a training program that improves their performance in a specific sport or activity. The course will emphasize many training techniques and equipment that students will use to coordinate a comprehensive physical fitness regimen. Students will be able to chart progress toward personal and individual goals. Prerequisites: PHE 1660 or PHE 1680. J fall, spring. 2 credit hours.

PHE 1710 Individualized Swimming
Students will be provided instruction in beginning swimming basics. Students will demonstrate skill in drowproofing, elementary backstroke, breaststroke, sidestroke, crawl stroke, trudgen stroke, and breaststroke. Improvement in swimming ability and cardiovascular health for all levels of swimmers are the main course objectives. No
PHE 1720 Aerobic Conditioning I After testing, students will be issued individualized programs to follow for the semester. Students will consider activities such as walking, jogging, cycling, swimming, racquetball, rope skipping, and stair climbing when building an improvement program. No prerequisites. J fall. 2 credit hours.

PHE 1731 Lifeguarding/CPR/AED Students will learn the skills of preventive lifeguarding, water rescue techniques, and aquatic facility management for pools and waterfronts. American Red Cross certification in CPR for the professional rescuer, lifeguarding, community first aid, automatic external defibrillator, and waterfront module may be used upon successful course completion. Students will learn to give immediate care to an individual who has been injured, has suddenly taken ill, or has a cardiac emergency. No prerequisites. J fall, spring. 3 credit hours.

PHE 1740 Volleyball/Softball Students will demonstrate the fundamental skills and strategies of both activities. Students will also develop and demonstrate officiating skills for both sports. No prerequisites. J occasionally. 2 credit hours.

PHE 1750 Cross-Country Skiing Students will demonstrate the basic skills used in cross-country skiing. Skills include, but will not be limited to, diagonal stride, star turn, reverse star turn, kick turn, stepping turn, herringbone, and sidestep. Field trips will be made to local cross-country ski areas. No prerequisites. J occasionally. 2 credit hours.

PHE 1760 Racquetball/Tennis Students will be introduced to the basic skills, rules of play, and strategies of both sports. Skill development in these racquet sports is emphasized. No prerequisites. J occasionally. 2 credit hours.

PHE 1770 Self-Defense: Coed Students will demonstrate the use of effective physical actions when no other alternative is available. Students will also demonstrate the ability to minimize the possibilities of assault and physical confrontation. The elements of karate, aikido, judo, and other fighting martial arts will be introduced. Learning how not to be a victim is the main course objective. No prerequisites. J Fall, spring. 2 credit hours.

PHE 1780 Walking for Health Students will be introduced to topics that educate and encourage students to begin and maintain a safe and effective walking program. The course will encompass concepts and activities that will advance the understanding of the relationship between lifelong physical activities and overall well-being. No prerequisites. J fall, spring. 2 credit hours.

PHE 1790 Cardio Kickboxing Cardio kickboxing is an exercise program comprised of general conditioning exercises for body conditioning and fitness. The course will cover kickboxing moves in an aerobic setting. Students will learn to throw basic kicks and punches with proper form and technique. A warm-up, aerobic portion, drills, cool down, and stretch and relaxation are included in the class. Eligibility: ENG 1530. J occasionally. 2 credit hours.

PHE 1800 Running for Health and Fitness Students will explore the aspects and benefits of running in relation to overall achievement of personal wellness. The course will help students gain a greater awareness of their potential by developing a higher level of physical fitness and nutritional awareness. No prerequisites. J spring. 2 credit hours.

PHE 1810 Baseball Fundamentals Students will be introduced to pitching and batting basics, team defense, and situation drills. Classroom studies will examine the strategies of winning baseball from the philosophies of the game to the history of America's greatest pastime program. Designed for both the player/coach of today's baseball players to tomorrow's coaches. Students will perform the baseball skills taught in the classroom. No prerequisites. J spring. 2 credit hours.

PHE 1820 CPR for the Professional Rescuer Students will learn the skills needed to respond appropriately to breathing and cardiac emergencies according to American Red Cross criteria for the professional rescuer, including use of automated external defibrillation (AED) to care for victims of cardiac arrest. No prerequisites. J occasionally. 1 credit hour.

PHE 1830 Beginning Golf Students will demonstrate rules, knowledge, and basic skills of golf including grip, address, stance, posture, and swing. No prerequisites. J occasionally. 2 credit hours.

PHE 1840 Self-Defense for Women This course prepares women to minimize the possibilities of criminal assaults and confrontations. Students will learn to use effective physical actions when no other alternative is available. Learning how not to be a crime victim is the main course objective. Elements of karate, aikido, judo, and other fighting martial arts are utilized. No prerequisites. J Fall, spring. 2 credit hours.

PHE 1850 Bowling/Golf Students will demonstrate the fundamental skills, rules, and strategies of both sports. No prerequisites. J Fall, spring. 2 credit hours.

PHE 1860 Archery/Foil Fencing Students will learn the basic fundamentals, rules, and strategies of each activity. No prerequisites. J Occasionally. 2 credit hours.

PHE 1870 Sport Psychology Students will be introduced to basic aspects of performance in sport and athletic competition. Primary psychological and physiological tenants will be major topics discussed and related to enhancement of athletic performance. There will be practical skills and knowledge development as well as discussion of career opportunities and the future direction of sport psychology. Prerequisite: PSY 1510. J Fall. 3 credit hours.

PHE 1880 Sport Nutrition Students will develop a thorough understanding of the role nutrition plays in enhancing one’s fitness and sport performance. The effect nutrition has on health promotion and disease prevention is emphasized through current research and practical activities. Corequisites: ENG 0430 or Eligibility: ENG 1510. Must meet minimum college level reading score: Accuplacer 80+. J occasionally. 2 credit hours.

PHE 1890 Introduction to Boot Camp Students will be involved in an intense basic aerobic workout without choreography or dance. The course focuses on endurance, strength, flexibility, and plyometric training. Circuit training, interval training, and endurance and resistance training are emphasized. Prerequisite: must meet minimum college level reading score: Accuplacer 80+. J spring. 2 credit hours.

PHE 2010 Physical Education Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local educational, recreational, or health setting. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisites: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

PHE 2050 Athletic Training Internship Students will apply knowledge of athletic training skills in a hands-on experience consisting of 180 hours. Each student will be assigned to work with an athletic team under the supervision of the certified athletic trainer for the semester, attending practices and games. Students will learn about conditioning, injury evaluation, treatment, preventative techniques, and rehabilitation. Prerequisites: PHE 1500 and CPR and first aid certification; Corequisites: ENG 1530; Eligibility: C+ or better in PHE 1500. J occasionally; C occasionally. Variable credit hours.

PHE 2060 Intramural Assist. Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

PHE 2460 Phys Ed for Law Enforcement Designed specifically for the basic recruit school trainee, this course emphasizes weight training and fitness for life. Students are required to complete successfully various exercises which include timed running, sit-ups, push-ups, swimming, and maintaining a measured progress throughout the semester. Also studies the need for fitness and the ideal of daily exercise. Corequisites: CRI 2250, CRI 2380, CRI 2470, and compliance with NYS regulations. J Fall. 3 credit hours.

PHE 2470 Defensive Tactics/Law Enforcement Students are given the knowledge, skills, and abilities to defend themselves during physical altercations while staying within the proper force/level of resistance matrix. Defensive tactics, mechanics of an arrest, transportation of prisoners, and searches are emphasized. Demonstration of learned skills by students is required. Eligibility: student must be current Chautauqua County Sheriff’s Academy recruit. New York state certified police/peace officer may be accepted with approval of the academy director. J occasionally. 2 credit hours.

PHE 2590 Fitness Seminar Students will learn how to set up a safe exercise program for their particular needs. Students will also learn various ways to exercise and methods best suited to spe-
PHL 1200 Philosophy Goes to the Movies
Students will learn about some of the major ideas in popular culture and philosophical thought via the media of film. Prerequisites: J occasionally; C occasionally. 3 credit hours.

PHL 1510 Introduction to Philosophy
Students will gain an understanding of the Western philosophical tradition and the influence of philosophical thinking. Students are introduced to major areas of philosophy and explore the relationships between concepts in metaphysics, epistemology, ethics, social philosophy, and aesthetics. Eligibility: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C occasionally. 3 credit hours.

PHL 1570 Critical Reasoning
Students will identify and criticize arguments and will acquire an understanding of basic concepts in semantics and logical analysis. Students will distinguish sound from unsound arguments and identify common fallacies. Prerequisites: must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

PHL 2550 Philosophy of Religion
Students will acquire an understanding of basic problems concerning the existence and nature of the divine. Students will also identify different perspectives on the nature of religious experience and its relationship to other areas of philosophy such as ethics and political philosophy. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 2570 Environmental Issues/Ethics
Students will gain critical understanding of the impacts of human activities as they affect the earth and the web of life it sustains from both ethical and scientific perspectives. Contemporary environmental issues such as methods and limitations of science and moral reasoning, global warming, ozone depletion, deforestation, animal rights, population growth, waste disposal, biodiversity, and species extinction will be discussed. This team-taught course is offered under biology for natural science credit (BIO 2570) or philosophy for humanities credit (PHL 2570). Prerequisites: BIO 1570 and ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 2610 Intro to Ethical Theory
Students will acquire an understanding of basic ethical theories as expressed by major ethicists. Students will develop an appreciation of the complexities and implications of basic moral concepts such as responsibility, duty, character, and the good life. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 2630 Contemporary Moral Problems
Students will analyze and acquire an understanding of contemporary moral issues and problems. Students will learn how moral problems are approached differently by diverse ethical perspectives such as utilitarianism and deontological theorists. Students will develop a coherent moral point of view which they will use to approach issues such as privacy, abortion, suicide, euthanasia, war, civil disobedience, and pornography. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 2650 Introduction to Formal Logic
Students will be introduced to modern systems of formal logic. Students will determine the formal validity of arguments in propositional and quantifier logic, make deductions in both systems, and perform translations of ordinary language arguments into formal language. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 2670 Biomedical Ethics
Students will identify key problems confronted by health and medical care professionals. Students will articulate a moral point of view with which they will address such problems as informed consent, patient rights, confidentiality, euthanasia, genetic testing, and medical resource allocation. Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

PHL 1250 Technical Physics I
Students will use various laboratory experiments to learn the fundamental phenomena, principles, and laws of physics. They will study motion, Newton’s Laws, torque, and the principles of work and energy using algebra and trigonometry. Students will also study applications of these concepts in various fields of manufacturing. Corequisite: MAT 1220 or MAT 1590 or higher. J fall, 4 credit hours.

PHL 1260 Technical Physics II
Students will continue their investigation into physical phenomena by focusing on electric and magnetic interactions and the structure of matter. They will study electrostatics, DC circuits, specific electrical components (such as DC motors and generators), and magnetism. Students will also study applications of these concepts in various fields of manufacturing. Prerequisite: PHY 1250. J spring. 4 credit hours.

PHL 1510 Understanding Physics
Students in this one-semester introductory course will learn how physics is the foundation for all other sciences. Students will look at physics from a conceptual viewpoint where verbal reasoning is emphasized and a minimum of algebra is used. Motion, heat, forces, light, energy, electricity, and magnetism are studied with the underlying theme being energy transfer. Each topic will emphasize hands-on investigations and lab experiences. Prerequisite: MAT 0500; must meet minimum college level reading score: Accuplacer 80+. J spring. 4 credit hours.

PHL 1610 General Physics I
Students will use computer-based sensors and probes to learn the fundamental phenomena, principles, and laws of physics. They will investigate Newtonian mechanics, rotational motion, simple harmonic oscillators and wave motion. Students will become aware of physics in everything they do and see. A tutorial session is available and strongly recommended. Prerequisites: high school physics or PHY 1510; Corequisite: MAT 1600; Eligibility: ENG 1530. J fall, 4 credit hours.

PHY 1620 General Physics II
Students will continue their investigative approach to understanding the principles of physics. They will further their comprehension of wave phenomena, including sound waves, and will study electricity and magnetism, light and optics, and selected topics in modern physics such as relativity. A tutorial session is available and strongly recommended. Prerequisites: PHY 1610 and MAT 1600. J spring; C occasionally. 4 credit hours.

PHY 1710 Analytical Physics I
Students will use computer-based laboratory techniques to learn about Newtonian mechanics. They will learn good problem-solving strategies as well as good laboratory practices. They will use vector analysis and calculus to study linear kinematics, dynamics, and conservation laws for momentum and energy. Students will investigate rotating systems and rigid bodies, including solving problems which use angular momentum, torque, center of mass, and moment of inertia concepts. They will also explore simple harmonic oscillators and wave motion. This is the first semester in a three-semester sequence of physics courses designed for students planning to major in physics, chemistry, mathematics, engineering science, or computer science. Students will begin to become aware of physics in everything they do and see. A tutorial session is available and strongly recommended. Eligibility: ENG 1530; Prerequisite: MAT 1710 and high school physics or PHY 1510 or PHY 1610. J spring. 4 credit hours.

PHY 1910 & 2020 Physics Internship
Students will receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students will work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: at least a 2.0 GPA and sophomore standing. J occasionally. Variable credit hours.

PHY 2510 Thermodynamics
Students will continue investigations into mechanics with extensive study in thermodynamic systems. Students will analyze and solve problems involving fluid dynamics, energy conservation, and thermodynamic processes. Prerequisite: PHY 1610 or 1710 and MAT 1720. J fall, 4 credit hours.

PHY 2710 Analytical Physics II
Students continue their investigation into physical phenomena by focusing on electric and magnetic interactions and the structure of matter. Students will develop an understanding of Maxwell’s equations from a detailed treatment of the laws of Coulomb, Ampere, and Faraday. They will use an investigative approach to get an intuitive understanding of electric and magnetic fields and their interactions with charged matter. Students will use vector calculus concepts such as line and surface integrals and will become familiar with the operation of meters and computer based data acquisition devices.
PHY 2720 Modern Physics Students will study three major themes: the development of the theory of relativity; the old quantum theory of Planck, Einstein, Bohr, and Sommerfeld; and the new quantum physics of Schroedinger, Heisenberg, Dirac, and Pauli. Students’ interest in relativity theory is motivated by the noncovariance problems discovered in the electromagnetic theory of Maxwell and Lorentz and by the null result of the Michelson-Morley experiment. The early quantum theory is developed from Planck’s analysis of the problem of blackbody radiation and from Einstein’s study of the photoelectric effect. This is followed by a careful study of the Schroedinger theory of quantum mechanics and solutions to the Schroedinger equation. In the laboratory students will repeat a number of historical experiments including the determination of the speed of light, the charge and charge to mass ratio of the electron, the Planck constant, and the Rydberg constant. Students may also perform the Franck-Hertz experiment. The last part of the semester in the modern lab is devoted to a special, student-designed project. Prerequisite: PHY 2710; Corequisite: MAT 2680. J spring. 4 credit hours.

POLITICAL SCIENCE

POL 1510 American Politics Students will study and examine national, state, and local government and politics with an emphasis on national public policy making. Students will learn the different types of democracy, the variety of political culture and ideology, the role and history of U.S. political parties, the structure of the U.S. constitution, including federalism, and the functioning of the political economy. Eligibility: ENG 1510; must meet college level reading score: Accuplacer 80+. J fall, spring; C spring. 3 credit hours.

POL 1520 World Politics Students will study world politics in the post-cold war era by focusing on the role of political “actors” including, but not limited, to nation-states, non-governmental organizations, and intergovernmental organizations including transnational organizations such as the United Nations and supranational organizations such as the European Union. Students develop an understanding of idealism and realism as the two major theories for organizing the study of world politics. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C spring. 3 credit hours.

POL 1550 Introduction to Labor Studies In this survey of labor studies, students examine labor history and politics, and the evolution, philosophy, and practice of collective bargaining. Social-psychological principles for effective leadership, team-building and organization are investigated. Eligibility: ENG 1510; Must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

POL 2010 Government Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: At least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally.

POL 2020 Political Science Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: At least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally.

POL 2530 Law & Civil Rights Using the case method, students will demonstrate how to “brief” significant cases in First Amendment law involving freedom of religion, freedom of speech, freedom of press, and freedom of association. Students will also learn the difference between natural rights and citizenship rights. Eligibility: ENG 1530. J fall, spring. 3 credit hours.

POL 2570 State & Local Government Students will examine the historical development and political roles of state, county, city, town, and village government with an emphasis on New York state. Students will complete the course by participating in a simulation of city government. Eligibility: ENG 1530. J occasionally. 3 credit hours.

POL 2860 European Union Students will examine the history, politics, and economics of the European Union. Students will complete the course by participating in a simulation of the decision-making bodies (European parliament, European Council, Council of Ministers, Economic and Social Committee, etc.). In odd-numbered years the simulation is held in March or April at SUNY Brockport and in even-numbered years the simulation is held in January in Belgium. Prerequisite: permission of instructor; Eligibility: ENG 1530. J occasionally. 3 credit hours.

PUBLIC SAFETY TECHNOLOGY

PST 1020 Introduction to Fire Protection Tech This course provides basic information that will enable the student to comprehend and evaluate good fire protection practices, including fire prevention and extinguishment and the application of scientific principles to the studies of fire protection technology and development of career positions. These related occupations that draw from the fire sciences include: sprinkler protection engineer, fire detection and alarm system design, manufacture and sales, fire safety protection engineer, fire investigator, and firefighter. No prerequisites. J occasionally. 3 credit hours.

PSYCHOLOGY

PSY 1510 General Psychology Students will demonstrate an understanding of theories and research as they apply to fundamental concepts in psychology. As they complete readings and activities on the history of psychology, models of learning, biology and behavior, personality theory, psychological disorders, social psychology and other selected topics students will apply their knowledge to better understand the causes of thought, feeling, and behavior. They will be able to comprehend and apply the methods of scientific inquiry to the science of psychology. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

PSY 1550 Stress & Coping Students will demonstrate an understanding of the sources of common kinds of stress and the terminology associated with the areas of both stress and coping. They are expected to engage in critical thinking involving the physiology of stress and the understanding that certain situations are stressful to some and not others. Students will distinguish effective coping mechanisms from maladaptive self-definition approaches. Students are expected to apply what they have learned to their own lives. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C fall. 3 credit hours.

PSY 1610 Death & Dying An introduction to how we view and cope with the concept and reality of death and dying, examining the psychological, social, and cultural responses. The course discusses all stages of death, including terminal illness, sudden death, the grieving process, and the importance of working through grief. Also, children of various ages and how they deal with death will be explored. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally. Variable credit hours.

PSY 2500 Psychology of Personality Students will demonstrate mastery of theories and research in the field of personality psychology. The aim of the course is to explore the many factors which make up and influence personality. Topics include shyness, thrill-seeking, gender differences, and extraversion. Students will apply class material to real-life situations and will demonstrate an understanding of theoretical contexts and interpersonal processes as they relate to individual personality. Prerequisite: PSY 1510; Corequisite: ENG 1530. J spring; C spring. 3 credit hours.

PSY 2510 Life Span Development Students will demonstrate an understanding of human development from conception to late adulthood. Students are expected to engage in critical thinking concerning the developmental processes and issues characterizing the various stages of the life cycle. Emphasis will be placed on integrating theory and research and appreciating the practical application of life span development to real-life concerns and problems. Prerequisite: PSY 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

PSY 2520 Child Development Students will demonstrate an understanding of development from the newborn to the adolescent. Students will apply knowledge of research methods, theories, and factual information. They will apply that knowledge to
COURSE DESCRIPTIONS

important issues that affect children from diverse cultural, ethnic, and socioeconomic backgrounds. Through a series of exercises, students will improve their ability to observe children and write about what they observe. Prerequisite: PSY 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

PSY 2530 Social Psychology Students will demonstrate mastery of theories and research in the field of social psychology. The course focus is on the influence of groups on individuals. Topics include prejudice, aggression, conformity, group decision making, and leadership. Students apply class material to real-life situations and will demonstrate an understanding of cultural diversity, including ethnic, racial, and gender issues. Prerequisite: PSY 1510 or SOC 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring; Online spring. 3 credit hours.

PSY 2540 Interpersonal/Group Dynamics Students will demonstrate mastery of the theories involved in both interpersonal relations and group dynamics and will be able to apply those theories to their own lives. They will be familiar with the research in both areas and be able to critically analyze various types of group processes. Students will do a process observation of an interpersonal and/or group interaction. Students will be committed to learning by experiential and more traditional methods. Prerequisite: PSY 1510 or PSY 1520; Corequisite: ENG 1530. J fall, spring; C fall; spring. 3 credit hours.

PSY 2550 Psychology of Adolescence Students will demonstrate an understanding of human development from the onset of puberty to adulthood; this understanding will cover physical, psychological, and cognitive development. Through exams and exercises, the student will demonstrate knowledge in personality development, physical development, adolescent sexuality, the achievement of autonomy, development of self, and developmental and behavioral problems of adolescence. Prerequisite: PSY 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.

PSY 2560 Abnormal Behavior Students will demonstrate mastery of past and current theoretical perspectives on abnormal behavior. Students will also learn issues relating to the classification, etiology, and treatment of basic abnormal behavior categories identified in the most current Diagnostic and Statistical Manual of Mental Disorders. Applications are made to specific case studies. Prerequisite: PSY 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

PSY 2570 Human Sexuality Students will gain an understanding of human sexuality, including deviations and sexual interactions. Students will also show knowledge and understanding through research and analysis of sexual interactions. Prerequisites: one course in biology or sociology and PST 1510; Corequisite: ENG 1530. J fall; C spring. 3 credit hours.

PSY 2580 Psychology and the Law Students will apply the methods and theories of psychology to the criminal justice (legal) system. Specifically, students will gain and understand the role of the criminal justice system, the use of psychology in the legal system, the relevance of psychology to the legal system, and the relevance of psychology in the legal system. Prerequisite: PSY 1510; Corequisite: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.

PSY 2600 Psych/Intimate Relationships Students will learn social psychological research findings about the meanings, characteristics, and development of intimate relationships. Students will demonstrate an understanding of the complexity of intimate relationships in a global, cross-cultural perspective. Students will develop critical thinking about special issues in relationships, such as intimate communication, male/female differences in communication, conflict, jealousy, trust, loneliness, and shyness. Prerequisite: PSY 1510; Corequisite: ENG 1530. J occasionally. 3 credit hours.

PSY 2710 Transpersonal Psychology Students will demonstrate knowledge of the study of consciousness and different states of awareness. Readings in the areas of ESP, dreams, meditation, drug experiences, and peak experiences are studied. Students apply class material in class exercises and/or projects. Students will also demonstrate an understanding of cultural diversity as it relates to studies of consciousness. Prerequisite: PSY 1510; Corequisite: ENG 1530. J occasionally. 3 credit hours.

RELI 1510 Introduction Hebrew Bible/Old Testament Students will examine the background, settings, and writing styles of various authors of the Old Testament books. The basic content of the Old Testament books and how they interrelate will be discussed. Special consideration will be given to the major views of the authorship of the Pentateuch. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

RELI 1520 Introduction to New Testament Students will examine the content, settings, and writing styles of various authors, historical events, and the background of the New Testament. The life of Christ, missionary travels of Paul, and first century apostolic history will be discussed. Corequisite: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

RELI 1530 Comparative Religion Students will examine cultural expressions of belief in the supernatural, focusing specifically on people’s ideas about magic, witchcraft, and religion. This course takes a wide-ranging and cross-cultural approach to studying religious beliefs and behaviors and incorporates “world religions” such as Christianity, Judaism, and Islam, as well as the “indigenous” religions of Africa, Asia, Australia, and the Americas. Students will have the opportunity to contrast other people’s beliefs and practices with their own and develop a deeper understanding of the role of religion in the human experience. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

RELI 2570 History of World Religions This interdisciplinary course examines the development and variety of religious belief in the past and present. Historical, pre-historic, and non-literate traditions are examined, including Native American, African, Asian, Indo-European, and Semitic beliefs. Special consideration is given to religious development, assimilation, diffusion, practices, and phenomena. Cross-cultural comparisons and the key tenets of today’s world faiths are also emphasized. Eligibility: ENG 1530. J occasionally. 3 credit hours.

RELI 2580 Survey of Islamic Studies This class will examine the Islamic religious tradition from its inception to the present. The course will culminate with a few specific modern social issues and political movements important to practitioners of the Islamic faith. Prerequisite: reading score of 80+; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

RUSSIAN

RUS 1510 Introductory Russian I Students will learn Russian language vocabulary and grammar by completing a series of activities designed for realistic communication, both written and spoken. They will learn the reading and writing of the Cyrillic alphabet. Through reading, dialogue, and associated study, students develop an understanding of the language and cultural distinctions of Russian speakers worldwide. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall. 4 credit hours.

RUS 2560 Russian Civilization & Culture Students will learn about Russian culture and civilization by focusing on the most significant events in Russian history from its formation to the collapse of the Soviet Union through exposure to the best examples of the Russian music, literature, arts and architecture, and exploring the depths of the Russian civilization and so-called “Russian soul.” Prerequisite: ENG 1510; Corequisite: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall. 4 credit hours.

SOC 1510 Introduction to Sociology Students will use sociological perspectives to critically analyze and understand taken-for-granted aspects of our social world. The influences of culture, socialization, social groups, and institutions on human behavior are investigated. Cultural diversity and issues related to social inequalities are also explored. Eligibility: ENG 1510; must meet minimum college level reading score: Accuplacer 80+. J fall, spring; C fall, spring. 3 credit hours.

SOC 1550 Drinking 101 Students will use sociological theories and concepts to examine social and cultural forces that influence alcohol consumption. Research about the social and personal consequences of drinking will be investigated. Students will also evaluate theories of alcoholism and the impact of alcohol-related social policies. Eligibility: ENG 1510. Must meet minimum college level reading score: Accuplacer 80+. J fall, spring. 2 credit hours.

SOC 2510 Marriage & the Family Students will develop a sociological understanding of marriage and the family as social institutions. Emphasis is
placed on challenges facing contemporary American families, from communication and conflict to sexual learning and behavior, changing gender roles, parenting, divorce, remarriage, violence, and abuse. Corequisite: ENG 1530. J fall; C fall. 3 credit hours.

SOC 2520 Social Problems Students will apply the sociological perspective to an understanding of major issues and conflicts in American society. They will explore the impact of social and cultural factors on the creation and definition of social problems and policies, and investigate possible solutions to these problems. Prerequisites: SOC 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

SOC 2540 Deviant Behavior Deviant behavior is behavior that attracts widespread social disapproval. In this course, students gain the ability to analyze a variety of deviant behaviors from sociological, critical, and cross-cultural perspectives. Topics include homicide, rape, and family violence to prostitution, unconventional sexuality, and suicide. Prerequisite: SOC 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

SOC 2560 Criminology Students will learn about criminal behavior by evaluating major sociological theories and research. Basic aspects of these theories and their relationship to values, social structures, and the criminal justice system are examined. For both the criminal justice student and those interested in social sciences. Prerequisite: SOC 1510; Corequisite: ENG 1530; must meet minimum college level reading score: Accuplacer 80+. J occasionally; C occasionally. 3 credit hours.

SOC 2580 Race and Ethnicity This course helps students appreciate the multicultural basis of American society. The course is designed to improve understanding of prejudice and discrimination, explore ways to improve intergroup communication and relations, and examine challenges faced by professionals working in settings with racial, ethnic, and religious diversity. Prerequisite: SOC 1510; Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.

SOC 2590 Sex, Sexuality, and Gender Students will learn to sex, sexuality, or gender, practices and concepts both from around the world and here in the United States. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: At least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.

SPA 2510 Introductory Spanish I Students will learn Spanish language vocabulary and structure to include the present-tense and basic sentence syntax by completing a series of activities designed for realistic communication, both written and spoken. Through reading, dialogue, writing and associated study, students develop an understanding of the language and cultural distinctions of Spanish speakers worldwide. Eligibility: ENG 1510. J fall; C fall. 4 credit hours.

SPA 2520 Intermediate Spanish II Students will learn Spanish language vocabulary and structure to include the preterit and imperfect past-tense verb forms by completing a series of activities designed for realistic communication, both written and spoken. Through reading, dialogue, writing and associated study, students develop an understanding of the language and cultural distinctions of Spanish speakers worldwide. Prerequisite: SPA 1510 or two years high school Spanish; Eligibility: ENG 1510. J spring; C spring. 4 credit hours.

SPA 2530 Introduction to Spanish Literature Students will examine representative works of prose, poetry, and drama of the 20th century literature of Spain and the Americas. Readings emphasize the close connection between style and content, as well as the historical and cultural influence of each. Includes lectures, class discussions, and student’s written work in Spanish. Prerequisites: SPA 2510-2520; Eligibility: ENG 1510. J occasionally; C occasionally. 3 credit hours.

SPA 2550 Spanish Conversation & Comp I Students will enhance their ability to express themselves verbally in Spanish. Conversations, prepared and spontaneous, will be based on everyday situations and contemporary topics. Spanish grammar is reviewed as needed. Prerequisite: SPA 2510 or a minimum of four years high school Spanish; Eligibility: ENG 1510. J occasionally; C occasionally. Variable credit hours.

THEATRE

THE 1510 Introduction to Theatre Students will obtain an understanding and appreciation of theatre from early ritual through post-war American drama. Plays are viewed in class and read independently. Students will discuss a variety of dramatic forms. Acting styles and the elements of costume, makeup, scenic design, and the lighting necessary to stage a show are also examined. Corequisite: ENG 1510 and a reading score of 80+. J occasionally; C occasionally. 3 credit hours.

THE 1520 Modern Drama Students will discover the turning point that led to a new direction for contemporary drama. The musical in post-war America is examined, as are theatre in Latin-American, Asian-American, women’s theatre, and such styles as Absurdism are investigated. Plays and performances are viewed in class and independent reading is assigned. Playwriting styles and a discussion of directing and producing approaches will help the student discover modern ways of presentation. A continuation of THE 1510. Corequisite: ENG 1530. J spring. 3 credit hours.

THE 1550 Stagecraft Students will gain a working knowledge of the tools, equipment, language, and procedures used in set construction. Construction documents and rigging, as well as practical application, are given special consideration. Corequisite: ENG 1530. J fall, spring. 3 credit hours.

THE 1570 Acting Students use the physical and mental processes of acting to build self-confidence. Both improvised and rehearsed scenes are practiced in class to discover how to be at home in front of an audience. Acting skills are strengthened through acting exercises and methods. Corequisite: ENG 1530 and a reading score of 80+. J fall. 3 credit hours.

THE 1630 London Theatre Seminar Students are introduced to the practice and production of theatre in London, England, one of the world’s theatre centers. Following six seminar meetings, students spend two weeks in London viewing theatre productions and visiting theatres, galleries, and museums. No prerequisites. J occasionally. 3 credit hours.

THE 2010 Theatre Internship Students receive on-the-job experience consisting of 135 hours of supervised activity in a local business or industry. Students work in conjunction with a faculty mentor and a supervisor at the job site. All guidelines in the original college internship policy will be followed. Prerequisite: At least a 2.0 GPA and either sophomore standing or one semester completion in an appropriate certificate program. J occasionally; C occasionally. Variable credit hours.
THE 2570 Acting II  Students expand upon the growth begun in THE 1570, experiencing an in-depth, cumulative, and progressive study of acting. An increased character exploration and the ability to incorporate it into scene study are learned. Students are given individual attention in voice and body control and audition techniques. Prerequisite: THE 1570. J spring. 3 credit hours.

THE 1620-1623 Theatre Practicum I-IV  Through hands-on application, students involved in mounting a stage production work in teams to learn group dynamics, problem solving, and time management skills. Students will gain a working knowledge in either lighting, sound, costuming, publicity, or props. May be taken for a total of 4 credit hours. Prerequisite: permission of instructor required. J fall, spring. 1 credit hour.

WELDING

WLD 1200 Safety and Cutting Processes  This course introduces oxy-fuel and plasma-arc cutting systems. Topics include an intensive introduction to welding safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxygen-fuel and plasma-arc cut metals of varying thicknesses as well as have an appropriate understanding of welding safety. Corequisite: MAT 0500; must meet minimum college level reading score. Corequisite: Accuplacer 70+. J fall. 3 credit hours.

WLD 1240 Applied Welding  Students will understand the three most common welding processes that are available to perform welds and the numerous ways to cut various materials. The welding processes included are oxy-fuel, plasma, and use of various mechanical cutting machines. Upon completion, students will be able to perform code quality welds on plates of various thicknesses in all three processes, as well as perform cutting operations on plates using all cutting equipment. Corequisite: MAT 0500 and reading score of 80+. Campus & Term: J, spring. 3 credit hours.

WLD 1350 Shielded Metal Arc Welding  This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes. Corequisite: MAT 0500; must meet minimum college level reading score. Corequisite: Accuplacer 70+. J spring. 3 credit hours.

WLD 1360 Gas Metal Arc Welding  This course introduces gas metal arc (GMAW) welding and flux core arc welding processes (FCAW). Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel in the flat, horizontal, and overhead positions. Corequisite: MAT 0500; must meet minimum college level reading score. Corequisite: Accuplacer 70+. J spring. 3 credit hours.

WLD 1370 Gas Tungsten Arc Welding  This course introduces the gas tungsten arc (GTAW) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials. Corequisite: MAT 0500; must meet minimum college level reading score. Corequisite: Accuplacer 70+. J spring. 3 credit hours.

WLD 2250 Adv Shielded Metal Arc Welding  Advanced shielded metal arc (stick) welding techniques will be performed using mild steel electrodes in the flat, horizontal, vertical, and overhead positions on structural plate. Identifying and analyzing defects in welding joints is emphasized. Carbon steel plate is welded using shielded metal arc welding (SMAW) to American Welding Society (AWS) Code. Students will develop skills necessary to make quality welds on carbon steel pipe with open root and backing rings according to AWS, American Society of Mechanical Engineers (ASME), and American Petroleum Institute (API) code. Prerequisite: WLD 1350; Corequisite: MAT 1220 or MAT 1590 or higher. J fall. 3 credit hours.

WLD 2260 Adv Gas Metal Arc Welding  Advanced gas metal arc welding practices and power source technology, including programmable and pulsing constant voltage machines, will be used. Machine set-up and techniques for nonferrous metals, including aluminum and stainless steel, will be practiced. Advanced arc welding techniques will be performed in the flat, horizontal, vertical, and overhead positions on structural plate. Identifying and analyzing defects in welding joints is emphasized. Carbon steel plate is welded using Gas Metal Arc Welding (GMAW) to American Welding Society (AWS) Code. Students will develop skills necessary to make quality welds on carbon steel pipe with open root and with backing rings according to AWS, American Society of Mechanical Engineers (ASME), and American Petroleum Institute (API) code. Prerequisite: WLD 1360; Corequisite: MAT 1220 or MAT 1590 or higher. J fall. 3 credit hours.

WLD 2270 Adv Gas Tungsten Arc Welding  Advanced study and practice of the gas tungsten arc welding process are emphasized. Advanced joint designs are mastered on carbon steel, aluminum, and stainless steel. A required American Welding Society Workmanship sample will be fabricated and welded. Students will also weld GTAW on pipe according to ASME (American Society of Mechanical Engineers) procedures. Theory and practice of GTAW on ferrous and non-ferrous metals in all positions will be covered. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometries. Prerequisite: WLD 1370; Corequisite: MAT 1220 or MAT 1590 or higher. J spring. 3 credit hours.

WLD 2350 Fabrication  Students will learn how to read blueprints with an emphasis on weld symbols, joint design, and layout techniques. Students will be introduced to equipment such as the iron worker, hand tools, press brake, and shears. The principles behind bending, punching, and fastening technologies will be discussed. Prerequisites: WLD 2260 and PHY 1250; Eligibility: ENG 1510. J spring. 3 credit hours.

WLD 2360 Alternate Processes  Machine setup and techniques for nonferrous metals, including aluminum and stainless steel, will be practiced. Welding applications of special metals such as copper, nickel, cobalt, and titanium will be discussed. Non-traditional or advanced welding and processing procedures such as resistance welding, automated plasma cutting, robotic welding and submerged arc welding are demonstrated. Laser and electron beam welding techniques are also reviewed. Prerequisites: WLD 2250, WLD 2260, and WLD 2270. J fall. 3 credit hours.

WLD 2370 Metallurgy  Students will learn the basic properties, characteristics, and production of the major metal families and processes for ferrous and nonferrous metals. General metal properties, testing, and heat treatments are covered, along with crystal structures in metals, iron-carbon phase diagrams, and isothermal transformation diagrams. Prerequisite: PHY 1250; Corequisite: ENG 1530. J fall. 3 credit hours.

WLD 2450 Capstone Project  Through research, discussion, and presentation, students will apply welding technology knowledge toward a real life problem. Each student will prepare a case study of a local industry problem or application as well as a solution to the problem. Process selection, joint design, cost estimating, and design of a welded project are required. Prerequisite: student must be within one semester of graduation or have permission of instructor. J spring. 2 credit hours.
The first still-active institution of the State University of New York was officially founded at Potsdam in 1816. By 1862, the Morrill Act set the stage for the four Ivy League land-grant SUNY colleges that now exist at Cornell University. The actual SUNY system did not come together until February 1948 when New York was the last of the then 48 states to establish an official state university. At this time, SUNY consisted of a consolidation of 29 unaffiliated institutions with 11 of them functioning as teachers’ colleges. All of these colleges had unique histories and a common goal to serve New York state. Since then, SUNY has grown to include 64 academic institutions that had formerly been independent institutions or were directly founded by the State University of New York.

SUNY institutions include everything from world-renowned community colleges to first-rate graduate schools that include the nation’s top veterinary school. The System’s highly regarded doctoral degree granting universities boast top research programs and attract experts in a variety of fields. SUNY has expanded to include more than 418,000 students enrolled in 6,688 programs of study. The scope of SUNY continues to increase.

Today, extensive study abroad opportunities exist, and majors range from childhood education to biomedical engineering. International students from over 160 countries attend a SUNY school.

SUNY has also created the SUNY Learning Network, one of the nation’s largest distance learning programs which provides educational opportunities to more than 70,000 students through 4,000 courses and offers sixty degree and certificate programs.

The State University motto is: “To Learn-To Search-To Serve.”

**University Centers & Doctoral Degree Granting Institutions**
SUNY at Albany | SUNY College of Ceramics at Alfred | SUNY at Binghamton | Downstate Medical Center: Health Sciences Center at Brooklyn | SUNY at Buffalo | College of Agriculture and Life Sciences at Cornell University | College of Ceramics at Alfred University | College of Human Ecology at Cornell University | School of Industrial and Labor Relations at Cornell University | College of Veterinary Medicine at Cornell University | SUNY College of Optometry at New York City | SUNY at Stony Brook | Upstate Medical University: Health Sciences Center at Syracuse | SUNY College of Environmental Science and Forestry at Syracuse

**University Colleges**
SUNY College at Brockport | SUNY College at Buffalo | SUNY College at Cortland | Empire State College | SUNY College at Fredonia | SUNY College at Geneseo | SUNY College at New Paltz | SUNY College at Old Westbury | SUNY College at Oneonta | SUNY College at Oswego | SUNY College at Plattsburgh | SUNY College at Potsdam | SUNY College at Purchase

**Technology Colleges**
SUNY College of Technology at Alfred | SUNY College of Technology at Canton | SUNY College of Agriculture and Technology at Cobleskill | SUNY College of Technology at Delhi | SUNY College of Agriculture and Technology at Morrisville | Institute of Technology at Utica/Rome | Maritime College at Fort Schuyler | SUNY College of Technology at Farmingdale

**Community Colleges**
Adirondack Community College Glens Falls | Broome Community College Binghamton | Cayuga County Community College Auburn | Clinton Community College Plattsburgh | Columbia-Greene Community College Hudson | Corning Community College Corning | Dutchess Community College Poughkeepsie | Erie Community College Williamsville, Buffalo, Orchard Park | Fashion Institute of Technology New York City | Finger Lakes Community College Canandaigua | Fulton-Montgomery Community College Johnstown | Genesee Community College Batavia | Herkimer County Community College | Jefferson Community College Watertown | Mohawk Valley Community College Utica | Monroe Community College Rochester | Nassau Community College Garden City | Niagara County Community College Sanborn | North Country Community College Saranac Lake | Onondaga Community College Syracuse | Orange County Community College Middletown | Rockland Community College Suffern | Schenectady County Community College Schenectady | Suffolk County Community College Selden, Riverhead, Brentwood | Sullivan County Community College Loch Sheldrake | Tompkins-Cortland Community College Dryden | Ulster County Community College Stone Ridge | Westchester Community College Valhalla

**Board of Trustees**

**SUNY Administration**
Chancellor | Nancy L. Zimpher
Provost & Executive Vice Chancellor | Alexander Cartwright
Vice Chancellor, Finance; Chief Financial Officer | Eileen McLoughlin
Vice Provost & Vice Chancellor, Academic Affairs | Elizabeth L. Bringsjord
General Counsel-in-Charge & Chief of Staff | Sandra Casey
Associate Vice Chancellor, University Relations & Chief of Staff | Stacey Hengsterman
Assistant Vice Chancellor, External Affairs | Jennifer Loturco
Director of Marketing & Creative Services | David Belsky
Senior Vice Chancellor, Community Colleges | Johanna Duncan-Poitier
Assistant Vice Chancellor, Operations | Kellie Dupuis
Vice Chancellor, Capital Facilities | Robert Haelen
Vice Chancellor, Human Resources | Curtis L. Lloyd
Associate Vice Chancellor, Enrollment Management & Student Success | Paul Marthers
COLLEGE DIRECTORY

Board of Trustees
Donna R. Beal 2017
Marie T. Carrubba, Esq. 2018
Margaret Cornell 2015
Louis P. DiPalma 2018
Dr. Carole B. Faulk 2019
James Griffin 2019
Barbara J. Hastings, Secretary 2013
Wally Huckno, Sr., Chairperson 2019
James Joseph Snyder 2016
Lance S. Spicer 2013
John J. Staley 2021
Mark J. Ward, Finance & Audit Committee Chair 2013
Cody Austin, student representative 2016

Jamestown Community College is supported by a regional partnership among Cattaraugus County, Chautauqua County, and the City of Jamestown.

Norman Marsh, Chairperson, Cattaraugus County Legislature
Vincent Horrigan, Executive Director, Chautauqua County Legislature
Samuel Teresi, Mayor of Jamestown

Administration
CORY L. DUCKWORTH (2013)
President
B.A., Utah State University
M.A., University of Utah
J.D., University of Utah College of Law

ELIZABETH C. BOOTH (2013)
Director, North County Center
B.A., Fordham University

MARILYN C. GERACE (2005)
Dean, Business & Social Sciences; Assistant Professor, Criminal Justice; Director, Criminal Justice; Cattaraugus County Campus
A.A., Jamestown Community College
B.A., SUNY Fredonia
M.S., Buffalo State College

EILEEN GOODLING (2007)
Vice President, Student Development
B.M., Oberlin College
M.A., Edinboro University of Pennsylvania
Ed.D., SUNY Binghamton

MARIA KINDBERG (2014)
Dean, Arts, Humanities & Health Sciences
B.A., SUNY Geneseo
M.A., SUNY Fredonia

BARBARA RUSSELL (2007)
Dean, Research & Planning
B.A., Alfred University
M.S., University of South Carolina

JOHN J. SAYEGH (2009)
Vice President, Cattaraugus County Campus, Continuing Education, & External Partnerships
A.A., Miami Dade Community College
B.A.A., Florida International University
M.B.A., Saint Bonaventure University

JEAN SCHRADER (1984)
Dean, Science, Technology, Engineering & Mathematics;
Professor, Mathematics & Computer Science
B.A., SUNY Geneseo
M.S., Ed., SUNY Fredonia

TAMMY SMITH (2006)
Dean, Student Development;
Assistant Professor; Counselor
B.A., SUNY Fredonia
M.S., Old Dominion University

KIRK D. YOUNG (2014)
Vice President, Enrollment, Marketing & Recruitment
B.A. Utah Valley State College
M.S. Brigham Young University
Ph.D. Gonzaga University

MARILYN A. ZAGORA (1974)
Vice President, Academic Affairs; Professor; Counselor
B.A., M.S., Ph.D., SUNY Buffalo

Faculty
LAURA ANDERSON (2004)
Assistant Professor, Spanish
B.A., Ohio University
M.A., SUNY Buffalo

TIMOTHY ARNOLD (2014)
Director of Libraries; Instructor
B.A., Western State College
M.S., Clarion University
M.B.A. Chaminade University of Honolulu

DAWN BABBAGE (2002)
Associate Professor; Nursing
A.A.S., Jamestown Community College
B.S., SUNY College at Utica/Rome
M.S., SUNY Buffalo

THERESA BAGINSKI (2002)
Associate Professor; Spanish;
Coordinator, Modern Languages;
B.A., Niagara University
M.A., SUNY Buffalo
M.S.S., U.S. Army War College

BRIAN BARONE (2004)
Assistant Professor; Criminal Justice;
A.S., Jamestown Community College
B.S., SUNY Fredonia
M.S., Mercyhurst College

AMANDA BARTELS (2011)
Assistant Professor; Mathematics
Cattaraugus County Campus
B.A., M.S., University of Albany

CARMELLA R. BARTIMOLE (1998)
Associate Professor; Counselor;
Coordinator, Counseling & Career Planning Center
Cattaraugus County Campus
B.S., Sacred Heart University
M.Ed., Saint Bonaventure University
Ph.D., SUNY Buffalo

SHANNON E. BESSETTE (2000)
Associate Professor; Anthropology;
Coordinator, Anthropology, Sociology, Geography
B.A., Cornell University
M.A., University of Oklahoma
SUNY Chancellor’s Award for Excellence in Teaching, 2015

KATY-JAN BOBSEINE (2013)
Instructor, Criminal Justice
A.S., Jamestown Community College
B.A., Mercyhurst College
M.A., Monterey Institute of International Affairs

JANIS L. BOWMAN (1998)
Professor, Biology;
Co-Coordinator, Science - Health Science
A.S., Jamestown Community College
B.S., M.S., SUNY Fredonia
SUNY Chancellor’s Award for Excellence in Teaching, 2007

SARAH BRAY (2013)
Instructor, Business
Cattaraugus County Campus
B.S., Alfred University
M.B.A., Saint Bonaventure University

96
HEATHER BURRELL (2011)  
Instructor, Nursing  
Cattaraugus County Campus  
A.A.S., Jamestown Community College  
B.S.N., Florida Hospital College of Health Sciences  
M.S., South University

MARY ROSE CHASLER (1999)  
Associate Professor, Nursing  
B.S., Indiana University of Pennsylvania  
M.S., University of Pittsburgh

JAMES J. CHIMENTI (1988)  
Professor; Business; Director, Business  
B.A., Grove City College  
M.B.A., Gannon University  
SUNY Chancellor’s Award for Excellence in Teaching, 2010

DAWN COLUMBARE (1992)  
Professor, Nursing;  
Director, Nursing  
B.S., Syracuse University  
M.S., SUNY Buffalo  
D.N.P., Case Western Reserve University  
SUNY Chancellor’s Award for Excellence in Professional Service, 2006

FRANK CORAPI (2006)  
Associate Professor, Psychology;  
Co-Director, Social Sciences;  
Coordinator, Psychology;  
Coordinator, Committee for Excellence in Learning and Teaching  
B.S., M.S., Gannon University

GERARD J. CRINNIN (1993)  
Professor, English  
North County Center  
A.A., Onondaga Community College  
B.A., Ph.D., SUNY Binghamton  
M.A., Brown University  
SUNY Chancellor’s Award for Excellence in Scholarship & Creative Activities, 2006

JACQUELINE M. CRISMAN (2007)  
Associate Professor, Biology;  
Coordinator, Biotechnology  
B.S., SUNY Geneseo  
M.S., Ph.D., Ohio State University

JEFFREY R. DAVIS (2001)  
Assistant Professor, Mathematics & Computer Science;  
Director, Computer & Information Sciences  
Cattaraugus County Campus  
A.A.S., Jamestown Community College  
B.S., SUNY Fredonia  
M.S., Capitol College

H. KREIG ELICKER (1989)  
Assistant Professor, Registrar  
B.S.Ed., M.S., Slippery Rock University

NEIL FLORY (2013)  
Assistant Professor; Music;  
Coordinator, Music  
A.A., Edison Community College  
B.M.E., University of Central Florida  
M.M., University of Florida  
D.M.A., University of Texas at Austin

RENEE FUNKE (2009)  
Assistant Professor; Education;  
Coordinator, Teacher Education  
Field Placement  
B.S., M.S., SUNY Fredonia  
C.A.S., SUNY Buffalo

GAEL E. GROSSMAN (2001)  
Professor, English;  
Director, English, Philosophy, Religion, Modern Languages  
B.A., University of Michigan  
M.A., Ph.D., Michigan State University  
SUNY Chancellor’s Award for Excellence in Teaching, 2014

COLETTE Hght (2011)  
Assistant Professor; Counselor;  
Coordinator, Advisement  
B.A., M.A., Edinboro University of Pennsylvania

BRENT HARKNESS (2007)  
Assistant Professor; Welding  
A.S., Alfred State University  
B.S., Ferris State University

KYLIE HARRIS (2013)  
Instructor, Nursing  
B.S., M.N., Edinboro University of Pennsylvania  
M.S.N., Clarion/Edinboro Universities  
SUNY Chancellor’s Award for Excellence in Scholarship & Creative Activities, 2006

JOHN HEARN (1981)  
Professor; Sociology  
B.A., University of Massachusetts-Dartmouth  
M.A., University of Connecticut  
SUNY Chancellor’s Award for Excellence in Teaching, 1996  
SUNY Chancellor’s Award for Excellence in Scholarship & Creative Activities, 2013

GILBERT HIGGINS (2006)  
Assistant Professor, English  
B.A., University of Pittsburgh  
M.A., Clarion University  
Pennsylvania

CINDY L. HINZ (2005)  
Associate Professor; Business;  
Coordinator, Business  
Cattaraugus County Campus  
B.S., University of Virginia  
M.B.A., Saint Bonaventure University

CATHARINE IANNELLO (2003)  
Associate Professor; Human Services;  
Director, Human Services  
B.A., SUNY at Buffalo  
M.S.W., University of Kentucky

SHAUN E. IRLAND (2010)  
Assistant Professor; English  
B.A., SUNY Potsdam  
M.A., University of Maine

DAVID T. JEFFERY (2001)  
Associate Professor; Computer Science;  
Coordinator, Computer & Information Services;  
Coordinator, Individual Studies  
B.S., Pennsylvania State University  
M.S., Regis University

MARY L. JERMANN (1983)  
Associate Professor; Reference Librarian;  
Coordinator, Library Services  
Cattaraugus County Campus  
B.A., Saint Bonaventure University  
M.S.L.S., Clarion University

DENNIS A. JOHNSON (2015)  
Associate Professor;  
Sport Management/Physical Education  
B.S., Marshall University  
M.S., Marshall University  
Ed.D., University of North Carolina

JEANNE L. JOHNSTON (2001)  
Assistant Professor, Business & Office Technology;  
Director, Office Technology & Medical Technology  
A.S., SUNY Regents College  
B.S., SUNY Empire State College  
M.S., SUNY College at Buffalo

YU KANAZAWA (2003)  
Associate Professor; Art; Coordinator, Art;  
Director, Media, Visual & Performing Arts  
B.F.A., Kutztown University  
M.F.A., Edinboro University of Pennsylvania

AMBER R. KAUTZMAN (2000)  
Associate Professor; Mathematics & Computer Science;  
Coordinator, Developmental Studies  
B.A., Mercyhurst College  
M.A., Miami University

JESSICA KUBIAK (2013)  
Instructor, Humanities;  
Coordinator, English, Philosophy, Religion, Theatre  
Cattaraugus County Campus  
Certificate, University Pittsburgh  
B.A., University of Pittsburgh-Bradford  
M.S., Buffalo State College
TRACI LANGWORTHY (2004)  
Assistant Professor, History  
B.A., Oberlin College  
M.A., University of Delaware

FRANCIS LaCHAPPELLE (2012)  
Instructor, Human Services;  
Coordinator, Human Services  
Cattaraugus County Campus  
B.S., University of Wisconsin-Stout  
B.S., University of Wisconsin-Eau Claire  
M.S.Ed., Saint Bonaventure University

WILLIAM G. Lasher (1979)  
Professor, Business Administration  
B.A., Lycoming College  
M.B.A., Shippensburg University

SUNG JONG (DAVID) LEE (2008)  
Assistant Professor, Computer Science  
Cattaraugus County Campus  
B.S., Korea Military Academy  
M.S., Daemen College

ELLEN LEHNING (2003)  
Associate Professor, Biology;  
B.S., M.S., Ph.D., Michigan State University

BETH LISI (2011)  
Assistant Professor;  
Coordinator, Academic Support Services  
Cattaraugus County Campus  
B.S., St. Bonaventure University  
M.A., California State University

KENNETH LOOMIS (2013)  
Instructor, Computer Science  
B.S., Edinboro University of Pennsylvania  
M.S., Worcester Polytechnic Institute

JUSTIN MARCH (2011)  
Assistant Professor, Reading  
B.S., Skidmore College  
M.A., City College of New York

ASHLEY MARTIN (2014)  
Instructor, Mathematics  
Cattaraugus County Campus  
B.S., SUNY Fredonia  
M.S., SUNY Fredonia

CHARLOTTE MARTINES-CAPPELLINI (1975)  
Professor, English;  
Cattaraugus County Campus  
A.A., Jamestown Community College  
B.A., SUNY Brockport  
M.A., SUNY Fredonia

MEGHAN McCUNE (2009)  
Assistant Professor, Anthropology/Sociology  
Co-Director, Social Sciences;  
Coordinator, Anthropology, Geography,  
History, Political Science, Psychology,  
Sociology  
Cattaraugus County Campus  
B.A., Wells College  
M.A., Michigan State University

CYNTHIA McKEE (2008)  
Assistant Professor; Reference Librarian  
A.A., Jamestown Community College  
B.A., SUNY Plattsburgh  
M.L.S., SUNY Buffalo  
SUNY Chancellor’s Award for Excellence in Librarianship, 2013

DEBORAH L. McMILLEN (2010)  
Assistant Professor, Nursing  
A.A.S., Jamestown Community College  
A.A.S., Jamestown Community College  
B.S., M.S., Daemen College

SIMONE MULLINAX (2013)  
Instructor, Communication;  
Coordinator, Communication  
B.A., M.A., University of Arkansas

JULIE B. MUSIAL (2001)  
Assistant Professor, History  
Cattaraugus County Campus  
R.M.A., Bryan Institute  
B.A., Arizona State University  
M.A., Western Washington University

SEAN NOWLING (2012)  
Assistant Professor, Physics  
B.S., Purdue University  
M.S., Ph.D., University of Illinois at Urbana-Champaign

JONATHAN D. O’BRIAN (1998)  
Professor, History;  
Coordinator, History  
A.A., Jamestown Community College  
B.S., SUNY Fredonia  
M.A., SUNY Buffalo  
SUNY Chancellor’s Award for Excellence in Teaching, 2015

HEATHER L. PANCZYKOWSKI (2000)  
Professor, Occupational Therapy;  
Director, Occupational Therapy Assistant Program  
B.S., Keuka College  
M.S., SUNY Buffalo  
D.H.Sc., Nova Southeastern University  
SUNY Chancellor’s Award for Excellence in Teaching, 2005

KIRK PARMENTER (2014)  
Assistant Professor, Biology  
B.S., St. Bonaventure University  
M.S., Ph.D., Clemson University

MEGHAN McCUNE (2009)  
Assistant Professor, Anthropology/Sociology  
Co-Director, Social Sciences;  
Coordinator, Anthropology, Geography,  
History, Political Science, Psychology,  
Sociology  
Cattaraugus County Campus  
B.A., Wells College  
M.A., Michigan State University

CYNTHIA McKEE (2008)  
Assistant Professor; Reference Librarian  
A.A., Jamestown Community College  
B.A., SUNY Plattsburgh  
M.L.S., SUNY Buffalo  
SUNY Chancellor’s Award for Excellence in Librarianship, 2013

DEBORAH L. McMILLEN (2010)  
Assistant Professor, Nursing  
A.A.S., Jamestown Community College  
A.A.S., Jamestown Community College  
B.S., M.S., Daemen College

SIMONE MULLINAX (2013)  
Instructor, Communication;  
Coordinator, Communication  
B.A., M.A., University of Arkansas

JULIE B. MUSIAL (2001)  
Assistant Professor, History  
Cattaraugus County Campus  
R.M.A., Bryan Institute  
B.A., Arizona State University  
M.A., Western Washington University

SEAN NOWLING (2012)  
Assistant Professor, Physics  
B.S., Purdue University  
M.S., Ph.D., University of Illinois at Urbana-Champaign

JONATHAN D. O’BRIAN (1998)  
Professor, History;  
Coordinator, History  
A.A., Jamestown Community College  
B.S., SUNY Fredonia  
M.A., SUNY Buffalo  
SUNY Chancellor’s Award for Excellence in Teaching, 2015

HEATHER L. PANCZYKOWSKI (2000)  
Professor, Occupational Therapy;  
Director, Occupational Therapy Assistant Program  
B.S., Keuka College  
M.S., SUNY Buffalo  
D.H.Sc., Nova Southeastern University  
SUNY Chancellor’s Award for Excellence in Teaching, 2005

KIRK PARMENTER (2014)  
Assistant Professor, Biology  
B.S., St. Bonaventure University  
M.S., Ph.D., Clemson University
KATHY TAYDUS (2004)
Associate Professor, Nursing
A.A.S., Jamestown Community College
B.A., Indiana University of Pennsylvania
B.S., Clarion University of Pennsylvania
M.S., St. Joseph’s College
D.N.P., Wayne University
SUNY Chancellor’s Award for Excellence in Teaching, 2014

SARAH TRANUM (2000)
Associate Professor, Occupational Therapy; Academic Fieldwork Coordinator; Occupational Therapy Assistant Program
A.A.S., Erie Community College
B.S., SUNY Buffalo
M.S., SUNY College at Buffalo

REBECCA TYLER (2011)
Assistant Professor, Nursing
Cattaraugus County Campus
A.A.S., Jamestown Community College
B.S., University of Pittsburgh at Bradford
M.S.N., Excelsior College

RONALD A. TURAK (1987)
Professor; Placement/Transfer Counselor; Coordinator, Counseling & Career Development Center
A.S., Bucks County Community College
B.A., M.A., Indiana University of Pennsylvania
M.B.A., Philadelphia University
SUNY Chancellor’s Award for Excellence in Professional Service, 2010

JENNIFER VISBISKY (2004)
Assistant Professor, Nursing
Cattaraugus County Campus
A.S., B.S., University of Pittsburgh
M.S.N., University of Phoenix

KAREN J. WEYANT (2001)
Assistant Professor, English;
B.A., University of Pittsburgh
M.A., Clarion University of Pennsylvania
SUNY Chancellor’s Award for Excellence in Scholarship & Creative Activities, 2011

KELLY WHITVER (2007)
Assistant Professor, Nursing
A.A.S., A.S., Jamestown Community College
B.S., M.S. Daemen College

LAURA WILLIAMS (2008)
Assistant Professor, Nursing,
Cattaraugus County Campus
A.A.S., Alfred State University
B.S.N., SUNY Brockport
M.S., Daemen College

DALE YERPE (1976)
Professor, English; Coordinator, CELT
Cattaraugus County Campus
B.A., M.S., SUNY Fredonia
M.A., Middlebury College
SUNY Chancellor’s Award for Excellence in Teaching, 1998

KAYE YOUNG (1975)
Professor; Coordinator, Main Street
A.A.S., A.S., Jamestown Community College
B.S., Empire State College
M.A.S.S., SUNY Fredonia
SUNY Chancellor’s Award for Excellence in Professional Service, 2004

JESSE ZEIDERS (2009)
Assistant Professor, Human Services
A.A.S., Jamestown Community College
B.S.W., Idaho State University
M.S.W., Roberts Wesleyan College

ERIN ZEIDERS-WEBER (2010)
Assistant Professor, Mathematics; Coordinator, Mathematics
A.S., Jamestown Community College
B.A., M.A. SUNY Potsdam

JESSIE ZEIDERS (2009)
Assistant Professor, Human Services
A.A.S., Jamestown Community College
B.S.W., Idaho State University
M.S.W., Roberts Wesleyan College

ERIN ZEIDERS-WEBER (2010)
Assistant Professor, Mathematics; Coordinator, Mathematics
A.S., Jamestown Community College
B.A., M.A. SUNY Potsdam

KELLY WHITVER (2007)
Assistant Professor, Nursing
A.A.S., A.S., Jamestown Community College
B.S., M.S. Daemen College

STEPHANIE M. ZWYGHUIZEN (2000)
Professor, Mathematics;
Director, Mathematics
B.S., Grand Valley State University
M.S., Northern Arizona University
ACADEMIC CALENDAR

2015-2016

Fall 2015 | 15 weeks of day and evening classes
August
20-21
Student orientation, advisement, registration
24
Classes begin
24-28
Late registration and senior citizen registration
September
7
Labor Day - no classes
28
Last day to choose CR/F and audit grade options for traditional semester courses
October
12-13
Fall recess - no classes
26
Last day to change CR/F back to regular grading system for traditional semester courses
November
4
Last day to officially withdraw from an individual class with a grade of W
25-28
Thanksgiving recess - no classes
December
14
Last day of classes
15-17
Final examinations

Spring 2016 | 15 weeks of day and evening classes
January
14-15
Student orientation, advisement, registration
19
Classes begin
19-25
Late registration and senior citizen registration
February
15-16
Presidents Day recess - no classes
24
Last day to choose CR/F and audit grade options for traditional semester courses
March
21
Last day to change CR/F back to regular grading system for traditional semester courses
23-April 3
Spring recess - no classes
April
6
Last day to officially withdraw from an individual class with a grade of W
May
16
Last day of classes
17-19
Final examinations
20
Cattaraugus County Campus commencement
21
Jamestown Campus commencement

Summer Session I 2016 | 6 weeks of day & evening classes
May
23
Classes begin
23-24
Late registration and senior citizen registration
June
3
Follows a Monday schedule
6
Last day to choose CR/F or audit grade option
13
Last day to change CR/F back to regular grading system
30
Last day to officially withdraw from an individual class with a grade of W
End of Summer Session I

Summer Session II 2016 | 6 weeks of day & evening classes
July
6
Classes begin
6-7
Late registration and senior citizen registration
19
Last day to choose CR/F or audit grade option
28
Last day to change CR/F back to regular grading system
August
16
Last day to officially withdraw from an individual class with a grade of W
16
End of Summer Session I
### Academic Advisement
20

### Academic Calendar
100

### Academic Information
29-60

### Academic Programs
41-60

### Academic Standing
31

### Access to Student Information
21

### Accreditation
3, 10, 14, 36

### Additional Degrees and/or Certificates
32

### Adjunct Faculty
33

### Admissions Information and Policies
8-15

### Aid for Part-time Study
16

### American Sign Language Courses
62

### Anthropology Courses
62

### Appeal of Dismissal
31

### Application Procedures
8-10

### Arabic Courses
62

### Art Courses
62-64

### Associate in Applied Science Degree
36, 38

### Associate in Arts Degree
36, 38

### Associate in Science Degree
36, 38

### Astronomy Courses
64

### Athletics
23

### Attendance Policy
29

### Aviation Courses
64-65

### Awards and Honors
33

### Biology Courses
65-67

### Biotechnology Degree
41

### Biomedical Engineering Degree
41

### Biomedical Science Degree
41

### Business Courses
67-69

### Business - Accounting Degree
41

### Business - Business Administration Degrees
41

### Campus Activity Board
23

### College Connections: College Courses in High Schools
34

### College-Level Examination Program (CLEP)
34

### College Program Committee
23

### Communication Courses
69-70

### Communication Degree
42

### Computer-Aided Design & Computer Numerical Control Certificate
56

### Computer Science Courses
70-71

### Continuing Education
28

### Continuing Education Units
28

### Cooperate Education
34

### Corrections Academy
15

### Corrections Officer Technology Certificate
56

### Counseling and Career Planning Services
20

### Course Changes and Withdrawals
29

### Course Descriptions
61-94

### Course Information
39-40

### Course Numbering
40

### Course Requisites
61

### Credit/Fail Policy
29

### Credit-Free Courses
28

### Criminal Justice Courses
71-74

### Criminal Justice Degree
43

### Criminal Justice-Police Degree
43

### Customized Training Programs
28

### Dance Courses
74

### Dean's List
33

### Degrees and Certificates
36-37

### DegreeWorks
37

### Developmental Studies Program
34

### Digital Audio Production Certificate
56

### Digital Graphic Design & Publishing Certificate
56

### Digital/Computer (Electrical) Technology Courses
76

### Diploma Charges
32

### Disability Support Services
20

### Early Admissions Policy
9

### Early Childhood Degree
44

### Early Childhood Development Certificate
57

### Economics Courses
75

### Education Courses
75-76

### Educational Opportunity Grant Program
16

### Electricity/Electronics Courses
76

### Employment and Job Search Services
20

### Engineering Courses
77-78

### Engineering Science Degree
44

### English Courses
76-77

### English Language Instruction Courses
76

### Entrepreneurship Certificate
57

### Entrepreneurship Courses
78

### Environmental Science Degree
45

### Extension Centers
7, 28

### Faculty Student Association
22

### Fee Schedule
19

### Financial Aid and Planning
15-19

### Fine Arts: Music Degree
45

### Fine Arts: Studio Arts Degree
46

### French Courses
78

### Frequency of Course Offerings
40

### Full Opportunity Concept
8

### General Education Requirements
32

### Geography Courses
78

### Geology Courses
78-79

### Global Studies Degree
46

### Grade Appeal
31

### Grade Point Average
31

### Grading System
30

### Graduate and Upper Division Courses
28

### Graduate Job Placement
33

### Graduation Outcomes, Requirements
32

### Grants
16

### Health Centers
21

### High School Equivalency Diploma
9

### History Courses
79-80

### Honors Program
34

### Human Development Courses
80

### Human Services Courses
80-81

### Human Services Degrees
46-47

### Humanities Degree
50

### Immunization Requirements
21

### Imputed Credit
31

### Independent Study
34

### Individual Studies Certificate
57

### Individual Studies Degrees
47-48

### Industrial Equipment Technology Certificate
58

### Information Technology Certificate
58

### Information Technology Degree
48

### Interdisciplinary Studies
35
<table>
<thead>
<tr>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Students - Admission Procedure</td>
</tr>
<tr>
<td>Interdisciplinary Studies Courses</td>
</tr>
<tr>
<td>International Education Courses</td>
</tr>
<tr>
<td>International Education and Study Abroad Internships</td>
</tr>
<tr>
<td>Intramural Sports, Recreation, and Fitness</td>
</tr>
<tr>
<td>J</td>
</tr>
<tr>
<td>JCC ALERT</td>
</tr>
<tr>
<td>K</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>Learning Skills Centers</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Adolescence Education Degree</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Child Education Degree</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Early Childhood Education Degree</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Humanities Degree</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Mathematics and Science Degree</td>
</tr>
<tr>
<td>Liberal Arts and Sciences: Social Science Degree</td>
</tr>
<tr>
<td>Library Courses</td>
</tr>
<tr>
<td>Library Services</td>
</tr>
<tr>
<td>Life Experience Credit Assessment</td>
</tr>
<tr>
<td>Loans</td>
</tr>
<tr>
<td>Machine Tool Technology</td>
</tr>
<tr>
<td>Main Street</td>
</tr>
<tr>
<td>Manufacturing Technology Institute - Jamestown</td>
</tr>
<tr>
<td>Manufacturing Technology Institute - Olean</td>
</tr>
<tr>
<td>Math and Sciences Degree</td>
</tr>
<tr>
<td>Mathematics Courses</td>
</tr>
<tr>
<td>Mathematics for Educators Courses</td>
</tr>
<tr>
<td>Mechanical Technology Courses</td>
</tr>
<tr>
<td>Mechanical Technology Degree</td>
</tr>
<tr>
<td>Media Arts Degree</td>
</tr>
<tr>
<td>Medical Office Technology Certificate</td>
</tr>
<tr>
<td>Medical Office Technology Courses</td>
</tr>
<tr>
<td>Medical Office Technology Degree</td>
</tr>
<tr>
<td>Meteorology Courses</td>
</tr>
<tr>
<td>Multimedia Production Certificate</td>
</tr>
<tr>
<td>Music Courses</td>
</tr>
<tr>
<td>Music Program</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>North County Center</td>
</tr>
<tr>
<td>Nursing Courses</td>
</tr>
<tr>
<td>Nursing Degree</td>
</tr>
<tr>
<td>Nursing Program Admission Policies</td>
</tr>
<tr>
<td>Occupational Therapy Assistant Courses</td>
</tr>
<tr>
<td>Occupational Therapy Assistant Degree</td>
</tr>
<tr>
<td>Occupational Therapy Assistant Program Admission Policies</td>
</tr>
<tr>
<td>Off-Campus Study Programs</td>
</tr>
<tr>
<td>Office Technology Certificate</td>
</tr>
<tr>
<td>Office Technology Degree</td>
</tr>
<tr>
<td>One-Plus-One Programs</td>
</tr>
<tr>
<td>Online Courses and Degree Opportunities Orientation</td>
</tr>
<tr>
<td>P</td>
</tr>
<tr>
<td>Physical Science Courses</td>
</tr>
<tr>
<td>Pre-College Enrollment Program</td>
</tr>
<tr>
<td>Professional Enrichment Courses</td>
</tr>
<tr>
<td>Professional Pilotling Degree</td>
</tr>
<tr>
<td>Psychology Courses</td>
</tr>
<tr>
<td>R</td>
</tr>
<tr>
<td>Religion Courses</td>
</tr>
<tr>
<td>Repeating a Course</td>
</tr>
<tr>
<td>Requirements by Degree Chart</td>
</tr>
<tr>
<td>Residential Halls</td>
</tr>
<tr>
<td>Residential Life</td>
</tr>
<tr>
<td>Retention and Graduation Rates</td>
</tr>
<tr>
<td>Russian Courses</td>
</tr>
<tr>
<td>S</td>
</tr>
<tr>
<td>Satisfactory Academic Progress Charts</td>
</tr>
<tr>
<td>Scholarships</td>
</tr>
<tr>
<td>Scientific Reasoning Requirement</td>
</tr>
<tr>
<td>Security Policies and Procedures</td>
</tr>
<tr>
<td>Selected Studies</td>
</tr>
<tr>
<td>Sexual Offense Policy</td>
</tr>
<tr>
<td>Sexually Violent Offender Registration Act</td>
</tr>
<tr>
<td>Small Business Assistance</td>
</tr>
<tr>
<td>Social Science Degree</td>
</tr>
<tr>
<td>Sociology Courses</td>
</tr>
<tr>
<td>Spanish Courses</td>
</tr>
<tr>
<td>Special Academic Programs</td>
</tr>
<tr>
<td>Special Audit Tuition Waivers</td>
</tr>
<tr>
<td>State Aid to Native Americans</td>
</tr>
<tr>
<td>State University of New York</td>
</tr>
<tr>
<td>Student Complaint Process</td>
</tr>
<tr>
<td>Student Constitution</td>
</tr>
<tr>
<td>Student Development Information</td>
</tr>
<tr>
<td>Student Government</td>
</tr>
<tr>
<td>Student Information Policies</td>
</tr>
<tr>
<td>Student Records</td>
</tr>
<tr>
<td>Student Responsibility</td>
</tr>
<tr>
<td>Student Success Seminar</td>
</tr>
<tr>
<td>SUNY General Education Requirements</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>Theatre Program</td>
</tr>
<tr>
<td>Transcripts</td>
</tr>
<tr>
<td>Transfer Advisement</td>
</tr>
<tr>
<td>Transfer Agreements</td>
</tr>
<tr>
<td>Transfer Evaluation Appeal Process</td>
</tr>
<tr>
<td>Transfer Information</td>
</tr>
<tr>
<td>Transferring Credits</td>
</tr>
<tr>
<td>Tuition and Fees Payment and Refund Policies</td>
</tr>
<tr>
<td>Tuition Assistance Program</td>
</tr>
<tr>
<td>Tutoring Services</td>
</tr>
<tr>
<td>U</td>
</tr>
<tr>
<td>V</td>
</tr>
<tr>
<td>Veterans' Educational Assistance</td>
</tr>
<tr>
<td>Vision, Mission, and Beliefs of JCC</td>
</tr>
<tr>
<td>W</td>
</tr>
<tr>
<td>Warren, PA Center</td>
</tr>
<tr>
<td>Web Access for Student Records and Registration</td>
</tr>
<tr>
<td>Web Design Certificate</td>
</tr>
<tr>
<td>Welding Courses</td>
</tr>
<tr>
<td>Welding Technology Certificate</td>
</tr>
<tr>
<td>Welding Technology Degree</td>
</tr>
<tr>
<td>Withdrawal Policy</td>
</tr>
<tr>
<td>Work Study Program</td>
</tr>
<tr>
<td>Writing Across the Curriculum</td>
</tr>
</tbody>
</table>