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JAMESTOWN
COMMUNITY
COLLEGE

S U N Y

2023-2024

CATALOG

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JAMESTOWN COMMUNITY COLLEGE

2023-2024 CATALOG

JAMESTOWN CAMPUS

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NORTH COUNTY CENTER

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CATTARAUGUS COUNTY CAMPUS

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WARREN CENTER

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Warren, Pennsylvania 16365
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*Supervised by the State University of New York.
Sponsored by a regional board of trustees representing
Cattaraugus County, Chautauqua County, and the City of Jamestown.*

www.sunyjcc.edu

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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 preclude 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 change. It is recommended that students considering enrollment check with the school director to determine if there is any change from the information provided in the catalog. The catalog contains information on the college's teaching personnel and courses/curricula offered. Please be advised that the State Education Department separately licenses all teaching personnel and independently approves all courses and curricula offered. Therefore, it 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 listed 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.

JCC's credit course schedule 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 characteristics. This policy applies to access to all activities and programs under the college sponsorship as well as to application and selection for admission, employment, and all other personnel procedures within the college.

Jamestown Community College is an accredited institution and a member of the Middle States Commission on Higher Education (MSCHE) www.msche.org. Jamestown Community College's accreditation status is accreditation reaffirmed. The Commission's most recent action on the institution's accreditation status in 2016 was to reaffirm accreditation. MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA). JCC's 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 Commission 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

To support our students' journey to success in the local and global workplace with quality, in-demand learning experiences.

Mission

Jamestown Community College provides inclusive educational opportunities for all individuals and employers within our region and beyond, focusing on career goals and support through community partnerships.

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

Within the **Ralph C. & Isabella M. Sheldon Center** are programs related to the sciences, technology, engineering, and mathematics and the arts, humanities, and health sciences divisions. It also houses physics and computer labs, music facilities, the management information systems and institutional research departments, Robert Lee Scharmann Theatre, Weeks Gallery, and Sarita Hopkins Weeks Reception Hall.

The **Katharine Jackson Carnahan Center** houses the criminal justice and public safety programs and computer labs, conference rooms, and training facilities.

Features of the **John D. Hamilton Collegiate Center** are the Student Union, Campus Store, Counseling & Career Center, Global Learning office, Applied Learning office, cafeteria, health center, art studios, box office, campus life and residence life offices, and buildings and grounds department. The student records, admissions, financial aid, marketing, and business offices are also located in the building, as are offices for JCC's administration and the JCC Foundation.

Hillside Suites, JCC's three residence halls, are comprised of suites with four or five single bedrooms as well as suites that contain three single bedrooms and one double bedroom.

Hultquist Library Building houses the business and social sciences division, the Jamestown Learning Commons (library, learning center and accessibility services offices), student lounges, Help Desk, computer labs, conference rooms, distance learning facilities, Lenna Teleconference Theatre, and Workforce Development offices and classrooms.

The **Manufacturing Technology Institute** is a partnership of JCC and the Manufacturers Association of the Southern Tier. MTI provides services 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 customized training programs, are taught in the facility. Workforce Readiness is also housed there.

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 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** houses JCC's biology, chemistry, environmental science, and geology programs. The facility features energy efficient and sustainable elements designed to highlight resource conservation, habitat restoration, and social responsibility.

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, 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 nursing, biology, chemistry and physics labs and classrooms.

College Center includes the Student Union, Campus Store, Center Gallery, student lounge, community room, cafeteria, boardroom, and student veterans' lounge. The Student Services Center (admissions, financial aid, registration, and business offices), Counseling and Career Center, campus life office, health center, and administrative offices are also located in the building.

The 190-seat theater **Cutco Theater** accommodates theatrical and musical performances, lectures, and training programs. The adjacent Magnano Reception Room is used for college and community events.

The **Library and Liberal Arts Center** houses the Cattaraugus County Campus Learning Commons (library, learning center, and accessibility services), faculty offices, classrooms, a student lounge, and Empire State College office.

The **Technology Center** houses the computer labs, classrooms, and study areas.

The **Dresser-Rand Continuing Education Conference and Training Center** is undergoing renovations.

The **Manufacturing Technology Institute** features classrooms, light duty and computer-aided design labs, and Workforce Development facilities.



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 at the North County Center.

North County Center

The North County Center offers a full range of services which includes assistance in admissions, financial aid, and registration, and provides counseling and career services, accessibility 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 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.

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/apply.
- 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. To apply, visit www.sunyjcc.edu/apply. 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 and Career 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. Apply online at www.sunyjcc.edu/apply.

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/apply 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

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, International Baccalaureate (IB) credits, or after military experience (ACE) are eligible to apply for advanced standing and credit.

A student may transfer credit hours to JCC from another postsecondary institution, recognized by an accrediting body for courses for which the student has earned the equivalent of a C grade or higher. Grades C- and below and grades that do not indicate a C or higher (i.e. credit/fail, pass/fail, satisfactory) was earned are not accepted as transfer credits. Credit hours and grades for transfer credit are not included in the calculation of the student's JCC grade point average.

Transferring Credits

Official records should be directed to the JCC admissions office. JCC considers expected learning outcomes and standards when evaluating incoming transcripts for JCC credit course equivalency. A student may transfer up to 30 semester hours of credit to JCC from another institution or other external sources. 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 a minimum of 30 semester hours of credit at JCC to be eligible for an associate degree, and 15 semester hours of credit to be eligible for a certificate from JCC.

Appeal Process for Transfer Evaluations

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 the student to provide additional information (such as a course syllabus). At the meeting, the registrar, or other evaluator, will review the criteria used to evaluate the credits brought to JCC.

If the appeal is not resolved to the student's satisfaction with the registrar, he may request that the appeal be forwarded to the academic department that oversees the course(s) under review. A program director or dean will review the credit evaluation and appeal and may request that the student provide additional information for consideration before rendering a decision.

If the appeal is not approved with the decision of the director or dean, the student may request that it be forwarded to the vice president of academic affairs who will review the appeal and supporting information. The vice president may request additional information. The vice president's decision regarding the appeal is final for students transferring credits to JCC from non-SUNY institutions.

Students transferring credits to JCC from a SUNY institution who do not agree with the vice president of academic affairs' decision may appeal to the SUNY provost by following instructions at <https://www.sunyjcc.edu/admissions/transfer>.

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.

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. JCC will deny registration privileges to any student who does not comply with this procedure. To register for courses, visit www.sunyjcc.edu/register.

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/admissions/first-time or contact the Admissions Office 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 home-schooled 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 (IHIP) 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 to the high school guidance counselor upon the completion of courses. Transcripts are available at www.sunyjcc.edu/transcripts.
- 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 banner.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 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

Math and English placement at JCC is based on high school GPA and additional success indicators. This helps determine the courses in which the student is best prepared to begin.

Students without a GPA through the junior year of high school will need to take a computer-based reading and math placement test. If you need the math and/or English test, or want to challenge your placement in English and/or math, you may schedule a placement test at any of our sites.

If you have a disability and require accommodated testing, contact the Coordinator of Accessibility Services.

To register for a placement test and/or to see a list of exemptions, go to www.sunyjcc.edu/placementtesting

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 global learning coordinator or visit www.sunyjcc.edu to learn about the international student application process.
- 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 an English language assessment. Acceptable assessments include Test of English as a Foreign Language (TOEFL), IELTS, TOEIC, Duolingo, and Cambridge.
- Scores from JCC's college placement test can be accepted from English speaking countries in lieu of the English language assessment. The placement test can be sent to students residing outside of the U.S. on a selective basis.
- Submit documented evidence of adequate financing to cover the cost of tuition, fees, books, room, board, and other living expenses for a full academic year. 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.

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. The nursing program at Jamestown Community College is licensed with the New York State Education Department, Division of Professional Education (SED), 89 Washington Avenue, 2nd floor, West Wing, Albany, NY 12234, (518) 486-2967. OPPROGS@nysed.gov.

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. 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.

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.
- A GPA from JCC of at least 2.5 for current or previous college students.
- High school students or high school graduates who have no college experience must have earned a 90% or above in high school courses. If a high school student does not meet this requirement he or she may still complete general education courses required for the nursing program and obtain 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 1510 without supports.
- Eligibility for placement in MAT 1500: Problem Solving with Mathematics.
- Completion of required Nursing Entrance Exam (TEAS Exam).
- 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.

Admission Rubric

An admission rubric will be applied to applicants based upon eligibility criteria, previous education, and TEAS score. Ten percent of seats are reserved for high school students/graduates who meet program requirements.

CRITERIA	DESCRIPTION	SCORE
PREVIOUS EDUCATION	Licensed Practical Nurse/License Vocational Nurse	1
TEAS SCORE	Developmental	0
	Basic	1
	Proficient	3
	Advanced	6
	Exemplary	9

Meeting the criteria does not guarantee admission into the nursing program. A greater score on the admission rubric 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 Accessibility 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 data.
- 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 JCC 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: CPR/AED for the Professional Rescuer (American Red Cross) or BLS for the Health Care Provider (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, JCC, and/or in the community.

Readmission Into Nursing Program Policy

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

1. Each student must apply for 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 need to apply by February 1, and for the spring semester, by October 1. Applications may continue to be accepted past the deadlines on a space available basis.
2. Each student must be accepted into the college for the semester being readmitted. (Reapplication must be completed by any readmitted student who was not attending JCC the semester immediately prior to admission.)
3. Students seeking readmission 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.
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 students be unsuccessful in repeating any nursing core course, they 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 readmission into the nursing program will be considered on the basis of space available and grade point average.

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 that address the varying needs of clients.
- demonstrate the ability to research evidence-based practices to positively impact interventions and inform occupational therapy practice.
- demonstrate clinical reasoning skills and provide innovative occupational therapy interventions in challenging healthcare environments.
- design and implement programming to engage consumers and/or caregivers in opportunities to improve their quality of life and well-being.

Note: Technical (OTA) and professional (OT) occupational therapy programs are two distinct paths of study leading to complementary, but different, practice roles. Any OTA student contemplating application to an OT program at another institution is subject to 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 <https://www.sunyjcc.edu/programs/occupational-therapy-assistant-aas/apply>.

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 accessibility 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:

- Students in the top 20% of their high school graduating class within the last 2 years and who meet the minimum requirements will receive automatic acceptance into the program, if application is received by the deadline (February 15).
- A grade point average (GPA) for acceptance consideration of at least 2.25 for current or previous college students who have completed at least 15 credits of college.
- HS average of 80% (B-) or better or combined GPA/HS average of 2.25 (C+) for those with less than 15 credits of college.
- Eligibility for placement in MAT 1500: Problem Solving with Mathematics.
- Eligibility for ENG 1510. Students who are required to take an additional ENG 0500 will be considered for admission.

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: February 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.

The point system can be viewed at <https://www.sunyjcc.edu/programs/occupational-therapy-assistant-aas/eligibility>.

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 student will be permitted to repeat each OTA course one time. If any students are unsuccessful in repeating any OTA course, they are ineligible to continue in the OTA program.
- A student seeking readmission to the OTA program is considered on a space available basis and GPA of at least 2.5.

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, medical examination, psychological profiling, intensive background investigation (felony convictions will bar admittance; misdemeanor convictions may bar admittance), law enforcement agency appointment/sponsorship, oral board interview, physical agility screening, military records, if applicable, civil service list standing, second language skills, and training zone residency. ***Note: Some of these components are not required but will give the candidate additional points toward acceptance.***

All candidates must meet New York state statutes as required by the Municipal Training Council for state certification of police officers. These standards are outlined in the Chautauqua County Sheriff’s Academy Rules and Procedures Manual. Matriculated students who are enrolled in the Law Enforcement Academy may receive an A.A.S. Individual Studies, a certificate in individual studies, or a certificate in law enforcement technology by completing a sequence of courses listed in the Program Requirements section. Details on the program can be obtained from the admissions director or the academy director on the Jamestown Campus. For more information, visit: www.sunyjcc.edu/sheriffsacademy.

Corrections Academy

Admission Policy

The Corrections Academy is offered through the Chautauqua County Sheriff’s Department for students interested in becoming a correctional officer at a local or county jail. Acceptance to the academy is contingent on successful completion of medical, psychological, and physical fitness examinations and an oral interview. An intense background investigation is conducted by an appropriate law enforcement agency. Applicants must also complete a pre-service application questionnaire.

Students who successfully complete the Corrections Academy and additional college coursework may receive an A.A.S. Individual Studies, a certificate in individual studies, or a certificate in corrections officer technology as outlined in the Program Requirements section. Previous college work may be applied to this degree program.

Questions about the degree program should be directed to JCC’s criminal justice director. Visit www.sunyjcc.edu/programs/corrections-officer-technology-certificate for further information.

FINANCIAL PLANNING

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.

SUNY JCC students can begin their college careers with the benefit of the New York State Excelsior Scholarship for full-time study and the Part-Time Student Scholarship for tuition expenses.

College costs are not limited to tuition alone, and 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 requirements to receive awarded funds.

Eligibility criteria and application deadlines vary for individual sources of financial aid. Details are available at <https://www.sunyjcc.edu/admissions/financial-aid>. Students can 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 <https://studentaid.gov/>. The FAFSA application should be filed after October 1 of each year for the following academic year. Due to limited funds for some programs, students who apply for aid by January 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 online applications for state grants and scholarships from their respective state agencies at hesc.ny.gov and pheaa.org. New York state residents anticipating part-time status should download the Aid for Part-time Study (APTS) application from the financial aid web page and submit it to the college prior to the start of each semester.

Students interested in institutional scholarships and grants should complete the JCC general scholarship application and/or the individual scholarship applications at sunyjcc.edu/financialaid.

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 JCC's 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. 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 refunds for excess aid by either direct deposit for those enrolled with Student Choice Refunds. Students not enrolled will receive a paper check 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 in great financial need, according to federal formulas, and who are Pell grant recipients.

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 pro-rated 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 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 sunyjcc.edu/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 admissions offices.

Pennsylvania students attending JCC's Warren Center and Jamestown Campus who are enrolled in an associate's degree program may qualify for a Pennsylvania State 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 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 **JCC Unified Student Assistance (USA) Scholarship** for top students in JCC's service area is the best known of the college's institutional scholarships.

The **New York State Excelsior Scholarship** for full-time study pays for qualifying students' resident tuition not met by other federal, state or institutional grants and scholarships.

Application processes and renewal criteria for these and over 70 other scholarships can be viewed at <https://www.sunyjc.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. Failure to complete the withdrawal process 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.sunyjc.edu/financialaid. 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.

Chart A: Satisfactory Academic Progress for Federal Financial Aid (Pell, FSEOG, FWS, and Direct Loans)

After attempting this many credits (college level and imputed)	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
a student must have passed this many credit hours	3	6	9	13	17	21	25	30	35	40	45	50	55	60	65
with a cumulative GPA of not less than	1.5	1.5	1.5	1.75	1.75	1.75	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Chart B: Satisfactory Academic Progress for New York State Aid (based on full-time enrollment)

*Effective 2011-12 for students enrolled in a *remedial program or all other students who received their first TAP award prior to 2010-11.*

before receiving this TAP payment	1st	2nd	3rd	4th	5th	6th
a student must have earned at least this many college level credits (does not include imputed credits)	0	3	9	18	30	45
with at least this cumulative grade point average (GPA) (based on college level credits; does not include imputed credits)	0	.5	.75	1.3	2.0	2.0
and this % of course completion in the prior semester (based on 12 credit hours of college level and imputed credits)	0	50%	50%	75%	75%	100%

Chart D: Satisfactory Academic Progress for New York State Aid (based on full-time enrollment)

*Effective 2011-12 for *non-remedial students who received their first TAP award 2010-2011 or later.*

before receiving this TAP payment	1st	2nd	3rd	4th	5th	6th
a student must have earned at least this many college level credits (does not include imputed credits)	0	6	15	27	39	51
with at least this cumulative grade point average (GPA) (based on college level credits; does not include imputed credits)	0	1.3	1.5	1.8	2.0	2.0
and this % of course completion in the prior semester (based on 12 credit hours of college level and imputed credits)	0	50%	50%	75%	75%	100%

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.

Student bills may be paid by debit/credit (MasterCard/Visa/Discover/AMEX) card in Banner. The college business office only accepts cash, check payments, and money orders.

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.

VA Pending Payment Compliance

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. Jamestown Community College will not:

- Prevent nor delay the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, libraries, or other institutional facilities.

However, to qualify for this provision, such students may be required to:

- Produce the Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.

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 received by 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:

	TUITION LIABILITY	REDUCTION OF TUITION CHARGES
prior to first day of instruction	0%	100%
1st week of instruction*	25%	75%
2nd week of instruction	50%	50%
3rd week of instruction	75%	25%
4th week of instruction and later	100%	0%

**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.

	TUITION LIABILITY	REDUCTION OF TUITION CHARGES
prior to first day of instruction	0%	100%
during the 1st week of instruction*	75%	25%
during the 2nd week of instruction	100%	0%
during the 3rd week of instruction	100%	0%
after 3rd week of instruction	100%	0%

**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 completing the online appeal form for further reduction of tuition and fees with supporting documentation to JCC's business office.

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:

- Students living in Chautauqua, Cattaraugus, and Allegany counties 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 their specific counties 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 pay a Faculty Student Association fee. The fee amount is based on the total number of credit hours for which each part-time student is registered. The fee is a flat amount if the student is enrolled in twelve or more credit hours (full-time). 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 fitness center access at 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.

COLLEGE FEE SCHEDULE

Tuition and fees are established annually. The figures below may be helpful in planning tuition and fee expenses.

Since tuition and fees may change, students should consult credit course schedules or sunyjcc.edu for updated information.

Tuition (effective 2023-2024 academic year - subject to change)

Full-time students (12 or more credit hours)

New York state resident with valid certificate of residence*	\$2,720 per semester
New York state resident without valid certificate of residence*	\$5,440 per semester
Out-of-state resident	\$5,440 per semester

Part-time students (1-11 hours)

New York state resident*	\$227 per credit hour
New York state resident without valid certificate of residence*	\$454 per semester
Out-of-state resident	\$454 per credit hour

Residence Hall Suites

Single room	\$4,100 - \$5,150 per semester, single
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The following fees are mandatory and are not refundable after drop/add period:

Student Activities Fee

Faculty Student Association (FSA) Fee***	\$13.75 per credit hour
	\$210/semester flat rate for full-time students, 12 credit hours or more

Course Fees

Health Services Fee (on-campus students only)	\$4.50 per credit hour
Learning Network Fee (all students)	\$6.25 per credit hour
Technology Fee (all students)	\$11.25 per credit hour
Laboratory/Studio Fees (specified courses)	varies \$10-\$250
JCC Book Bundle (all students but NUR/OTA)	\$23.25 per credit hour

College Fees

College Processing Fee (one-time fee payable upon admission to JCC)	\$85
Official Transcript Fee	refer to website for current rate
Late Payment Fee	\$50
Placement Test Retesting Fee	\$10
Returned Check Fee	\$30 per check

Special Fees

Additional degree/certification	\$20
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Life Experience assessment

portfolio review fee	\$50
administrative fee	\$25
per credit awarded fee	1/3 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	\$6,300
Books and supplies	1,100
	<hr/>
	\$7,400**

** 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 sunyjcc.edu/financialaid.

*** Students registered for only online courses are not required to pay FSA fees.

STUDENT SERVICES

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. Part-time students are encouraged, but not required, to seek academic advisement.

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 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 and Career Center or at www.sunyjcc.edu/advising.

Learning Commons

The Learning Commons on the Jamestown and Cattaraugus campuses are academic spaces shared by accessibility services, learning centers, and the library. Located on 1st floor of the Hultquist Building in Jamestown and 1st floor of the library and Liberal Arts Center in Cattaraugus, the spaces are enhanced with technologies to support learning in a collaborative atmosphere, along with faculty and staff members who provide academic assistance:

Accessibility Services

JCC is dedicated to assisting qualified students with disabilities in earning grades that reflect their abilities and not their disabilities. The accessibility services offices are located in the college's Learning Commons. Students should contact the accessibility services coordinator to inquire about and/or arrange accommodations.

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 coordinator of accessibility services and provide documentation that verifies the existence of a disability and supports the need for accommodation. The accessibility 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 catalog and at www.sunyjcc.edu. Skill sets expected of students in the OTA program can be found on the college website. Both programs require medical exams prior to field placement.

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 the catalog.

When a student requests a modification which is beyond the scope of authority of the accessibility 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 accessibility services office, through either the vice president of academic affairs or student development, and on JCC's website.

Learning Centers

JCC Learning Centers offer complimentary coursework assistance to students. In addition to help with many 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 or experienced faculty members. Tutors help students clarify course concepts, prepare for exams, brainstorm ideas, and improve writing assignments. Faculty assess student needs to help them improve their study skills, academic habits, and overall student performance. Services can be accessed in person on the Jamestown and Cattaraugus campuses and are available virtually to all JCC students. Course-specific study guides and other academic resources are also available. For more information, visit our website at <https://www.sunyjcc.edu/support/learning-commons/learning-center>.

Library Services

The Hultquist Library on the Jamestown Campus and the Cattaraugus County Campus Library are dedicated to supporting the mission of JCC as a student-centered institution which embraces academic excellence and meets the evolving learning needs of the college and the greater community. As a central hub of academic life, the libraries provide facilities to support students' academic needs including computer workstations, printers, group study rooms, and quiet work spaces. In addition, the libraries' leisure seating areas are a place for quiet conversation and relaxation.

JCC's libraries share a commitment to "acquire, produce, organize, and provide access to a collection of materials which reflect the needs of the college." The libraries' collections include over 90 databases containing more than 60,000 full-text periodicals (journals, magazines, and newspapers), as well as thousands of eBooks, multimedia content, and statistical resources. The libraries also maintain a small, but robust, collection of academically focused print books and periodicals to further support users' information needs. Interlibrary loan services broaden the available resources by facilitating the borrowing of materials from other libraries, worldwide.

Reference librarians provide research assistance and support through a variety of means including, course-level instruction sessions, drop-in assistance, individual research appointments, and chat, email, and phone reference. LibGuides (<https://www.sunyjcc.edu/library>) provide additional support with custom created subject, course, and assignment-level research guides. All library staff are available to provide technical assistance with the libraries' computers, printers, and other technology.

To learn more about the JCC Libraries, visit your campus library in person, online at <https://www.sunyjcc.edu/library>, or call 716.338.1008 for the Jamestown Campus, and 716.376.7517 for the

Cattaraugus County Campus.

Counseling and Career Centers

The Counseling and Career Center on the Cattaraugus County and Jamestown campuses provide JCC students with a variety of counseling services. Particular emphasis is placed on issues related to student growth and development and educational, transfer, and career decision-making and planning. Personal counseling services are designed to support and assist students with issues impeding their academic success. Services include crisis intervention, brief solution-oriented counseling, and referrals to other agencies, services, or professionals as needed.

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 www.sunycc.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 and Career Center on both campuses.

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

Career Services

Career Services offices are located on JCC's Cattaraugus County and Jamestown campuses to help students explore and prepare for careers.

Career preparation services include developing a job search strategy; writing resumes and cover letters; creating LinkedIn profiles; preparing for interviews, obtaining information about job opportunities, and more. Career Services staff also coordinate career fairs, on-campus recruiting, and other events to facilitate connections and networking opportunities among employers, students, and alumni. All JCC students and alumni receive accounts in JCC's exclusive job and internship database, where individuals can find local and national part-time, full-time, and seasonal jobs and internships, as well as on-campus student employment opportunities. Career development resources, podcasts, and event calendars are also available within the database.

The Career Services offices also facilitate applied learning experiences including local, national and international internships; job shadowing experiences, and workplace tours.

Internships allow students to apply learning from previous coursework in real world settings while pursuing learning objectives through both work and reflection.

Students who have completed at least 12 college-level credits with a GPA of 2.0 or better are eligible to apply for credit-bearing internships. Some internships have additional requirements. While some certificate and degree programs require internships, students in other programs may opt to complete an internship to gain valuable work experience or explore career options. A student must fulfill 45 hours of work for each credit awarded.

Each internship is based on learning objectives defined within a learning contract created jointly by the student, a faculty supervisor, and a host business or agency representative. Internships with non-profit organizations are often described as service learning and are most often unpaid. Placements with for-profit organizations may be paid or unpaid.

Students should select applied learning experiences based on their transfer and career plans and discussion with their JCC academic advisors. Students who wish to arrange an applied learning experience should speak to a faculty member or a member of JCC's Career Services staff.

For additional information, visit www.sunycc.edu/careerservices.

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 banner.sunycc.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); 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), past and present participation in college activities, athlete height/weight, and photos. 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 they are 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 they no longer attend 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.

Transfer Advisement

Transfer agreements are available to assist students with transferring to selected transfer schools. Faculty advisors will assist students in planning academic programs at JCC which conform to the requirements of transfer institutions.

Transfer agreements and course equivalent information is available at www.sunyjcc.edu/transfer.

Students may send transcripts to the colleges or universities of their choice by visiting www.sunyjcc.edu/transcripts. Some holds on student records may prohibit the release of transcripts. When necessary, faculty write letters of recommendation for qualified students.

Counseling and Career 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

Faculty Student Association

The Faculty Student Association (FSA) is an independent non-profit organization and the primary sponsor of co-curricular activities at JCC. FSA is financed entirely by fees paid by all JCC students and faculty. The corporation is managed by a board of directors consisting of representatives of JCC's administration, faculty, staff, and student body. Funds are allocated annually to departments and committees across campus to provide enriching activities and experiences which add to the total college experience.

Campus partners which receive their funding from FSA include Student Senate, the college program committee, campus life, arts, music, theatre, residence life, and athletics, including recreation, intramurals, and the Total Fitness program.

Campus Stores

Located in the Hamilton Collegiate Center on the Jamestown Campus, in the College Center on the Cattaraugus County Campus, and in the North County Center, the campus stores offer a variety of products and services. Numerous selections of new, used, and reference textbooks are sold, and if a book cannot be found on the shelves, it can be special ordered.

The campus stores carry an assortment of JCC, Jayhawk, and Jaguar merchandise, including imprinted clothing, giftware, and school supplies. In addition, the campus stores stock greeting cards, stationery, art supplies, computer supplies, snacks and drinks, and residence hall room supplies.

Services also include box office ticket sales, check cashing, fax and copy service, meal plans, parking registration, student ID cards, textbook buyback, sales, and rentals, and postage stamps.

Dining and Vending Services

FSA partners with food service companies to provide a variety of breakfast items, wraps, sandwiches, pizza, soup, and full hot meals that are both nutritional and pleasing to the palate. Food service hours vary by campus; each location accepts cash or credit cards. The Jamestown and Cattaraugus campuses offer meal plans as well as debit card programs.

For additional meal plan information, visit the campus store. Vending machines are available on all campuses.

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 the president's 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 hour 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 on 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. The 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.

JCC's Jayhawks participate in intercollegiate competition in men's and women's basketball, soccer, golf, and swimming/diving, women's softball and volleyball, and men's baseball and wrestling. Jayhawk teams have gained regional and national recognition.

Cattaraugus County Campus students can participate in intramural

activities as well as joint intercollegiate athletic competition in men's and women's swimming and diving and men's golf with Jamestown Campus athletes.

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 and 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.

Student Complaint Process

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:

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.

Student Conduct - When the actions of students hinder the academic life of students or the ability of the college to achieve its educational purposes, students 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 a 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 Safety Data Sheets or SDS). MSDSonline is an online library of safety data sheets. Safety sheets contain information to keep JCC faculty, staff, and students safe from dangerous chemicals and other hazardous substances. Access MSDSonline at <https://www.sunyjcc.edu/experience/safety/programs> to obtain 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 <https://www.sunyjcc.edu/experience/safety/programs>.

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

Manufacturing Technology Institute

Jamestown Campus

The Manufacturing Technology Institute on the Jamestown Campus 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.

Cattaraugus County Campus

The Manufacturing Technology Institute on the Cattaraugus County Campus in Olean provides advanced manufacturing programs and processes and features classrooms, specialized training space for machining and other industrial skills, light duty labs, and a computer-aided design lab.

MTI houses degree and certificate programs such as computer-aided design & computer numerical control, industrial equipment technology, machine tool technology, welding technology, as well as non-credit industry specific customized training programs.

Workforce Readiness Center & Programs

JCC's Workforce Readiness Center in Jamestown, Dunkirk, and Olean, offers a broad spectrum of programs and services. It provides the public with an open door to lifelong learning opportunities in higher education, professional and vocational advancement, personal development, and cultural enrichment.

The center administers a diversified program that includes professional certifications, job-related skill development, and personal enrichment opportunities. Programs are offered year-round at times convenient for adults. Numerous online courses and programs are also available.

In addition to public offerings, the center administers programs designed to serve industries, governmental agencies, businesses, labor, and professional associations.

Continuing Education Units

JCC offers Continuing Education Units (CEUs) for approved professional workforce courses offered through Workforce Readiness. 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 Workforce Readiness Center 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

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 a JCC course regardless of where it is offered. Customized training and small business counseling services are available at the 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 and camps for youth are available at the Jamestown and Cattaraugus County campuses. Examples include Kids' College for ages 8-12 and Wee/Kids' College for ages 6-7.

Personal and Professional Enrichment Courses

JCC offers many non-credit courses in professional development, customer service, computer applications, vocational and skilled trades, basic skills, technology, and personal enrichment. Online courses are also available. Contact the Workforce Readiness Center or visit sunyjcc.edu/workforcereadiness 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 details, call the SBDC at 716.338.1024 or visit sunyjcc.edu/sbdc.

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 students with a fair and realistic assessment of their 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, full-term course through the last day of final exams 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 their instructor and obtain the instructor's signature (via email is acceptable for online students). The student should also obtain a signature (email is acceptable for online students) from their academic advisor to indicate they have discussed potential ramifications of the withdrawal. On-campus students can obtain a withdrawal card online at www.sunyjcc.edu, from the registrar's office, the Student Services Center in Olean, or from the North County Center main office.

If the instructor is unavailable, the student should see a full-time faculty member from that academic area or a dean for approval. A counselor, dean, or full-time faculty member from the academic area may also sign as the advisor when the advisor is unavailable. If time prohibits a student from obtaining both signatures, one of these signatures will suffice.

Signed withdrawal cards must be submitted to the registrar's office in Jamestown, Student Services Center in Olean, or the North County Center main office. Failure to withdraw properly from a course will result in the student receiving the grade they 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 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 F grade is reflected in the computed grade point average while the "CR" grade is not. Please note: many colleges and universities do not accept a grade of CR as transfer credit. The decision to pursue a CR/F grade is made by the student with guidance from their advisor or a member of the Counseling Center.

Credit Hour Policy

JCC has a policy for the assignment of course credit hours. This policy is located in the Academic Resources section of the JCC website (sunyjcc.edu/academics/academic-resources/assignment-courses-credit-hours-policy).

General Policies

Courses and programs listed in this catalog are offered when-ever

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 permission of the vice president of academic affairs, the vice president of student affairs, 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

Students can obtain an official paper or electronic transcript of their record or send transcripts directly to other colleges or prospective employers using the Credentials online service. Students will be charged a fee, based on the method of order and delivery. Refer to website for the current rate. To order official JCC transcripts or for more information, visit www.sunyjcc.edu/transcripts. Students may view or print an unofficial transcript through self-service Banner by selecting the Student tab.

Repeating a Course

When a student wishes to raise his/her grade and average by repeating a course, their highest grade will be used in the computation of their 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.

Fresh Start

Fresh Start is an academic forgiveness policy which provides JCC students a second opportunity if they have experienced academic

difficulties or have undergone a change of major. Students may apply for Fresh Start once they successfully complete 12 consecutive or concurrent credits and consult with their advisor or the Counseling & Career Center to review the policy and determine whether or not it is appropriate. If approved, the student's transcript will include a notation indicating that Fresh Start was granted. Forgiven coursework will continue to appear on the academic transcript but will be excluded from GPA calculations and will no longer meet requirements. Students may use Fresh Start only once, it cannot be rescinded, and will not be applied to a previously granted degree. Visit www.sunyjcc.edu for additional information.

Grading

Grading System

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

GRADE	MEANING	QUALITY POINTS
A	Excellent	4.0
B+	Above Average	3.5
B	Above Average	3.0
C+	Average	2.5
C	Average	2.0
D+	Below Average	1.5
D	Below Average	1.0
F	Failure	0.0
I	Incomplete	None
CR	Credit	None
W	Withdrawal	None
X	Administrative Withdrawal	None
AU	Audit	None
SA	Special Audit	None
SW	Special Audit Withdrawal	None
SX	Special Audit Administrative Withdrawal	None

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 Student Services 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 the student receiving the grade indicated on the incomplete form. The registrar's office must receive the completed student/ faculty agreement prior to the final grade entry deadline as listed on the academic calendar.

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. - A student can withdraw from a single, full-term course through the last day of final exams 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. 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 student desiring to withdraw totally from JCC may officially begin this process at the Counseling and Career Center (without seeing each faculty member separately). A “W” grade will be recorded on the transcript. Full-time students who officially withdraw are withdrawing from JCC and must reapply for admission should they desire to return.*

Grade Appeal

Students who believe that they have been graded unjustly or who wish to present evidence of extenuating circumstances that influenced a grade should first appeal their grade at the instructor and division level. If the appeal is not approved at the division level, it can be taken to the Academic Standings Committee. To be considered, appeals need to be received by the Academic Standings Committee within one year of the grade assignment. 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 who, due to extraordinary circumstances, wishes to appeal to change one or more failed courses to withdrawals must submit the appeal directly to the academic standings committee, and must provide ample documentation to corroborate reasons for such a change. If the student wishes to appeal grades for an entire semester to a total withdrawal, then the conversion of past semesters’ grades to total withdrawal will include all courses in the designated semester, not just those the student failed.

Grade Point Average

Each student’s academic standing is based on the average of all grades earned, as determined by 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 either the grade provided by the instructor, an “F,” or an “IF.”

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 student records for satisfactory academic progress or suspension.

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 semester 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 Recovery status or progress probation.

Academic Recovery

Academic Recovery status means students have not achieved a satisfactory cumulative grade point average. Students in Academic Recovery will have a semester to improve their cumulative grade point average. During this time, students will have access to additional support measures to assist in recovering their grades. If either the semester GPA or the cumulative GPA remains below the required standards in subsequent semesters, students will be placed in Academic Jeopardy status and may face Academic Suspension.

Academic Jeopardy

Academic Jeopardy means a student’s cumulative grade point average has remained below satisfactory level beyond one semester. Students in Academic Jeopardy may be considered for Academic Suspension. A student who is not suspended will have an additional semester to improve their cumulative grade point average or face possible suspension in subsequent semesters. During this time, students will be required to access support measures to assist in recovering their grades.

Academic Suspension

Students in Academic Jeopardy will be considered for Academic Suspension. Academic Suspension is at the discretion of the Academic Standings Committee, which will consider the status of each student based upon current grades and academic history. Students who are suspended from the college can reapply after one full semester. Students who are readmitted to the college will be in Academic Jeopardy until their cumulative grade point average reaches a satisfactory level.

Academic Standing and Financial Aid

If a student is placed in Academic Recovery or is placed on Progress Probation for the first time, the student retains federal financial aid eligibility. However, if the student does not 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.

Warning Status

Warning status is defined as:

	CREDIT HOURS ATTEMPTED	GPA
Category I	1-23	0.0 to 1.75
Category II	24-41	0.0 to 1.99

Students will be warned if their semester or cumulative grade point averages fall 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).

Progress probation

Progress Probation is a deficiency in hours earned only. 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.

Appeals

Students have the right to appeal any academic standings decision.

Students will receive correspondence indicating the decision, and they may appeal in writing to the Academic Standings Committee within the period of time specified. 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.

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 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:

GRADE	MEANING	QUALITY POINTS
IA	Excellent	0.0
IB+	Above Average	0.0
IB	Above Average	0.0
IC+	Average	0.0
IC	Average	0.0
ID+	Below Average	0.0
ID	Below Average	0.0
IF	Failure	0.0
II	Imputed Incomplete	None
ICR	Imputed Credit	None
IW	Imputed Withdrawal	None
IX	Imputed Administrative Withdrawal	None

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 certificate.

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 student services center on the Cattaraugus County Campus, the main office at the North County Center or visit www.sunyjcc.edu. Students should apply to graduate once they are registered for their final semester coursework. 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.

DEGREE	MINIMUM HOURS AND GPA
Second degree	90 hrs. with an overall GPA of 2.0 or better
Third degree	120 hrs. with an overall GPA of 2.0 or better
Fourth degree	150 hrs. with an overall GPA of 2.0 or better

JCC Essentials

Learning leads each of us on a unique journey. But wherever your journey leads, you will need certain essential skills and experiences to get where you want to go. Like a compass pointing the way north, the JCC Essentials point the way toward your future.

More than random bits of knowledge, the Essentials are those fundamentals of learning that prepare you to think and act effectively in the complex modern world. After all, knowledge is only as powerful as our ability to apply it to the real world, and today's world is one of great challenges and opportunities. The changing technologies, global reach, and abundant information of the 21st century require the ability to adapt to new situations, collaborate with people of different backgrounds, and evaluate evidence with a critical eye.

JCC can't teach you everything you will need to know, but it will give you what you need to continue to grow as you navigate life's twists and turns. The JCC Essentials forge a path for lifelong learning that promotes innovative connections across fields of study and prepares students to make a positive difference in our diverse and changing world.

Three Levels of Learning

The Essentials are spread across three levels of learning. These same levels form the basis for every degree program at JCC. As you advance along your path, you will:

Level 1: Inquire into complex questions with a critical eye for evidence and differing perspectives. Learning begins with a question. Completed during the first year of study, Level 1 courses examine multi-faceted questions through a critical lens, giving students the opportunity to explore different perspectives and types of sources. As students engage their inner detectives they develop the cognitive skills needed for hands-on, college-level inquiry. In the process they learn to navigate the culture of higher education at JCC.

Level 2: Grow the versatile toolkit of skills and knowledge essential to success in the twenty-first century. Courses in this level expand students' knowledge and skills across a range of different disciplines. Students are drawn into new intellectual experiences as they build college-level proficiency in the following areas:

A number of Level 2 courses also fulfill SUNY general education requirements, allowing students to complete SUNY and JCC requirements simultaneously. Other Level 2 courses develop knowledge and skills that are specific to students' programs and career interests.

Level 3: Connect your learning to the real world and recognize the

- Written composition
- Oral Communication
- Mathematical reasoning
- Scientific reasoning
- Cultural understanding

impact of your actions. Level 3 coursework challenges students to put their learning to use and make thoughtful connections between the

classroom and real world. Students effectively apply their knowledge and skills to a real-world experience, creative project, or independent intellectual investigation. Other coursework broadens students' worldview to consider the potential significance of their own and others' actions in a diverse, global community.

Course requirements

All graduates of JCC must complete appropriate liberal arts and sciences courses for the degree sought. In addition, all degree holders must meet the following collegewide requirements. Except where otherwise indicated, these requirements apply to all JCC degree recipients who matriculate in a program for the first time beginning fall 2019 and thereafter:

Level 1: Inquire

- Completion of INT 1555 Inquire or an approved inquiry-based course. Completion of this course is recommended within a year of matriculation in a degree program (for students matriculating in Fall 2020 and after).

- Completion of ENG 1510 English Composition I

Level 2: Grow*

- Completion of ENG 1530 English Composition II
- Completion of one approved SUNY Mathematics course (for students matriculating in Fall 2023 and after).
- Completion of two approved courses incorporating the study of scientific reasoning, to include one course in the SUNY Natural Sciences and one course in the SUNY Social Sciences
- Completion of one course incorporating the study of cultural understanding, to be selected from an approved list of SUNY courses

*To ensure a sufficient breadth of study, no individual course may be used to fulfill more than one Level 2 requirements. However, courses within Level 2 may be used to fulfill requirements in other levels if approved accordingly. not be used to fulfill more than one

Level 3: Connect*

- Completion of one applied learning course or experience, to be selected from an approved list of options
- Completion of one course incorporating the study of global perspectives, to be selected from an approved list of options
- Completion of one approved SUNY Diversity (DIVE) course incorporating the study of diversity, equity, and social justice (for students matriculating in Fall 2023 and after).

* To ensure a sufficient breadth of study, no individual course may be used to fulfill more than two Level 3 requirements. however, courses within level 3 may be used to fulfill requirements in other levels if approved accordingly.

Additional Competencies

In addition to the requirements listed above which are incorporated into specific courses, the college also requires each degree holder to demonstrate several other competencies which are infused across the curriculum. These competencies are not necessarily associated with any one course but are included in each degree program, as determined by program faculty.

Information literacy - This competency ensures that all JCC students learn to find, understand, evaluate, and use information in various forms. Being information literate also requires an awareness of the authority, validity, and bias of different sources. Students are expected to weigh the ethical implications of using and disseminating information in the modern world.

Critical thinking reasoning - This competency ensures all JCC students learn to analyze different forms of evidence and weigh differing perspectives as they work to develop well-reasoned conclusions. Students also improve their problem-solving skills by learning to identify the various aspects of multi-faceted, interdisciplinary issues.

Technological competency - This competency ensures all JCC students possess the knowledge and skills to successfully and efficiently use computer and other appropriate technologies as individuals, students, employees, and citizens. Some elements of technological competency are infused across all 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.

Values and ethical reasoning [moved from Level 3] - This competency challenges all JCC students to consider the significance of their own and others' actions within a larger community. Ethical awareness begins within the college classroom and extends to students' lives beyond JCC. Program-specific coursework reinforces the importance of ethical behavior in students' future professional lives.

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 expecting 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.

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 12 credit hours which are applicable toward a degree and contribute to a student's GPA.

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.

The transfer agreements are too numerous and detailed to include in this catalog, and new agreements are negotiated each year. All transfer agreements are on file 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 <https://www.sunyjcc.edu/experience/transfer-career>.

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 Alfred State and the SUNY College of Environmental Science and Forestry. 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 2021, 51% were taught by full-time faculty. The other 49% were taught by adjunct faculty.

Graduate Job Placement

A total of 69% of 2020-21 JCC graduates with Associate in Applied Science degrees responding to a survey indicated they were employed full-time. Of those responding, 75% said their current occupation is highly related to their JCC degree area and 83% said JCC prepared them for their positions in the workforce (64% indicated "very well," 19% noted "adequately").

In the same survey, 100% of full-time transfer students responded that JCC prepared them for continuing their education. Of the respondents, 59% indicated JCC had prepared them "very well" and 41% said "adequately." Also, 77% of the full-time transfer students are studying in a program highly 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: Concurrent Enrollment Programs

As part of its College Connections program, JCC offers courses in nearly 40 area high schools. Students who qualify for the program are able to choose from 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. Courses are offered in high schools throughout Chautauqua, Cattaraugus, and Allegany counties, and some are available over the BOCES 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 details, visit www.sunyjcc.edu/collegeconnections.

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.

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 Student Services Center on the Cattaraugus County Campus. The list is also available online at <https://clep.collegeboard.org>. Information on the exact number of credits that may be earned under CLEP and their transferability is also available from these offices.

Honors Program

JCC's Honors Program provides challenging curriculum, supportive services, and special enrichment opportunities for highly motivated students who have demonstrated their academic ability. Honors students enroll in special honors-designated courses, engage in co-curricular activities, and complete projects that synthesize academic and real-world experiences. Students who complete the honors program requirements receive an honors citation on their transcripts along with other special graduation recognition and student privileges.

Honors courses are developed by faculty who are dedicated to providing additional rigor and support for honor students. The courses must have the following attributes: a focus on greater depth and breadth of subject matter; an interdisciplinary approach; strong attention to writing and critical thinking; and a strong focus on values and ethics.

New students with a 90% high school average who are eligible for MAT 1540 are eligible for the Honors Program. Returning students who are eligible to take a college-level English course without supports and MAT 1540 and have a GPA of 3.5 or better after 12 credit hours are honors eligible. To remain in the program, a student must earn a cumulative grade point average of 3.0 or better.

To earn JCC's honors citation, students must successfully complete a three-credit hour honors symposium course as well as two one-credit hour honors project courses. The symposium courses allow students to approach a global topic from diverse perspectives. Continuing and prospective honors students are encouraged to visit [sunyjcc.edu/academics/honors-program](https://www.sunyjcc.edu/academics/honors-program) for current course offerings.

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.

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 the academic program listings page to determine which programs are available fully online.

Online courses are available in over 25 discipline areas. Students do not need to be enrolled in a degree program to take online courses. For more information regarding online courses, visit [sunyjcc.edu/online](https://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.

Independent Study Courses

Students who want to participate in an independent study project must make arrangements directly with a faculty member who agrees to serve as their 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 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

Courses which cross the normal boundary lines between disciplines are listed under the common heading of Interdisciplinary Studies (INT).

Global Learning and Study Abroad

JCC students have the opportunity to study abroad in 27 countries for a full semester or summer sessions 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. Programs consist of courses taken at a college or university in the host country. Credit hours earned vary by program and sessions.

Each year, JCC also offers credit-bearing courses that include short-term, faculty-led study abroad experiences. Recent offerings have provided students with opportunities to travel to Belgium, England, Guatemala, Italy, Japan, and Spain. Students can also enroll in credit-bearing, semester-long or summer internships in China, Ireland, Guatemala, Japan, and Spain.

For additional information, visit the global learning office or explore opportunities at <https://www.sunyjcc.edu/experience/academic-opportunities/study-abroad>.

Applied Learning

Many applied learning opportunities are available to students who wish to acquire work experience related to a particular field of study while attending JCC. These experiences allow students to apply learning from previous coursework in real world settings while pursuing learning objectives through both work and reflection.

Students who have completed at least 12 college-level credits with a GPA of 2.0 or better are eligible to apply for credit-bearing internships. Some internships have additional requirements. While some certificate and degree programs require internships, students in other programs may opt to complete an internship to gain valuable work experience or explore career options. A student must fulfill 45 hours of work for each credit awarded.

Each internship is based on learning objectives defined within a learning contract created jointly by the student, a faculty supervisor, and a host business or agency representative. Internships with non-profit organizations are often described as service learning and are most often unpaid. Placements with for-profit organizations may be paid or unpaid.

Students should select applied learning experiences based on their transfer and career plans and discussion with their JCC academic advisors. Students who wish to arrange an applied learning experience should speak to a member of JCC's applied learning staff or a dean and/or designated faculty of the specific academic field.

JCC also offers non-credit applied learning experiences through career mentoring, job shadowing, and workplace tours.

For additional information, including listings of available internships, visit <https://www.sunyjcc.edu/support/career-services/internships>.

Life Experience Credit Assessment

JCC believes that valuable and meaningful learning takes place for individuals in their personal worlds. 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.

Additional information is available at the Counseling and Career Center on the Jamestown and Cattaraugus County campuses and at www.sunyjcc.edu

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: Language, Literature, & Writing, Liberal Arts and Sciences: Social Sciences, 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 45 credit hours of study must be taken in the liberal arts and sciences. 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, homeland security, human services, individual studies, Liberal Arts & Sciences: Education, Liberal Arts & Sciences: Math/Science, media arts, physical education studies, and sport management.

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. The general degree requirements for the A.S. degrees are outlined in the program sections of this catalog.

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

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, early childhood, human services, individual studies, information technology, mechanical technology, medical office technology, office technology, nursing, occupational therapy assistant, sport management 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. 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 and Career Center.

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.

Accreditation

Jamestown Community College is an accredited institution and a member of the Middle States Commission on Higher Education (MSCHE) www.msche.org. Jamestown Community College's accreditation status is accreditation reaffirmed. The Commission's most recent action on the institution's accreditation status in 2016 was to reaffirm accreditation. MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA). JCC's 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.

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 and specific program 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.
(A minimum of 30 credits must be earned from JCC.)
- Complete graduation application.

REQUIREMENT	DEGREE		
	ASSOCIATE IN ARTS	ASSOCIATE IN SCIENCE	ASSOCIATE IN APPLIED SCIENCE
Liberal Arts & Sciences (NY State Education Department)	Minimum of 45 credits in any category.	Minimum of 30 credits in any category.	Minimum of 20 credits in any category.
SUNY General Education (SUNY)* Minimum of 30 credits in at least 7 of the 10 categories. <ul style="list-style-type: none"> • Math (MATH) (required) • Diversity: Equity, Inclusion, and Social Justice (required) • Natural Sciences (NSCI) (required) • Social Sciences (SOCS) • US History & Civic Engagement • World History & Global Awareness • Humanities (HUMN) • Arts (ARTS) • World Languages (FLAN) • Communication; Written & Oral (required) 	X	X	Not applicable
JCC Essential Requirements Level 1 - Inquire <ul style="list-style-type: none"> • INT 1555** (Inquiry Course) or an approved alternative inquiry course • ENG 1510 (English Composition I) Level 2 – Grow <i>(Individual courses may not be used to fulfill more than one Level 2 requirement.)</i> <ul style="list-style-type: none"> • ENG 1530 (English Composition II) • College-Level Mathematics • SUNY Natural Sciences (Scientific Reasoning) • SUNY Social Sciences (Scientific Reasoning) • Cultural Understanding Level 3 - Connect <ul style="list-style-type: none"> • Applied Learning** • Global Perspectives • Diversity Additional Competencies <ul style="list-style-type: none"> • Critical Thinking • Information Literacy • Technological Competency • Values & Ethical Reasoning 	X	X	X

ACADEMIC INFORMATION

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

** Effective for students who matriculate in a program for the first time beginning fall 2020 or thereafter.

Certificate requirements are specific to each program and are defined in the following pages.

COURSE INFORMATION

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.

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 those 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, CHI, 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 a humanities, but rather as career and/or electives. Current humanities courses include but are not limited to:

ARA 1510	ART 2570	CMM 1710	DAN 1570	ENG 2560	ENG 2850	HMT 2540	PHL 1200	REL 1530	SPA 2560
ARA 1520	ART 2590	CMM 1750	EDU 2650	ENG 2580	ENG 2870	INE 2730	PHL 1510	REL 2570	SPA 2600
ART 1500	ART 2740	CMM 2500	ENG 1510	ENG 2590	ENG 2890	INT 1750	PHL 1570	REL 2580	SPT 2520
ART 1530	ART 2800	CMM 2510	ENG 1530	ENG 2610	FRE 1510	LDR 1660	PHL 2550	RUS 1510	SPT 2530
ART 1540	ASL 1510	CMM 2530	ENG 1540	ENG 2620	FRE 1520	MUS 1510	PHL 2570	RUS 2560	THE 1510
ART 1550	ASL 1520	CMM 2570	ENG 1580	ENG 2650	FRE 2510	MUS 1530	PHL 2610	SPA 1500	THE 1520
ART 1560	BUS 1660	CMM 2600	ENG 2440	ENG 2660	FRE 2520	MUS 1570	PHL 2630	SPA 1510	THE 1630
ART 1670	CHI 1510	CMM 2610	ENG 2510	ENG 2730	GLS 1500	MUS 1580	PHL 2650	SPA 1520	
ART 1730	CMM 1510	CMM 2840	ENG 2520	ENG 2740	GLS 2500	MUS 1590	PHL 2720	SPA 1600	
ART 1740	CMM 1610	DAN 1510	ENG 2540	ENG 2830	HMT 1200	MUS 2570	REL 1510	SPA 2510	
ART 1750	CMM 1630	DAN 1530	ENG 2550	ENG 2840	HMT 2530	MUS 2580	REL 1520	SPA 2550	

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. Current mathematics and sciences courses include but are not limited to:

AST 1510	BIO 1560	BIO 2550	BIO 2810	CRI 2540	CSC 2330	ENR 2510	INT 2800	MAT 1710	PHY 1710
BIO 1500	BIO 1570	BIO 2560	BIO 2820	CSC 1510	CSC 2410	ENR 2550	MAT 1220	MAT 1720	PHY 2510
BIO 1510	BIO 1575	BIO 2570	BIO 2830	CSC 1520	CSC 2450	ENR 2560	MAT 1250	MAT 2650	PHY 2710
BIO 1515	BIO 1580	BIO 2600	BIO 2840	CSC 1530	CSC 2510	ENR 2580	MAT 1500	MAT 2670	PHY 2720
BIO 1520	BIO 1820	BIO 2620	CHE 1500	CSC 1570	CSC 2540	ENR 2740	MAT 1540	MAT 2680	
BIO 1525	BIO 1830	BIO 2660	CHE 1530	CSC 1580	CSC 2650	GLG 1510	MAT 1590	MET 1510	
BIO 1540	BIO 2510	BIO 2650	CHE 1550	CSC 1590	CSC 2660	GLG 1520	MAT 1600	PHY 1500	
BIO 1550	BIO 2520	BIO 2670	CHE 1560	CSC 1600	CSC 2670	GLG 1550	MAT 1630	PHY 1510	
BIO 1551	BIO 2531	BIO 2760	CHE 2530	CSC 1610	CSC 2680	GLG 1740	MAT 1640	PHY 1610	
BIO 1552	BIO 2532	BIO 2800	CHE 2540	CSC 1720	ENR 1560	GLG 1810	MAT 1670	PHY 1620	

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. Current social sciences courses include but are not limited to:

ANT 1510	ANT 2570	ECO 1530	HIS 1510	HIS 2570	LDR 1660	POL 2860	PSY 2520	PSY 2580	SOC 2510
ANT 1520	ANT 2590	ECO 2610	HIS 1520	HIS 2590	POL 1510	PSY 1510	PSY 2530	PSY 2600	SOC 2520
ANT 1530	ANT 2600	ECO 2620	HIS 1530	HIS 2600	POL 1520	PSY 1550	PSY 2540	PSY 2710	SOC 2540
ANT 2510	BUS 1650	GEO 1520	HIS 1540	HIS 2610	POL 1550	PSY 1610	PSY 2550	REL 1530	SOC 2560
ANT 2520	CRI 1510	GLS 1500	HIS 2100	HUM 1660	POL 2530	PSY 2500	PSY 2560	SOC 1510	SOC 2580
ANT 2560	CRI 1520	GLS 2500	HIS 2560	HUS 2370	POL 2570	PSY 2510	PSY 2570	SOC 1550	SOC 2590
	CRI 2570								SOC 2600
									SPT 1320

Career and/or Electives

In general, courses in Aviation (AVN), Business (BUS), Education (EDU), Electricity (ELC), Entrepreneurship (ENT), Health Information Technology (HIT), Human Development (HUM), Human Services (HUS), Library Science (LIB), Mechanical Technology (MCT), Nursing (NUR), Occupational Therapy (OTA), Physical Education (PHE), Sport Management, 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. Current career and/or elective courses include:

ANT 2010	AVN 1350	BUS 2550	CRI 1690	EDU 1260	HIT 2450	MCT 1300	MUS 1930	OTA 1620	PSY 2010
ANT 2020	AVN 2100	BUS 2570	CRI 1710	EDU 1290	HIT 2460	MCT 1340	MUS 1940	OTA 1630	SPA 1530
ART 1510	AVN 2140	BUS 2580	CRI 1720	EDU 1300	HUM 1300	MCT 1380	MUS 2520	OTA 1640	SPA 2010
ART 1520	AVN 2150	BUS 2590	CRI 1730	EDU 1310	HUM 1310	MCT 2010	MUS 2610	OTA 1650	SPT 1300
ART 1570	AVN 2200	BUS 2630	CRI 2200	EDU 1510	HUM 1510	MCT 2020	MUS 2620	OTA 1700	SPT 1310
ART 1590	AVN 2250	CED 1050	CRI 2250	EDU 2150	HUM 1550	MCT 2230	MUS 2630	OTA 2520	SPT 1330
ART 1600	AVN 2350	CED 1060	CRI 2260	EDU 2210	HUS 1210	MCT 2270	MUS 2640	OTA 2540	SPT 1350
ART 1611	AVN 2450	CED 2050	CRI 2270	EDU 2220	HUS 1220	MCT 2280	MUS 2720	OTA 2550	SPT 1870
ART 1612	BIO 2010	CED 2060	CRI 2280	EDU 2340	HUS 1280	MCT 2300	MUS 2740	OTA 2560	SPT 2010
ART 1613	BIO 2012	CMM 1700	CRI 2330	EDU 2440	HUS 1310	MCT 2340	MUS 2750	OTA 2570	SPT 2330
ART 1620	BIO 2013	CMM 2100	CRI 2370	EDU 2450	HUS 1410	MCT 2380	MUS 2760	OTA 2620	THE 1550
ART 1621	BIO 2020	CMM 2560	CRI 2380	EDU 2460	HUS 2210	MCT 2410	MUS 2830	OTA 2700	THE 1570
ART 1622	BIO 2022	CMM 2561	CRI 2420	EDU 2500	HUS 2215	MCT 2420	MUS 2840	OTA 2720	THE 1620
ART 1623	BIO 2023	CMM 2562	CRI 2470	EDU 2510	HUS 2220	MCT 2410	MUS 2850	PHE 1300	THE 1621
ART 2010	BUS 1220	CMM 2563	CRI 2510	ELC 1200	HUS 2230	MUS 1520	MUS 2860	PHE 1310	THE 1622
ART 2510	BUS 1320	CMM 2564	CRI 2530	ELC 1220	HUS 2250	MUS 1610	MUS 2870	PHE 1480	THE 1623
ART 2520	BUS 1410	CMM 2565	CRI 2520	ELC 1230	HUS 2340	MUS 1620	MUS 2880	PHE 1501	THE 2010
ART 2530	BUS 1420	CRI 1290	CRI 2550	ENG 2010	HUS 2350	MUS 1630	MUS 2890	PHE 1510	THE 2570
ART 2600	BUS 1430	CRI 1310	CRI 2560	ENR 2010	HUS 2380	MUS 1670	MUS 2930	PHE 1520	WLD 1200
ART 2610	BUS 1500	CRI 1320	CRI 2580	ENR 2020	HUS 2400	MUS 1680	MUS 2940	PHE 1530	WLD 1240
ART 2611	BUS 1510	CRI 1350	CRI 2610	ENT 1440	HUS 2430	MUS 1690	NUR 1510	PHE 1540	WLD 1350
ART 2612	BUS 1520	CRI 1370	CRI 2620	ENT 1450	INT 1500	MUS 1700	NUR 1520	PHE 1550	WLD 1360
ART 2613	BUS 1610	CRI 1390	CRI 2640	ENT 1460	INT 1520	MUS 1710	NUR 1540	PHE 1560	WLD 1370
ART 2620	BUS 1700	CRI 1400	CRI 2650	ENT 1470	INT 2600	MUS 1720	NUR 2050	PHE 1590	WLD 2250
ART 2621	BUS 2010	CRI 1420	CRI 2660	ENT 1480	LIB 1500	MUS 1730	NUR 2060	PHE 1610	WLD 2260
ART 2622	BUS 2020	CRI 1430	CRI 2670	ENT 1490	LIB 1600	MUS 1740	NUR 2350	PHE 1620	WLD 2270
ART 2623	BUS 2270	CRI 1440	CRI 2680	GLS 2010	LIB 2010	MUS 1750	NUR 2360	PHE 1630	WLD 2350
ART 2750	BUS 2320	CRI 1550	CSC 1560	HCR 1450	LDR 1300	MUS 1760	NUR 2510	PHE 1640	WLD 2360
AVN 1100	BUS 2420	CRI 1600	CSC 1680	HCR 1460	MAE 2510	MUS 1830	NUR 2520	PHE 1650	WLD 2370
AVN 1140	BUS 2430	CRI 1560	CSC 1760	HIS 2010	MAT 2010	MUS 1840	NUR 2550	PHE 1660	WLD 2450
AVN 1150	BUS 2440	CRI 1610	CSC 2010	HIT 1410	MCT 1210	MUS 1850	NUR 2560	PHE 1670	
AVN 1200	BUS 2480	CRI 1630	CSC 2020	HIT 1420	MCT 1240	MUS 1860	NUR 2970	PHE 1680	
AVN 1240	BUS 2510	CRI 1650	CSC 2470	HIT 1460	MCT 1250	MUS 1870	OTA 1510	PHE 2500	
AVN 1250	BUS 2530	CRI 1660	CSC 2480	HIT 2430	MCT 1270	MUS 1880	OTA 1520	PHE 2880	
AVN 1340	BUS 2540	CRI 1670	EDU 1250	HIT 2440	MCT 1280	MUS 1890	OTA 1530	PST 1020	

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). 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: DEGREES

ASSOCIATE IN SCIENCE

Addictions Counseling

curriculum code: 2050 | HEGIS code: 5506
minimum credit hours required: 60

This degree program is designed for students who are interested in future employment within the field of alcohol, substance abuse, and other addiction treatment. Graduates of the program will fulfill New York State's educational requirements for a CASAC-TR license. Students in the program will develop knowledge of the nature and history of addiction and chemical dependency, and learn skills needed for intake assessment, treatment planning, case management, individual and group counseling. Students will participate in a fieldwork experience which provides 135 hours of practical, supervised field experience in an addictions agency. **Program is also available mostly online.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I Mathematics course (SUNY)	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences BIO 1510: Health Science	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2560: Abnormal Behavior	3	Cultural Understanding	SOSC	S
HUS 2215: Field Placement I: Addictions	5	Applied Learning		
HUS 1210: Introduction to Human Services	3			
HUS 1280: Family Systems	3			
HUS 1310: Studies in Alcohol Chemical Dependency	3			
HUS 1410: Generalist Practice Skills	3			
HUS 2230: Interviewing and Counseling	3			
HUS 2400: Ethics/Issues-Addiction Services	3			
HUS 2430: Alcohol/Chemical Dependency Treatment Methods	3			
PSY 2540: Interpersonal Group Dynamics	3		SOSC	S
Open Electives Up to 9 credits may need to be SUNY Gen ed category-specific and may need to fulfill JCC Essentials requirements in Global Perspectives and Diversity (DIVE).	11	Global Perspectives & Diversity	(2 categories, to include DIVE) [9 credits]	[7 credits]
TOTAL CREDITS: 60			30	30

ASSOCIATE IN APPLIED SCIENCE

Administrative Professional

curriculum code: 2476 | HEGIS code: 5005
minimum credit hours required: 60

This degree program provides the student with the skills necessary to prepare for employment in today's technology-enhanced office settings. 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 emphasizes written communication in a variety of formats using technologically advanced equipment, financial tasks, management of records and files, and the use of a variety of software packages. The ability to develop decision-making and problem-solving skills will be stressed throughout the program. Upon completion of the program, students will be able to enter the workplace or transfer credits to a four-year institution. **Program is also available online.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences BIO 1510: Health Science	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
BUS 2420: Professional Development/ Internship	5	Applied Learning		
BUS 1360: Keyboarding/Word Processing	3			
BUS 1420: Office Procedures	3			
BUS 1500: Introduction to Business	3			
BUS 2320: Word Processing Production	4			
BUS 2550: Marketing or BUS 2570: Principles of Management or BUS 2580: Management & Organizational Behavior	3			
CSC 1560: Computer Application Software I	4			
Program Core Electives choose any BUS course	9			
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	9	Global Perspectives, Cultural Understanding, & Diversity	[5 credits, to include DIVE]	[3 credits]
TOTAL CREDITS: 60			20	20

ASSOCIATE IN SCIENCE

Business-Business Administration

curriculum code: 0671 | HEGIS code: 5004
 minimum credit hours required: 60

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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Electives - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
ECO 2620: Microeconomic Principles	3	SUNY Social Science	SOSC	S
ECO 2610: Macroeconomic Principles	3	Global Perspectives	SOSC	S
BUS 1520: Principles of Managerial Accounting	4	Applied Learning		
BUS 1510: Principles of Financial Accounting	4			
CSC 1560: Computer App Software I	4			
MAT 1590: College Algebra and Trigonometry (or higher)	4		MATH	N
Program Core Electives choose any additional BUS course- 6 credits must be numbered 2500 or higher	9			
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	15	Global Perspectives, Cultural Understanding, & Diversity	"(2 categories, to include DIVE) [5 credits]"	[7 credits]
TOTAL CREDITS: 60			30	30

ASSOCIATE IN APPLIED SCIENCE

Business-Business Administration

curriculum code: 0671 | 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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Electives - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
BUS 1520: Principles of Managerial Accounting	4	Applied Learning		
BUS 1510: Principles of Financial Accounting	4			
BUS 2530: Business Law I or BUS 2540: Business Law II	3			
BUS 2580: Management and Organizational Behavior	3			
CSC 1560: Computer App Software I	4			
Program Core Electives [3 credits must be numbered 2500 or higher] BUS 1430, BUS 1500, BUS 1610, BUS 1650, BUS 1700, BUS 2010, BUS 2270, BUS 2430, BUS 2440, BUS 2510, BUS 2550, BUS 2570, BUS 2630, CMM 1610, CMM 1700, ECO 1530, LDR 1660	12			
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	13	Global Perspectives, Cultural Understanding, & Diversity	"[5 credits, to include DIVE]"	[3 credits]
TOTAL CREDITS: 60			20	20

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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CMM 1610: Public Speaking	3	Applied Learning	ARTS	H
CMM 1510: Introduction to Communication	3		HUMN	H
CMM 1750: Rhetoric of Vision and Sound	3		HUMN	H
CMM 2500: Interpersonal Communication	3		DIVE	H
CMM 2610: Mass Communication & Media Literacy	3			H
Social Sciences Electives	6	(Global Perspectives, Cultural Understanding, & Diversity)	SOSC	S
Humanities E lective choose either CMM 2530: Media Writing, or ENG 2740: Newswriting & Editing, or ENG 2840: Film Study & Appreciation, or ENG 2890: Creative Nonfiction	3			H
Program Core Elective choose any CMM course beyond the Program Core Requirements, or BUS 2550, BUS 2570, BUS 2580, BUS 2630, ENG 2540, LDR 1660, PHL 1510, PHL 1570, PHL 2610, PHL 2630, PSY 2530, PSY 2540, SOC 2510, SPT 1350	12			
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	7	(Global Perspectives & Cultural Understanding)		
TOTAL CREDITS: 60			30	41

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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1710: Calculus/Analytic Geometry I	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CSC 1570: Programming Concepts & Applications	3			N
CSC 1580: Computer Hardware & System Software	3			N
CSC 1590: Computer Programming	4			N
CSC 1600: Data Structures	4			N
CSC 2670: Computer Organization	4		MATH	N
CSC 2510: Introduction to Networks	3	Applied Learning		N
MAT 1670: Discrete Mathematics	3		MATH	N
Program Core Elective choose any additional CSC course(s) beyond the Program Core Requirements, with at least 1 credit numbered 2500 or higher	3			N
Open Electives up to 7 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements	15	Global Perspectives, Cultural Understanding, & Diversity	"(2 categories, to include DIVE) [7 credits]"	
TOTAL CREDITS: 60			30	41

IMPORTANT POINTS:

- Students are initially placed in a mathematics course based on their mathematics background. Students who do not place in college-level mathematics may need more than two years to complete this degree.
- Several upper-level computer science courses are only offered online.

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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: Introduction to Psychology or SOC 1510: Introduction to Sociology	3	SUNY Social Science	SOSC	S
Social Sciences Elective choose a Cultural Understanding course	3	Cultural Understanding	SOSC	S
CRI 1510: Introduction to Criminal Justice	3	Applied Learning		S
CRI 2550: Ethics in Criminal Justice	3			
Program Core Electives* choose any CRI course not already required, or SOC 2560: Criminology	15			
Open Electives up to 12 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	19	Global Perspectives, Cultural Understanding, & Diversity	"(2 categories, to include DIVE) [12 credits]"	[7 credits]
TOTAL CREDITS: 60			30	30

IMPORTANT POINT:

- At least 9 credits of the program core electives must be 2000-level and at least two of the following courses must be taken: CRI 1320, CRI 1520, CRI 2530, SOC 2560

ASSOCIATE IN APPLIED SCIENCE

Criminal Justice

curriculum code: 0640 | HEGIS code: 5505
minimum credit hours required: 60

This degree program provides students with the occupational skills and background necessary for entering employment into a variety of criminal justice professions such as law enforcement on the local and state level, corrections, and private sector investigative and public safety occupations. This also provides students with a broader understanding of human nature through general education.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: Introduction to Psychology or SOC 1510: Introduction to Sociology	3	SUNY Social Science	SOSC	S
CRI 1510: Introduction to Criminal Justice	3	Applied Learning		S
CRI 1290: Physical Fitness for Criminal Justice	2			
CRI 1320: Introduction to Law Enforcement or CRI 1520: Intro to Corrections	3			
CRI 1420: Report Writing in Criminal Justice	3			
CRI 2550: Ethics in Criminal Justice	3			
CRI 2370: Criminal Investigations	3			
CRI 2330: Criminal Procedural Law or CRI 2530: Criminal Law	3			
Social Sciences Elective	3			
Program Core Electives choose any additional CRI course beyond the Program Core Requirements	6			
Open Electives up to 5 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	14	Global Perspectives, Cultural Understanding, & Diversity	[5 credits, to include DIVE]	
TOTAL CREDITS: 60			20	20

IMPORTANT POINTS:

- Credit for criminal justice courses may be given to students who have successfully completed an accredited Basic Recruit School for Police. Arrangements for this corresponding credit must be made through the criminal justice coordinator or admissions director.

ASSOCIATE IN SCIENCE

Cybersecurity

curriculum code: 2595 | HEGIS code: 5199
minimum credit hours required: 60

Cybersecurity has become a major concern for organizations and individuals who utilize computers. This program is designed to provide students with an understanding of computers, computer networks and the vulnerability of those systems, and methods for addressing cyber threats. Students will study a variety of tools, policies, and procedures designed to address vulnerabilities and minimize cyber threats. Students will be prepared to complete industry certification in computer hardware and system software, networking, and security. This degree program is designed for students who plan to transfer to a four-year college or university to major in cybersecurity or computer science.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective (MAT 1590 or higher)	7	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CSC 2510: Introduction to Networks	3	Applied Learning		N
CSC 1520: Introduction to Cybersecurity	3			N
CSC 1570: Programming Concepts & Applications	3			N
CSC 1580: Computer Hardware & System Software	3			N
CSC 1590: Computer Programming	4			N
CSC 1600: Data Structures	4			
CSC 2480: Advanced Networking & Security	3			
CSC 2660: Database Management	4			
CSC 2670: Computer Organization	4		MATH	
Open Electives up to 7 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	8	Global Perspectives, Cultural Understanding, & Diversity	"(2 categories, to include DIVE) [7 credits]" "	
TOTAL CREDITS: 60			30	37

IMPORTANT POINTS:

- Students are initially placed in a mathematics course based on their mathematics background. Students that do not place in college-level mathematics may need more than two years to complete this degree.
- Work with your advisor to determine the MAT courses required at your selected transfer school. MAT 1670 and MAT 1710 are required for Computer Science transfer at SUNY schools. MAT 1720 may also be required at some transfer institutions.
- Several upper-level computer science courses are only offered online.
- Additional fees will be required if students choose to take industry certification tests such as CompTIA A+, Network +, and Security +. Additional fees will be required if students choose to take industry certification tests such as CompTIA A+, Network +, and Security +.

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 successful early childhood professional and is directed toward students planning 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 program provides opportunities for those already employed in child care facilities, 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 teach and develop programs, cultivate 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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2520: Child Development	3	Cultural Understanding	SOSC	S
EDU 2460: Field Experience - Exceptional Child	1	Global Perspectives		
EDU 2450: Exceptional Children	3	Diversity	DIVE	
EDU 1290: Introduction to Early Childhood Education Care	3			
EDU 1250: Early Childhood Development	1			
EDU 1260: Health, Safety, & Nutrition in Early Childhood Development	3			
EDU 1300: Observation & Guidance of Young Children	3			
EDU 1310: Family, School, & Community Relations	3			
EDU 2150: Infant/Toddler Development & Education	3			
EDU 2210: Field Placement I - Education	4			
EDU 2220: Field Placement II - Education	3			
EDU 2440: Children's Literature	3			
EDU 2510: Philosophy and Techniques of Early Childhood Education	3			
Social Sciences Elective	3			S
Open Electives up to 2 credits may need to be SUNY Gen ed specific and may need to fill JCC Essentials Diversity requirements.	4		[2 credits]	
TOTAL CREDITS: 60			20	23

IMPORTANT POINTS:

- Individuals who have earned the Child Development Associate (CDA) will receive these 11 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 2210: Field Placement I, and approval of the application is required for the filed placement to commence. EDU 1290 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.

ASSOCIATE IN SCIENCE

Engineering Science

curriculum code: 0530 | HEGIS code: 5609
minimum credit hours required: 66

This degree program is designed to prepare students to transfer to a four-year college or university to earn a bachelor's degree in engineering. This degree program provides appropriate preparation for continued study toward careers in mechanical, chemical, civil, industrial, ceramic, aerospace, nuclear, environmental, or metallurgical engineering. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
ENR 1560: Introduction to Engineering & Engineering Design	4	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1710: Calculus and Analytic Geometry I	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1550: General Chemistry I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
ENR/PHY 2510: Thermodynamics	4	Applied Learning	NSCI	N
CSC 1610: Computer Programming for Scientists & Engineers	3			N
ENR 2550: Mechanics - Statics	3			N
ENR 2560: Mechanics - Dynamics	3			N
ENR 2740: Analysis of Linear Electrical Circuits	3			N
MAT 1720: Calculus and Analytic Geometry II	4		MATH	N
MAT 2650: Calculus and Analytic Geometry III	4		MATH	N
MAT 2680: Ordinary Differential Equations	3		MATH	N
PHY 1710: Analytical Physics I	4		NSCI	N
PHY 2710: Analytical Physics II	4		NSCI	N
Program Core Electives choose 2 from the following: MAT 2670, ENR 2580, CHE 1560, CHE 2530	7			N
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	Global Perspectives, Cultural Understanding, & Diversity	DIVE	X
TOTAL CREDITS: 66			43	66

IMPORTANT POINTS:

- Students in this program are required to fill only 5 of the 10 SUNY Gen Ed categories with a total of 30 credits. The 5 categories must include Communication (Written & Oral), DEISJ, Mathematics, and Natural Sciences. All other programs require 7 of 10 categories and 30 credits.
- Choosing electives carefully, with the help of an advisor, students can complete a focus in aerospace/mechanical, biomedical/chemical, civil, environmental, or industrial engineering.

ASSOCIATE IN SCIENCE

Environmental Science

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

This degree program 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. Students are prepared to comprehend and critically evaluate contemporary environmental problems at the intersection of nature, human institutions, and scientific study. The program also provides the interdisciplinary explorations and scientific tools and technologies essential for addressing the emerging environmental challenges and opportunities of today's world. Students are engaged in exploring the ethical dimensions of decisions and actions associated with being responsible local and global citizens, and an understanding that a more sustainable world will nurture healthier ecosystems, vibrant human communities, and stronger economies. Students are also prepared 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. This degree program meets the academic and professional needs of students seeking careers related to environmental science and other disciplines related to the environmental health of the planet.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1600: Precalculus (or higher)	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1550: General Chemistry I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
ECO 1530: Contemporary Economic Problems or ECO 2610: Macroeconomic Principles or ECO 2620: Macroeconomic Principles	3	SUNY Social Science	SOSC	S
BIO 2550: Conservation Biology	3	Global Perspectives	NSCI	N
BIO 1552: Introduction to Environmental Science - LAB	1	Applied Learning	NSCI	N
BIO 1551: Introduction to Environmental Science	3		NSCI	N
BIO 1570: Principles of Cell & Molecular Biology	4		NSCI	N
BIO 1580: Principles of Ecology & Evolution	4		NSCI	N
CHE 1560: General Chemistry II	4		NSCI	N
Program Core Electives choose from: BIO 1830, BIO 2013*, BIO 2023*, BIO 2531, BIO 2532, BIO 2560, BIO/PHL 2570, BIO 2600, BIO 2650, BIO 2660, BIO 2620, BIO 2670, BIO 2830, CHE 2530, CHE 2540, GLG 1810, GLG 1510, GLG 1550, MAT 1540, MAT 1710, PHY I (1610 or 1710), PHY II (1620 or 2710)	12			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	10	Cultural Understanding & Diversity	"(2 categories, to include DIVE) "	
TOTAL CREDITS: 60			36	38

IMPORTANT POINTS:

- Internships do not count towards the required number of Liberal Arts and Sciences credits.

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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
MUS 1730: Intro to Music Technology	3	Applied Learning	ARTS	
MUS 1510: Music Appreciation	3		ARTS	H
MUS 1570: Music Theory I	3		ARTS	H
MUS 1580: Music Theory II	3			H
MUS 1610,1620,2610,2620: Applied Music: Private Lessons	4			
MUS 1670: Beginning Piano	3		ARTS	H
MUS 1690: Piano II	3		ARTS	
MUS 1930: Aural Skills I	2			
MUS 1940: Aural Skills II	2			
MUS 2570: Music Theory III	3			H
MUS 2930: Aural Skills III	2			
Music Ensembles	8			
Social Sciences Elective	3	(Global Perspectives, Cultural Understanding, & Diversity)	[1 category, to include DIVE]	
Program Core Electives choose from: MUS 1590, MUS 1630, MUS 1680, MUS 1700, MUS 1710, MUS 1890, MUS 2630, MUS 2640, MUS 2580, MUS 2890, MUS 2940	3			
Open Electives	1			
TOTAL CREDITS: 63				

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 covering 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 (General)

curriculum code: 1445 | HEGIS code: 5610
minimum credit hours required: 60

This degree program includes courses in design, drawing, painting, sculpture, ceramics, photography, video, animation, art history and digital arts. Introductory courses provide students with engaging hands-on experiences, while integrating technical skills and knowledge of contemporary art. Later coursework will foster opportunities for students to refine skills while contemplating ideas and developing a body of work. The art and design facilities, technology labs and access to the Weeks Gallery at JCC will provide avenues for students to hone their skills, experiment with ideas, and become knowledgeable about creative processes.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
ART 1560 Art in Culture II	3	Cultural Understanding	ARTS	H
ART 1540: 3-D Design, Concepts, Materials	3	Applied Learning	ARTS	H
ART 1510: Drawing I	3		ARTS	
ART 1520: Drawing II	3		ARTS	
ART 1530: 2-D Design & Color	3		ARTS	H
ART 1550: Art in Culture I	3			H
ART 1590: Ceramics I	3		ARTS	
ART 1670: Photo I: Digital	3		ARTS	H
ART 1730: Graphic Design I	3		ARTS	H
ART 2510: Painting I	3		ARTS	
ART 2560: Art & Design: Portfolio & Professionalism	4		ARTS	H
Program Core Electives choose from: ART 1500, ART 1610-1621, ART 2610-2621, ART 1740, ART 1750, ART 2540, ART 2570, ART 2600, ART 2624, ART 2550, ART Internships	6			
Open Electives (ART 1500 is recommended) up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	Global Perspectives & Diversity	(1 category, to include DIVE)	
TOTAL CREDITS: 60			49	38

IMPORTANT POINTS:

- Students should consult with their advisor in their choice of program electives to better prepare for transfer or employment.
- The importance of developing a good portfolio of visual art experiences cannot be overstated. Almost all career opportunities will be based on the quality of your portfolio. Students must learn the due date for application and portfolio review from transfer institutions.

ASSOCIATE IN ARTS

Fine Arts: Studio Arts (Graphic Design)

curriculum code: 1445 | HEGIS code: 5610
minimum credit hours required: 60

This degree program includes courses in graphic design, typography and layout, video and sound, animation, drawing, three-dimensional design, and photography. Introductory courses provide students with technical skills and software knowledge to produce engaging visual communication projects. Later coursework will foster opportunities for students to refine skills, create meaningful design, and develop a professional portfolio. The art and design facilities, technical labs, and access to visual resources on campus, such as the Weeks Gallery, will provide students with a solid foundation in design and sought-after skill sets.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
ART 1560: Art in Culture II	3	Cultural Understanding	ARTS	H
ART 1540: 3-D Design, Concepts, Materials	3	Applied Learning	ARTS	H
ART 1510: Drawing I	3		ARTS	
ART 1530: 2-D Design & Color	3		ARTS	H
ART 1550: Art in Culture I	3			H
ART 1670: Photo I: Digital	3		ARTS	H
ART 1730: Graphic Design I	3		ARTS	H
ART 1740: Typography and Layout	3		ARTS	
ART 1750: Graphic Design II	3		ARTS	
ART 2540: 4D Design	3		ARTS	
ART 2560: Art & Design: Portfolio & Professionalism	4		ARTS	H
Program Core Electives choose from: ART 1500, ART 1520, ART 1610-1621, ART 2510, ART 2610-2621, ART 2550, ART 2570, ART Internships	6			
Open Electives (ART 1500 is recommended) up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	Global Perspectives & Diversity	(1 category, to include DIVE)	
TOTAL CREDITS: 60			49	38

IMPORTANT POINTS:

- Students should consult with their advisor in their choice of program electives to better prepare for transfer or employment.
- The importance of developing a good portfolio of visual art experiences cannot be overstated. Almost all career opportunities will be based on the quality of your portfolio. Students must learn the due date for application and portfolio review from transfer institutions.

ASSOCIATE IN ARTS

Global Studies

curriculum code: 2432 | HEGIS code: 5622
minimum credit hours required: 60

This degree program prepares students to operate in an increasingly interconnected world by promoting critical perspectives on the social, cultural, environmental, political, and economic issues and processes associated with globalization. By exposing students to a variety of academic disciplines and world cultures, the program seeks to strengthen needed competencies for continued education in any number of fields, in particular those related to global, international, or cultural studies. The idea that we exist in a complex web of interrelations serves as the core of the program that ultimately aims to foster a sense of responsibility toward the human community and the responsiveness to effect positive change toward a future of peace and conflict management

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
GEO 1520: World Regional Geography	3	SUNY Social Science	SOSC	S
GLS 1500: Introduction to Global Studies	3	Cultural Understanding: Global Perspectives	WHGA	S
GLS 2010: Global Studies Internship	3	Applied Learning		
CMM 2500: Interpersonal Communications	3	Diversity	DIVE	H
HIS 1510: World History before 1500 or HIS 1520: World History since 1500	3		WHGA	S
POL 1520: World Politics	3		WHGA	S
World Language Requirement	6		FLAN	H
Program Core Elective* Cultural & Regional Studies choose from: ANT 1520, ANT/REL 1530, ANT 2520, ANT 2510, ART 1560, CMM 2610, ENG 2510, ENG 2520, ENG 2730, ENG 2600, REL 2580, RUS 2560, SOC 1510, SPA 2560	3			X
Program Core Elective* Institutions & Issues choose from: BIO/PHL 2570, BIO 2620, BUS 1650, ECO 1530, ECO 2610, ECO 2620, POL 2860, ANT/BIO/CMM 2600)	3			X
Program Core Elective* Peace, Justice, & Conflict Management choose from: LDR 1660, PHL 1510, PHL 2630, POL 2530, PSY 2530, SOC 2580, SOC 2520	3			X
Program Core Elective* choose from any of the three categories	3			X
GLS 2500: Global Studies Capstone	3			S
Open Electives recommended- ANT 1520, CMM 1610, PHL 1570, POL 1510, ART 1560, MUS 1510	7			
TOTAL CREDITS: 60			30	50

ASSOCIATE IN APPLIED SCIENCE

Health Information Technology

curriculum code: 1969 | HEGIS code: 5214
 minimum credit hours required: 60

This career program provides students with the skills necessary to prepare for employment in today's medical office/health information departments. The program offers an education that will prepare a student in automated medical office communications, medical terminology, medical coding, healthcare documentation, medical transcription and medical insurance, as well as advancing the implementation and effective management of electronic health records (EHRs). The program also provides a broad background in liberal arts that will add to students' ability to develop decision-making skills. Upon completion of this program, students will be able to enter the job market or transfer to a four-year institution. **Program is also available online.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Biology - Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
BUS 2420: Professional Development	5	Applied Learning		
BUS 1360: Keyboarding/Word Processing	3			
CSC 1560: Computer App Software I	4			
HIT 1410: Medical Terminology	3			
HIT 1420: Health Data Procedures	3			
HIT 1460: Electronic Health Record Management	3			
HIT 2430: Healthcare Doc & Med Transcription	3			
HIT 2440: Medical Coding I (CPT)	4			
HIT 2450: Medical Coding II (IDC-10-CM)	4			
HIT 2460: Health Insurance and Reimbursement	3			
Social Sciences Elective may choose a Cultural Understanding & Global Perspectives course	3	(Cultural Understanding; Global Perspectives, Diversity)	X	S
Open Electives up to 2 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	5	(Cultural Understanding; Global Perspectives, Diversity)	[2 credits, to include DIVE]	
TOTAL CREDITS: 60			20	20

ASSOCIATE IN SCIENCE

Homeland Security

curriculum code: 2060 | HEGIS code: 5505
 minimum credit hours required: 60

This degree program provides students interested in homeland security careers (especially those planning to work in intelligence or state and federal law enforcement positions) with specialized education in this field, preparing them for further study of homeland security or intelligence at four-year institutions.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology or SOC 1510: Introduction to Sociology	3	SUNY Social Science	SOSC	S
CRI 1510: Introduction to Criminal Justice	3	Applied Learning		S
CRI 1560: Homeland Security	3			
CRI 1600: Introduction to Intelligence Studies	3			
CRI 2550: Ethics in Criminal Justice	3			
CRI 2580: Introduction to Terrorism	3			
CRI 2680: The Constitution and Homeland Security	3			
Social Sciences Elective	3	(Cultural Understanding; Global Perspectives, Diversity)	(1-2 categories) [3 credits]	S
Program Core Elective choose any additional CRI course beyond the Program Core Requirements numbered 2000 or higher- CRI 2570, CRI 2610, CRI 2660, and/or CRI 2670 are recommended	6			
Open Electives up to 12 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	16	(Cultural Understanding; Global Perspectives, Diversity)	(0-1 categories) [12 credits]	[7 credits]
TOTAL CREDITS: 60			30	30

ACADEMIC INFORMATION

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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
HUS or EDU 2210: Field Placement I or HUS 2215: Field Placement I: Addictions	5	Applied Learning		
HUS 1210: Introduction to Human Services	3			
HUS 1280: Introduction to Family Systems	3			
HUS 1410: Generalist Practice Skills	3			
HUS 2220: Field Placement II or HUS 2215: Field Placement I: Addictions	5			
HUS 2230: Interviewing and Counseling	3			
Program Core Electives choose any additional HUS course, CRI 1510, CRI 2620, CRI 2650, EDU 1250, EDU 1260, EDU 1290, EDU 1300, EDU 2150, EDU 2440, EDU 2450, EDU 2510, PSY 1550, PSY 1610, PSY 2510, PSY 2520, PSY 2540, PSY 2550, PSY 2560, SOC 2510, and SOC 2580	9			
Social Sciences Elective	3			S
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	9	(Cultural Understanding, Global Perspectives, Diversity)	(2 categories) [5 credits]	
TOTAL CREDITS: 60				

IMPORTANT POINTS:

- The core requirements in this human services program include two field placements. 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 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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
BIO 1500: Human Biology or BIO 1510: Health Science	3-4	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
SOC 1510: Introduction to Sociology	3	Cultural Understanding	SOSC	S
HUS 2210: Field Placement I: Social work or HUS 2215: Field Placement I: Addictions	5	Applied Learning		
HUS 1210: Introduction to Human Services	3			
HUS 1410: Generalist Practice Skills	3			
HUS 2230: Interviewing and Counseling	3			
HUS 2250: Policy and Organization	3			
Program Core Electives choose any additional HUS course, CRI 1510, CRI 2620, CRI 2650, POL 1510, PSY 1550, PSY 1610, PSY 2510, PSY 2520, PSY 2540, PSY 2550, PSY 2560, SOC 2520, SOC 2580, ANT/SOC 2590	6			
Open Electives up to 12 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	16-17	(Cultural Understanding, Global Perspectives, Diversity)	(2 categories) [12 credits]	[10 credits]
TOTAL CREDITS: 60			30	30

IMPORTANT POINTS:

- 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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
Open Electives up to 12 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, Applied Learning, and Diversity requirements.	43	(Cultural Understanding; Global Perspectives, Applied Learning, Diversity)	"DIVE [5 credits]"	[3 credits]
TOTAL CREDITS: 60			20	20

IMPORTANT POINTS:

- Plans for the 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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
Open Electives up to 15 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, Applied Learning, and Diversity requirements.	43	(Cultural Understanding; Global Perspectives, Applied Learning, Diversity)	(2 categories, to include DIVE) [15 credits]"	[13 credits]
TOTAL CREDITS: 60			30	30

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 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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CSC 2450: CIT Capstone	3	Applied Learning		
CSC 1520: Introduction to Cybersecurity	3			
CSC 1530: Introduction to HTML & CSS	3			N
CSC 1570: Programming Concepts and Applications	3			N
CSC 1580: Computer Hardware & System Software	3			N
CSC 2510: Introduction to Networks	3			
Program Core Electives choose from non-required CSC courses above 1510, BUS 1500	13			
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	12	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE) [5 credits]	[4 credits]
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

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, world 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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2550: Psychology of Adolescence	3	Cultural Understanding	SOSC	S
World Language Requirement choose from courses within the ASL, ARA, CHI, FRE, RUS, SPA disciplines	6	Global Perspectives	FLAN	H
EDU 1510: Foundations of Education	3	Applied Learning		
SUNY Gen Ed - US History & Civic Engagement	3		UHS	S
SUNY Gen Ed - World History & Global Awareness	3		WHGA	X
SUNY Gen Ed - Diversity	3		DIVE	X
SUNY Gen Ed - Arts	3		ARTS	H
Program Core Specialization* choose a minimum of 12 credits in a specialization area	12			
Program Core Electives choose any EDU course not already required, MAE 2510, or MAE 2520	6			
Open Electives	1			
TOTAL CREDITS: 60				
			36	35

IMPORTANT POINTS:

- Some courses may meet additional program requirements which may result in additional elective availability.
- Students planning to transfer should work closely with a transfer counselor and an academic advisor.
- 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 1290, 1510, 2150, 2210, 2220, and 2460 all include a field component. The number of field hours varies by course.

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, world 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 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 plan their programs with a transfer counselor and an academic advisor as soon as possible and preferably before beginning their first semester at JCC.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2520: Child Development	3	Cultural Understanding	SOSC	S
World Language Requirement choose from courses within the ASL, ARA, CHI, FRE, RUS, SPA disciplines	6	Global Perspectives	FLAN	H
EDU 1510: Foundations of Education	3	Applied Learning		
SUNY Gen Ed - US History & Civic Engagement	3		UHS	S
SUNY Gen Ed - World History & Global Awareness	3		WHGA	X
SUNY Gen Ed - Diversity	3		DIVE	X
SUNY Gen Ed - Arts	3		ARTS	H
Program Core Specialization* choose a minimum of 12 credits in a specialization area	12			
Program Core Electives choose any EDU course not already required, MAE 2510 or MAE 2520	6			
Open Electives	1			
TOTAL CREDITS: 60			36	35

IMPORTANT POINTS:

- * Some courses may meet additional program requirements which may result in additional elective availability.
- Students planning to transfer should work closely with a transfer counselor and an academic advisor.
- 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 1290, 1510, 2150, 2210, 2220, and 2460 all include a field component. The number of field hours varies by course.

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 plan their programs with a transfer counselor and an academic advisor as soon as possible and preferably before beginning their first semester at JCC.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2520: Child Development	3	Cultural Understanding	SOSC	S
World Language Requirement choose from courses within the ASL, ARA, CHI, FRE, RUS, SPA disciplines	6	Global Perspectives	FLAN	H
EDU 1510: Foundations of Education	3	Applied Learning		
SUNY Gen Ed - US History & Civic Engagement	3		UHS	S
SUNY Gen Ed - World History & Global Awareness	3		WHGA	X
SUNY Gen Ed - Diversity	3		DIVE	X
SUNY Gen Ed - Arts	3		ARTS	H
Program Core Specialization* choose a minimum of 12 credits in a specialization area	12			
Program Core Electives choose any EDU course not already required, MAE 2510 or MAE 2520	6			
Open Electives	1			
TOTAL CREDITS: 60			36	35

IMPORTANT POINTS:

- * Some courses may meet additional program requirements which may result in additional elective availability.
- Students planning to transfer should work closely with a transfer counselor and an academic advisor.
- 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 1290, 1510, 2150, 2210, 2220, and 2460 all include a field component. The number of field hours varies by course.

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Language, Literature, & Writing (General Degree)

curriculum code: 2986 | 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 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, world language, music, and theatre. Students can choose to earn the general degree or can choose to earn the degree with a concentration in English (a SUNY Transfer Path). **Program is also available online.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
World Language Requirement choose from courses within the ASL, ARA, CHI, FRE, RUS, SPA disciplines	6	Global Perspectives	FLAN	H
Program Core Elective choose a humanities course	12			H
Program Core Elective choose any 2000-level humanities & Applied Learning course	3	Applied Learning		H
Mathematics and Sciences Elective	3			N
Social Sciences Elective	3			S
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Cultural Understanding, and Diversity requirements, and liberal arts and sciences	16	(Cultural Understanding; Diversity)	(up to 1 category) [up to 9 credits]	[1 credit]
TOTAL CREDITS: 60			30	44

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Language, Literature, & Writing - English

curriculum code: 2986 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Humanities degree or can choose to earn the degree with a concentration in English (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted. **Program is also available online.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
World Language Requirement choose from courses within the ASL, ARA, CHI, FRE, RUS, SPA disciplines	6	Global Perspectives	FLAN	H
Program Core Elective choose any 2000-level humanities & Applied Learning course	3	Applied Learning		H
Program Core Elective Program Core Electives choose any 2000-level ENG courses or CMM 2530	9			H
Program Core Elective choose a humanities course	3			H
Mathematics and Sciences Elective	3			N
Social Sciences Elective	3			S
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Cultural Understanding, and Diversity requirements.	16	(Cultural Understanding; Diversity)	(up to 1 category) [up to 9 credits]	[1 credit]
TOTAL CREDITS: 60			30	45

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences: 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 concentration in biology, chemistry, mathematics, or nutrition (each a SUNY Transfer Path).

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1600: Precalculus (or higher)	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
Laboratory Science Elective	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
Program Core Elective** choose an Applied Learning course from math/science courses not already required and numbered 1500 or higher within AST, BIO, CHE, GLG, MAT(1540+), MET, PHY(1600+) disciplines	3	Applied Learning		
Program Core Elective** choose from math/science courses not already required and numbered 1500 or higher within AST, BIO, CHE, GLG, MAT(1540+), MET, PHY(1600+) disciplines	13			
Open Electives up to 13 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	25	(Cultural Understanding; Global Perspectives, Diversity)	(2 categories, including DIVE) [up to 13 credits]	[13 credits]
TOTAL CREDITS: 60			30	30

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).

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences: Mathematics & Sciences - Biology

curriculum code: 0645 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Mathematics and Sciences degree or can choose to earn the degree with a concentration in biology (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1600: Precalculus (or higher)	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1550: General Chemistry I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
BIO 1570: Principles of Cell & Molecular Biology	4	Applied Learning	NSCI	N
BIO 1580: Principles of Ecology & Evolution	4		NSCI	N
CHE 1560: General Chemistry II	4		NSCI	N
Program Core Elective** choose from BIO 1830, BIO 2510, BIO 2520, BIO 2531/2532, BIO 2550, BIO 2560, BIO 2800, BIO 2830, BIO 2550, BIO 2650, BIO 2660, BIO 2670, CHE 2530, CHE 2540, MAT 1540, MAT 1710, MAT 1720, PHY 1610, PHY 1620, PHY 1710, PHY 2710	19			N
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	10	(Cultural Understanding; Global Perspectives, Diversity)	(2 categories, including DIVE) [up to 1 credit]	
TOTAL CREDITS: 60			30	50

IMPORTANT POINT:

- A GPA of at least 2.0 in math/science coursework is required for graduation.

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences: Mathematics & Sciences - Chemistry

curriculum code: 0645 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Mathematics and Sciences degree or can choose to earn the degree with a concentration in chemistry (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted. Program completion will require students to attend some classes on the Jamestown Campus.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1710: Calculus I	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1550: General Chemistry I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CHE 2540: Organic Chemistry II	4	Applied Learning		N
CHE 1560: General Chemistry II	4		NSCI	N
CHE 2530: Organic Chemistry I	4		NSCI	N
MAT 1720: Calculus II	4		MATH	N
MAT 2650 Calculus & Analytic Geometry III	4		MATH	N
PHY 1710: Analytical Physics I	4		NSCI	N
PHY 2710: Analytical Physics II	4		NSCI	N
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	13	(Cultural Understanding; Global Perspectives, Diversity)	(2 categories, including DIVE)	
TOTAL CREDITS: 60			41	47

IMPORTANT POINT:

- A GPA of at least 2.0 in math/science coursework is required for graduation.

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences: Mathematics & Sciences - Mathematics

curriculum code: 0645 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Mathematics and Sciences degree or can choose to earn the degree with a concentration in mathematics (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1710: Calculus I	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
Laboratory Science Elective	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
MAT 1720: Calculus II	4		MATH	N
MAT 2650: Calculus III	4		MATH	N
MAT 2670: Linear Algebra	3		MATH	N
MAT 2680: Ordinary Differential Equations	3		MATH	N
Mathematics and Sciences Elective choose a course not already required numbered 1500 or higher within the AST, BIO, CHE, GLG, MAT (1540+), MET, and PHY (1600+) disciplines"	3		NSCI	N
Open Electives up to 12 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, Applied Learning, and Diversity requirements.	24	(Cultural Understanding; Global Perspectives, Applied Learning, Diversity)	(2 categories, including DIVE)	
TOTAL CREDITS: 60			34	36

IMPORTANT POINTS:

- A GPA of at least 2.0 in math/science coursework is required for graduation.
- Recommended electives include MAT 1540, MAT 1670, or a second science course, and should be selected based on transfer requirements. Please consult with an advisor for assistance.

ASSOCIATE IN SCIENCE

Liberal Arts & Sciences: Mathematics & Sciences - Nutrition

curriculum code: 0645 | HEGIS code: 5649
minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Mathematics and Sciences degree or can choose to earn the degree with a concentration in nutrition (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1600: Precalculus (or higher)	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
BIO 2760: Nutrition	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
SOC 1510: Introduction to Sociology	3	Cultural Understanding & Global Perspectives	SOSC	S
BIO 1570: Principles of Cell & Molecular Biology	4	Applied Learning	NSCI	N
BIO 1580: Principles of Ecology & Evolution	4		NSCI	N
BIO 2510: Anatomy and Physiology I	4		NSCI	N
BIO 2520: Anatomy and Physiology II	4		NSCI	N
BIO 2531: Microbiology	3		NSCI	N
BIO 2532: Microbiology Lab	1			N
CHE 1550: General Chemistry I	4		NSCI	N
CHE 1560: General Chemistry II	4		NSCI	N
CHE 2530: Organic Chemistry I	4		NSCI	N
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	24	(Cultural Understanding, Global Perspectives, Diversity)	(2 categories, including DIVE)	
TOTAL CREDITS: 60			50	53

IMPORTANT POINT:

- A GPA of at least 2.0 in math/science coursework is required for graduation.

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Social Sciences (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 social sciences. The social and behavioral sciences examine the development and activity of human beings both as individuals and in society. Disciplines in the social sciences include anthropology, history, global studies, political science, economics, geography, criminal justice, psychology, and sociology. JCC's social sciences curriculum is an excellent transfer program since it parallels the first two years of most baccalaureate liberal arts programs. Working closely with their faculty advisors, students can select their courses to meet degree requirements and be prepared to complete a baccalaureate degree at a transfer institution with two additional years of full-time study. Many graduates of four-year programs whose bases are in the social sciences seek careers in psychology, teaching, government, and social work. Students can choose to earn the general degree or can choose to earn the degree with a concentration in economics, psychology, or sociology (each a SUNY Transfer Path).

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
Program Core Electives* Must include JCC Applied Learning course	18	(Applied Learning)		X
Program Core Elective* choose a 2000-level course	3		X	X
Humanities Elective	3			H
Mathematics or Natural Sciences Elective	3		X	N
Open Electives up to 9 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials requirements in Global Perspectives, Cultural Understanding, and Diversity.	16	(Cultural Understanding, Global Perspectives, Diversity)	(up to 2 categories, including DIVE) [9 credits]	[up to 1 credit]
TOTAL CREDITS: 60			30	45

IMPORTANT POINT:

- To earn the degree, students must have courses from at least three different social sciences areas, at least 3 credits must be numbered 2000 or higher. These areas include the ECO, ANT, GEO, GLS, HIS, POL, PSY, or SOC disciplines. This requirement may be filled through Program Core Electives.

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Social Sciences - Economics

curriculum code: 0212 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Social Sciences degree or can choose to earn the degree with a concentration in economics (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1600 Precalculus	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
ECO 2620: Microeconomics	3	SUNY Social Science	SOSC	S
ECO 2610: Macroeconomics	3	Global Perspectives	SOSC	S
Program Core Electives* Must include JCC Applied Learning course	12	(Applied Learning)		X
Humanities Elective	3			H
Mathematics or Natural Sciences Elective	2		X	N
Social Sciences Electives	6		X	S
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials requirements in Cultural Understanding and Diversity.	16	(Cultural Understanding; Diversity)	(up to 2 categories, including DIVE) [4 credits]	[up to 1 credit]
TOTAL CREDITS: 60			30	45

IMPORTANT POINTS:

- MAT 1540: Elementary Statistics is recommended.
- Some transfer institutions require Calculus I prior to achieving junior status in economics.

* To earn the degree, students must have courses from at least three different social sciences areas, at least 3 credits must be numbered 2000 or higher. These areas include the ECO, ANT, GEO, GLS, HIS, POL, PSY, or SOC disciplines. This requirement may be filled through Program Core Electives.

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Social Sciences - Psychology

curriculum code: 0212 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Social Sciences degree or can choose to earn the degree with a concentration in psychology (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
PSY 2510: Lifespan Development or PSY 2520: Child Development or PSY 2550: Psychology of Adolescence	3		SOSC	S
PSY 2560: Abnormal Behavior	3	Cultural Understanding	SOSC	S
PSY 2530: Social Psychology	3	Applied Learning	SOSC	S
Humanities Elective	3			H
Mathematics or Sciences Elective	3			N
Social Sciences Electives	6		SOSC	S
Program Core Electives*	6			X
Open Electives up to 6 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials requirement in Global Perspectives and Diversity.	16	(Global Perspectives; Diversity)	(up to 2 categories, including DIVE)	[up to 1 credit]
TOTAL CREDITS: 60			30	45

IMPORTANT POINTS:

- MAT 1540: Elementary Statistics is recommended.

* To earn the degree, students must have courses from at least three different social sciences areas, at least 3 credits must be numbered 2000 or higher. These areas include the ECO, ANT, GEO, GLS, HIS, POL, PSY, or SOC disciplines. This requirement may be filled through Program Core Electives.

ASSOCIATE IN ARTS

Liberal Arts & Sciences: Social Sciences - Sociology

curriculum code: 0212 | HEGIS code: 5649
 minimum credit hours required: 60

Students can choose to earn the general Liberal Arts and Sciences: Social Sciences degree or can choose to earn the degree with a concentration in sociology (a SUNY Transfer Path). Students interested in pursuing this concentration should speak with an advisor or counselor to make sure the correct concentration is noted.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
SOC 1510: Introduction to Sociology	3	Cultural Understanding, Global Perspectives, Diversity	SOSC, DIVE	S
Humanities Elective	3			H
Mathematics or Sciences Elective	3			N
Social Sciences Elective	3		X	S
Sociology Electives	6		SOSC	S
Program Core Electives* Must include JCC Applied Learning course	9	(Applied Learning)		S
Open Electives up to 9 credits may need to be SUNY Gen ed category specific	16		(up to 1 category) [up to 9 credits]	[up to 1 credit]
TOTAL CREDITS: 60			30	45

IMPORTANT POINTS:

- MAT 1540: Elementary Statistics is recommended.
- * To earn the degree, students must have courses from at least three different social sciences areas, at least 3 credits must be numbered 2000 or higher. These areas include the ECO, ANT, GEO, GLS, HIS, POL, PSY, or SOC disciplines. This requirement may be filled through Program Core Electives.

ASSOCIATE IN APPLIED SCIENCE

Mechanical Technology: Design Concentration

curriculum code: 0595 | HEGIS code: 5315
 minimum credit hours required: 60

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, 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 a bachelor's degree in mechanical engineering technology. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire & MCT 1250: Statics for Technology or ENR 1560: Introduction to Engineering & Engineering Design * **	4-5	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1590: College Algebra/ Trigonometry	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
PHY 1500: Foundational Physics	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
MCT 2420: Manufacturing Process I	3	Applied Learning		
CSC 1570: Programming Concepts/ Applications	3			
MAT 1600: Precalculus	4		MATH	N
MCT 1240: Engineering Drawing with AutoCAD	4			
MCT 1270: Machine Theory and Operations	3			
MCT 1340: Manufacturing Drawings or CSC 1510: Introduction to Computer Sci or CSC 1560: Computer Application Software I	3-4			
MCT 1380: Introduction to Solid Modeling	3			
MCT 2230: Mechanics of Materials or MCT 1310: Industrial Safety & Quality and MCT 1320: Production Processes and Main	4			
MCT 2270: Mechanics of Energy Systems	4			
MCT 2340: Dimensional Metrology	2			
MCT 2380: Advanced Solid Modeling	3			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE)	
TOTAL CREDITS: 60			21	23

IMPORTANT POINTS:

- To complete the program in two years, students must begin in a fall semester at the appropriate levels of math. MAT 1590 has a prerequisite of MAT 0550 or placement. With the appropriate mathematical background, students may elect to take MAT 1600 and MAT 1710 in place of the MAT 1590/1600 requirements.
- * Students should consult with an advisor on which course choice is most appropriate for their educational and/or career goals.
- ** ENR 1560: Introduction to Engineering & Engineering Design incorporates the student learning outcomes of INT 1555: Inquire.

ASSOCIATE IN APPLIED SCIENCE

Mechanical Technology: Machine Tool Concentration

curriculum code: 0595 | HEGIS code: 5315
 minimum credit hours required: 63

This degree program is for students desiring employment in the field of manufacturing technology. Graduates may qualify for positions such as machine tool or CNC operator, CNC Programmer, industrial laboratory technician; inspector, production technician, CAD operator; and other related positions. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1590: College Algebra/Trigonometry	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
PHY 1500: Foundational Physics	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
MCT 2420: Manufacturing Process I	3	Applied Learning		
MCT 1240: Engineering Drawing with AutoCAD	4			
MCT 1270: Machine Theory and Operations	3			
MCT 1280: Computer Numerical Control of Machine Tools	3			
MCT 1300: Machine Tool Technology II	3			
MCT 1310: Industrial Safety & Quality Practices	2			
MCT 1320: Production Processes & Maintenance Awareness	2			
MCT 1340: Manufacturing Drawing & GD&T	4			
MCT 1380: Introduction to Solid Modeling	3			
MCT 2280: Advanced CNC Programming	3			
MCT 2300: Machine Tool Technology III	3			
MCT 2340: Dimensional Metrology	2			
MCT 2410: Computer Aided Manufacturing	3			
WLD 2370: Metallurgy	3			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE) [up to 3 credits]	[1 credit]
TOTAL CREDITS: 60			20	20

IMPORTANT POINTS:

- To complete the program in two years, students must begin in a fall semester at the appropriate levels of math. MAT 1590 has a prerequisite of MAT 0550 or placement. With the appropriate mathematical background, students may elect to take MAT 1600 and/or MAT 1710.
- Students with the appropriate background may opt to take PHY 1610 or PHY 1710 to fulfill the PHY 1250 requirement.

ASSOCIATE IN APPLIED SCIENCE

Mechatronics

curriculum code: 2450 | HEGIS code: 5311
 minimum credit hours required: 63

Mechatronics is an interdisciplinary field that combines elements of engineering, machining, information technology, robotics, and electronics. It synergizes these diverse fields to keep production lines, manufacturing floors, and industry processes working smoothly. Graduates of this program will be prepared to operate and maintain electro-mechanical systems found in automated or robotically controlled environments. Program components include comprehensive analysis, assembly, and troubleshooting techniques, which are reinforced through laboratory experiences. **Program will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1590: College Algebra/Trigonometry	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
PHY 1500: Foundational Physics	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
MCT 2220: Automation & Robotics	3	Applied Learning		
CSC 1510: Intro to Computer Sciences, CSC 1560: Computer App Software I, or MCT 1380: Introduction to Solid Modeling	3-4			
CSC 1580: Computer Hardware/Systems Software	3			N
ELC 1200: Fundamentals of Electricity	3			
ELC 1220: Industrial Automations Using PLC	3			
ELC 1230: Electric Motors & Control Systems	3			
MCT 1210: Applied Pneumatics & Hydraulics	3			
MCT 1240: Engineering Drawing with AutoCAD	4			
MCT 1270: Machine Theory and Operations	3			
MCT 1280: Computer Numerical Control of Machine Tools	3			
MCT 1310: Industrial Safety & Quality Practices	2			
MCT 1320: Production Processes & Maintenance Awareness	2			
MCT 2210: Mechanical Drives	3			
ELC 2220: Advanced Programmable Logic Controllers	3			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE) [3 credits]	
TOTAL CREDITS: 60			20	22

ACADEMIC INFORMATION

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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
CMM 1610: Public Speaking	3	Applied Learning	ARTS	H
CMM 1510: Introduction to Communication	3		HUMN	H
CMM 1710: Digital Video Production	3		ARTS	H
CMM 1750: Rhetoric of Vision and Sound	3		ARTS	H
CMM 2530: Writing for Electronic Media	3		ARTS	H
CMM 2610: Mass Communication & Media Literacy	3			H
Humanities Elective choose either ENG 2540, ENG 2740, or ENG 2840	3		X	H
Program Core Electives choose from ART 1510, ART 1530, ART 1570, ART 1611, ART 1613, ART 1670, ART 1730, ART 1740, ART 1750, ART 2530, ART 2570, ART 2800, CMM 1630, CMM 1700, CMM 2560, CMM 2570, CSC 1530, MUS 1710, MUS 1730, MUS 2890, THE 1570, THE 2570	12			
Social Sciences Electives	6			S
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	4	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE)	
TOTAL CREDITS: 60			36	44

ASSOCIATE IN SCIENCE

Music Industry

curriculum code: 2940 | HEGIS code: 5610
minimum credit hours required: 60

This degree program prepares students for transfer to a four-year baccalaureate degree in music business or a related field, with the ultimate goal of finding employment in one or more of a variety of areas within the modern music industry. It also serves the student interested in an associate's degree as a terminal degree before pursuing employment in the music industry. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
ECO 2610: Macroeconomics	3	SUNY Social Science	SOSC	S
MUS 1710: Intro to Sound Recording or MUS 1730: Intro to Music Technology	3-4	Applied Learning	ARTS	H
BUS 1500: Introduction to Business	3			
BUS 1510: Principles of Financial Accounting	4			
BUS 1520: Principles of Managerial Accounting	4			
CSC 1530: Introduction To HTML & CSS or CSC 1560: Computer Application Software I	3-4			
ECO 2620: Microeconomics	3		SOSC	S
MUS 1510: Music Appreciation	3		ARTS	H
MUS 1520: Introduction to Music Industry	3			
MUS 1530: Historical Survey-Rock & Roll	3		ARTS	H
MUS 1570: Music Theory I	3		ARTS	H
Music Ensembles	2			
MUS 1610: Applied Music: Private Lessons	1			
MUS 2520: Practices & Issues in Music Industry	3			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Cultural Understanding, and Diversity requirements.	4	(Cultural Understanding; Diversity)	(DIVE)	
TOTAL CREDITS: 60			33	32

IMPORTANT POINT:

- ECO 2610 and ECO 2620 require MAT 1590 eligibility.

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.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
NUR 1510: Foundations of Nursing	7	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
BIO 2510: Anatomy and Physiology I	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
SOC 1510: Introduction to Sociology	3	SUNY Social Science	SOSC, DIVE	S
PSY 2510: Life Span Development	3	Cultural Understanding	SOSC	S
BIO 2520: Anatomy and Physiology II	4		NSCI	N
BIO 2531: Microbiology	3		NSCI	N
BIO 2532: Microbiology Lab	1		NSCI	N
NUR 2510: Health Restoration/Maintenance I	8	Global Perspectives; Applied Learning		
NUR 1520: Health Restoration	8			
NUR 2520: Health Restoration/Maintenance II	8			
NUR 2350: Pharmacology for Nurses I	1.5			
NUR 2360: Pharmacology for Nurses II	1.5			
NUR 2550: Pathophysiology I	1.5			
NUR 2560: Pathophysiology II	1.5			
TOTAL CREDITS: 64			27	29

IMPORTANT POINTS:

- 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.
- BIO 2531: Microbiology and BIO 2532: Microbiology Lab must be completed with a minimum grade of "C" prior to taking NUR 2520
- 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. Students who are unsuccessful in repeating any nursing core course are 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 occupation is affected by illness and injury, and how function in life roles can be facilitated. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
OTA 1520: Human Conditions Across the Lifespan	3	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1500: Problem Solving with Mathematics or MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
BIO 2510: Anatomy and Physiology I OR BIO 1500: Human Biology	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 2510: Life Span Development	3	SUNY Social Science	SOSC	S
PSY 2560: Abnormal Behavior	3	Cultural Understanding	SOSC	S
SOC 1510: Introduction to Sociology	3	Global Perspectives, Cultural Understanding, Diversity	SOSC, DIVE	S
OTA 2540: Community Based Practice	1	Applied Learning		
BIO 2520: Anatomy and Physiology II OR HCR 2100: Kinesiology	3-4			
OTA 1510: Foundations of Occupational Therapy	3			
OTA 1530: Fundamental Skills of OT I	1			
OTA 1620: Psychosocial Concepts/Techniques	2			
OTA 1630: Fundamental Skills of OT II	1			
OTA 1640: OT Interventions I	2			
OTA 1650: Growing Years: Birth-Young Adult	3			
OTA 1700: Introduction to Professional Practice	1			
OTA 2520: Adulthood and Aging	2			
OTA 2550: Technology and Environmental Applications for Living	2			
OTA 2560: OT Interventions II	2			
OTA 2570: Classroom to Clinic	2			
OTA 2620: Physical Rehabilitation	3			
OTA 2700: Fieldwork IIA	5			
OTA 2720: Fieldwork IIB	5			
TOTAL CREDITS: 63-64			21	23

IMPORTANT POINTS:

- MAT 1540 is recommended and most widely transferred into OT programs.
- ENG 1540 is recommended and needed for transfer.
- See more important program information at www.sunycc.edu/academics/occupational-therapy-assistant/course-formats-semester-layout.

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.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
BIO 2510: Anatomy and Physiology I OR BIO 1500: Human Biology	4	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science		S
Program Core Electives choose any PHE or SPT Applied Learning course	3	Applied Learning		
BIO 2520: Anatomy and Physiology II OR Sciences Elective choose from BIO 1510, BIO 1570, BIO 1580, BIO 2760, CHE 1500, or CHE 1530	3-4			N
PHE 2880: Sport Nutrition	3			
PHE 1590: Principles of Fitness & Wellness	3			
Mathematics and Sciences Electives	5		X	N
Social Sciences Elective	6		X	S
Program Core Electives choose any PHE or SPT courses	12			
Open Electives up to 3 credits may need to be SUNY Gen Ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	6-7	(Cultural Understanding; Global Perspectives, Diversity)	(2 categories, including DIVE) [3 credits]	
TOTAL CREDITS: 60			30	30

IMPORTANT POINT:

- Requirements for bachelor's degrees in this field vary. 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 SCIENCE

Sport Management

curriculum code: 2688 | HEGIS code: 5099
minimum credit hours required: 60

This degree program is designed to provide students with the needed knowledge, skills, theory, and experiences to prepare them for transfer to an accredited baccalaureate program in sport management. Graduates will be prepared to pursue degree programs leading to careers in youth, scholastic, intercollegiate, or professional athletic organizations. Graduates will also be prepared to transfer into sports facility management (arenas, stadiums), campus and community recreation programs, fitness management, sport information, public relations, sport marketing, promotions, and sport media communication degree programs. **Program completion will require students to attend some classes on the Jamestown Campus.**

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1540: Elementary Statistics	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
SOC 1510: Introduction to Sociology	3	Cultural Understanding & Global Perspectives, Diversity	SOSC, DIVE	S
SPT 1300: Introduction to Sport Management	3	Applied Learning		
CMM 1510: Introduction to Communication or CMM 1610: Public Speaking	3		HUMN/ ARTS	H
ECO 2610: Macroeconomic Principles or ECO 2620: Microeconomic Principles	3		SOSC	S
BUS 1510: Principles of Financial Accounting	4			
SPT 1320: Sport in Society	3		SOSC	S
SPT 1550: Sport Promotion & Marketing	3			
SPT 1870: Sport Psychology	3			
Program Core Electives choose from BUS 1520, BUS 2530, BUS 2550, BUS 2580, CSC 1560, ECO 2610 OR ECO 2620, PHE 1480, PHE 1590, PHE 2500, PHE 2880, SPT 1310, SPT 1330, SPT 1350, SPT 2330, SPT 2520, SPT 2530	12			
Open Electives up to 3 credits may need to be SUNY Gen Ed category-specific and Liberal Arts and Sciences specific	6		(up to 1 category) [up to 3 credits]	[3 credits]
TOTAL CREDITS: 60			30	30

ASSOCIATE IN APPLIED SCIENCE

Sport Management

curriculum code: 2687 | HEGIS code: 5099
 minimum credit hours required: 60

This degree program is designed to provide students with the sport management knowledge, skills, theory, and experiences to prepare them for immediate entry into the workforce in any of these areas: recreation, youth sport, athletic administration, and/or fitness promotion. Program completion will require students to attend some classes on the Jamestown Campus.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
Mathematics Elective - SUNY Gen Ed	3	SUNY Mathematics & Quantitative Reasoning	MATH	N
Natural Sciences Elective - SUNY Gen Ed	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
PSY 1510: General Psychology	3	SUNY Social Science	SOSC	S
SOC 1510: Introduction to Sociology	3	Cultural Understanding & Global Perspectives, Diversity	SOSC, DIVE	S
SPT 2010: Internship OR PHE 2010: Internship OR PHE 2060: Intramural Assistant Internship	3	Applied Learning		
CMM 1510 Introduction to Communication or CMM 1610: Public Speaking	3		HUMN/ARTS	H
BUS 1510: Principles of Financial Accounting	4			
SPT 1320: Sport in Society	3		SOSC	S
SPT 1550: Sport Promotion & Marketing	3			S
SPT 1870: Sport Psychology	3			
SPT 1300: Introduction to Sport Management	3			
Program Core Electives choose from BUS 2580, CMM 2100, PHE 1480, PHE 1590, PHE 2500, PHE 2880, SPT 1310, SPT 1330, SPT 1350, SPT 2330, SPT 2520, SPT 2530	18			
TOTAL CREDITS: 60			24	29

ASSOCIATE IN APPLIED SCIENCE

Welding Technology

curriculum code: 1643 | HEGIS code: 5308
 minimum credit hours required: 61

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 a bachelor's degree in welding engineering technology.

JCC ESSENTIALS (FOR REFERENCE ONLY)		
Level 1	Level 2*	Level 3*
INT 1555/approved inquiry course ENG 1510 English Composition I	ENG 1530 English Composition II Mathematics course (SUNY) Natural Science course (SUNY) Social Science course (SUNY) Cultural Understanding course	Global Perspectives course Diversity (DIVE) course (SUNY) Applied Learning course/credit(s)

* Coursework may be used to fulfill requirements in more than one level. But no single course may be used to fulfill more than one requirement within Level 2 or more than two requirements within Level 3.

REQUIRED COURSES	CR	JCC	SUNY	LAS
INT 1555: Inquire	2	Inquiry- Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMN	H
ENG 1530: English Composition II	3	College Comp & Oral Communication	COMW & COMO	H
MAT 1590: College Algebra/Trigonometry (or higher)	4	SUNY Mathematics & Quantitative Reasoning	MATH	N
CHE 1500: Introduction to Chemistry	3	SUNY Natural Science & Scientific Reasoning	NSCI	N
Social Sciences Elective - SUNY Gen Ed	3	SUNY Social Science	SOSC	S
WLD 2450: Capstone Project	2	Applied Learning		
MCT 1240: Engineering Drawing with AutoCAD	4			
PHY 1500: Foundational Physics	4		NSCI	N
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 GTAW	3			
WLD 2350: Fabrication	3			
WLD 2360: Alternate Processes	3			
WLD 2370: Metallurgy	3			
Open Electives up to 3 credits may need to be SUNY Gen ed- category specific and may need to fill JCC Essentials Global Perspective, Cultural Understanding, and Diversity requirements.	3	(Cultural Understanding; Global Perspectives, Diversity)	(DIVE)	
TOTAL CREDITS: 61			20	24

IMPORTANT POINTS:

- To complete the program in two years, students must begin in a fall semester.
- With the appropriate background, students 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 PROGRAMS: CERTIFICATE

CERTIFICATE

Addictions Counseling

curriculum code: 2351 | HEGIS code: 5506
minimum credit hours required: 35

This certificate program is designed for students who are pursuing or already hold a college degree in human services, social work, or a related field and are seeking credentials in the field of alcohol, substance abuse, and other addiction treatment. Graduates of the program will fulfill New York State's educational requirements for a CASAC-TR license. Students in the program will learn about the nature and history of addiction and chemical dependency and learn skills needed for intake assessment, treatment planning, case management, individual and group counseling. Students participate in a fieldwork experience which provides 135 hours of practical, supervised field experience in an addictions agency. **Program is available online.**

CERTIFICATE REQUIREMENTS	CREDITS
BIO 1510: Health Science	3
HUS 1280: Family Systems	3
HUS 1310: Studies/Alcohol/Chem Dependency	3
HUS 1410: Generalist Practice Skills	3
HUS 2215: Field Placement I: Addictions	5
HUS 2230: Interviewing and Counseling	3
HUS 2400: Ethics/Issues-Addictions Services	3
HUS 2430: Alcohol/Chemical Dependency: Treatment	3
PSY 1510: General Psychology	3
PSY 2540: Interpersonal Group Dynamics	3
PSY 2560: Abnormal Behavior	3
TOTAL CREDITS	35

CERTIFICATE

Administrative Professional

curriculum code: 2477 | HEGIS code: 5005
minimum credit hours required: 31

This certificate program provides the student with the 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.**

CERTIFICATE REQUIREMENTS	CREDITS
BUS 1360: Keyboarding/Word Processing	3
BUS 1420: Office Procedures	3
BUS 1500: Introduction to Business	3
CSC 1560: Computer Application Software I	4
ENG 1510: English Composition I	3
ENG 1530: English Composition II	3
Program Core Elective (choose any BUS course)	3
Mathematics Elective - SUNY Gen Ed	3
Social Sciences Elective	3
Elective	3
TOTAL CREDITS	31

CERTIFICATE

Computer-Aided Design

curriculum code: 1681 | HEGIS code: 5303
minimum credit hours required: 26-27

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.**

CERTIFICATE REQUIREMENTS	CREDITS
CSC 1510: Introduction to Computer Science or CSC 1560: Computer Application Software I	3-4
MCT 1240: Engineering Drawing with AutoCAD	4
MCT 1270: Machine Theory and Operations	3
MCT 1310: Industrial Safety & Quality Practices	2
MCT 1320: Production Processes & Maintenance Awareness	2
MCT 1340: Manufacturing Drawings & Geometric Dimensioning & Tolerancing	4
MCT 1380: Introduction to Solid Modeling	3
MCT 2340: Dimensional Metrology	2
MCT 2380: Advanced Solid Modeling	3
TOTAL CREDITS	26-27

CERTIFICATE

Corrections Officer Technology

curriculum code: 1660 | HEGIS code: 5505
minimum credit hours required: 24

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.

CERTIFICATE REQUIREMENTS	CREDITS
CRI 1310: Corrections Practicum	2
CRI 1350: Corrections Academy	10
CRI 1430: Inmate Classification	1
CRI 1440: Inmate Direct Supervision	2
ENG 1510: English Composition I or ENG 1530: English Composition II	3
PSY 1510: General Psychology or SOC 1510: Introduction to Sociology	3
Mathematics and Sciences Elective	3
TOTAL CREDITS	24

CERTIFICATE

Cybersecurity

curriculum code: 2048 | HEGIS code: 5199
minimum credit hours required: 30

Cybersecurity has become a major concern for organizations and individuals who utilize computers. This certificate is designed to provide students with a basic understanding of computers, computer networks and the vulnerability of those systems, and methods for addressing cyber threats. Students will study a variety of tools, policies, and procedures designed to address vulnerabilities and minimize cyber threats. Graduates will be prepared for entry into and/or career advancement within cybersecurity computer networks, which is a growth market within our service region. **This program is available online.**

CERTIFICATE REQUIREMENTS	CREDITS
CSC 1520: Introduction to Cybersecurity	3
CSC 1570: Programming Concepts & Applications	3
CSC 1580: Computer Hardware & System Software	3
CSC 2480: Advanced Networking & Security	3
CSC 2510: Introduction to Networks	3
ENG 1510: English Composition I	3
INT 1555: Inquire	2
Mathematics Elective - MAT 1590 or higher	3
Social Sciences Elective - SUNY Gen Ed	3
Program Core Electives choose from CSC 1530 or above, or BUS 1500 or above	3
Elective	1
TOTAL CREDITS	30

IMPORTANT POINTS:

- Students are initially placed in a mathematics course based on their mathematics background. Students that do not place in college-level mathematics may need more than two years to complete this degree.
- Work with your advisor to determine the MAT courses required at your selected transfer school. MAT 1670 and MAT 1710 are required for Computer Science transfer at SUNY schools. MAT 1720 may also be required at some transfer institutions. Several upper-level computer science courses are only offered online.
- Additional fees will be required if students choose to take industry certification tests such as CompTIA A+, Network +, and Security +.

CERTIFICATE

Digital Audio Production

curriculum code: 1781 | HEGIS code: 5008
minimum credit hours required: 32

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.**

CERTIFICATE REQUIREMENTS	CREDITS
Applied Music Electives choose from the MUS courses: 1610, 1620, 2610, 2620, 1750, 1760, 2750, 2760, 1830, 1840, 2830, 2840, 1850, 1860, 2850, 2860, 1870, 1880, 2870, 2880	1-2
CMM 1750: Rhetoric of Vision and Sound	3
ENG 1510: English Composition I (or above)	3
Mathematics & Sciences Elective CSC 1510: Introduction to Computer Science is recommended	3
MUS 1510: Music Appreciation or MUS 1530: Historical Survey of Rock & Roll	3
MUS 1570: Music Theory I	3
MUS 1670: Beginning Piano	3
MUS 1710: Introduction to Sound Recording	4
MUS 1730: Intro to Music Technology	3
MUS 2890: Digital/Audio Seminar	3
Social Sciences Elective	3
TOTAL CREDITS	32-33

IMPORTANT POINT:

- Students should select program electives with the help of their advisor.

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.**

CERTIFICATE REQUIREMENTS	CREDITS
ART 1510: Drawing I	3
ART 1530: 2-D Design & Color	3
ART 1730: Graphic Design I	3
ART 1740: Graphic Design, Layout, & Publishing	3
ART 1750: Graphic Design II	3
ART 1611: Studio Projects - Design I	3
ENG 1530: English Composition II	3
Mathematics & Sciences Elective CSC 1510: Introduction to Computer Science is recommended	3
Program Core Elective choose one course from ART 1500, ART 1550, ART 1560, ART 1570, and ART 2611	6
Social Sciences Elective	3
TOTAL CREDITS	33

IMPORTANT POINT:

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

CERTIFICATE

Early Childhood Development

curriculum code: 0968 | HEGIS code: 5503
minimum credit hours required: 32

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.

CERTIFICATE REQUIREMENTS	CREDITS
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 1310: Family, School, & Community Partnerships	3
EDU 2210: Field Placement I - Education	4
EDU 2440: Children's Literature	3
ENG 1510: English Composition I	3
ENG 1530: English Composition II	3
PSY 1510: General Psychology	3
PSY 2520: Child Development	3
TOTAL CREDITS	32

IMPORTANT POINTS:

- Students who have earned a Child Development Associate (CDA) must complete a portfolio review process to have EDU 1250, EDU 1260, EDU 1290, and EDU 2210 waived.
- 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 2210: Field Placement I, and approval of the application is required for the filed placement to commence. 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 will provide you with an opportunity to develop your entrepreneurial skills with an understanding of accounting, marketing, 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 becoming a successful entrepreneur. **Program is available online.**

CERTIFICATE REQUIREMENTS	CREDITS
BUS 1430: Entrepreneurship & Innovation	3
BUS 2540: Business Law II	3
CSC 1560: Computer Application Software I	4
ENG 1510: English Composition I	3
ENT 1440: Small Business Management	3
ENT 1490: Launching Ventures	3
Mathematics and Sciences Electives	3
Program Core Electives choose from BUS 1500, BUS 1650, BUS 1700, BUS 2550, BUS 2570, BUS 2580, CMM 1610, CSC 1530, ENG 1580, ENT 1460, ENT 1470, ENT 1480, LDR 1660	5
Social Sciences Electives	3
TOTAL CREDITS	30

IMPORTANT POINT:

- Mathematics courses are selected based on a student's background.
MAT 1500: Problem Solving with Mathematics or MAT1540: Elementary Statistics are recommended electives.

CERTIFICATE

Health Information Technology

curriculum code: 2692 | HEGIS code: 5214
minimum credit hours required: 31

This program is designed to provide students with the skills necessary to prepare for entry-level employment in today's medical office/health information department. The program will also develop students' office skills along with specialization directed toward medical terminology, medical insurance, and medical office procedures. The certificate provides students with the basic core of work and problem-solving abilities and constitutes the first half of the A.A.S.-Health Information Technology degree.

CERTIFICATE REQUIREMENTS	CREDITS
Natural Sciences Elective - Biology	3
BUS 1360: Keyboarding/Word Processing	3
CSC 1560: Computer Application Software I	4
ENG 1510: English Composition I	3
HIT 1410: Medical Terminology	3
HIT 1420: Health Data Procedures	3
HIT 1460: Electronic Health Record Management	3
Social Sciences Elective	3
Electives	6
TOTAL CREDITS	31

CERTIFICATE

Healthcare Studies

curriculum code: 2951 | HEGIS code: 5299
minimum credit hours required: 28

This flexible certificate provides students with a foundation in general education, courses related to the healthcare profession, and healthcare-related science courses that will assist in their exploration of potential career paths in the healthcare industry. The certificate will prepare students for various entry-level employment opportunities in healthcare and for career advancement.

CERTIFICATE REQUIREMENTS	CREDITS
BIO 1500: Human Biology or BIO 2510: Anatomy & Physiology I	4
ENG 1510: English Composition I (or above)	3
HCR 1200: Introduction to Healthcare Studies	3
HCR 1210: Introduction to Disease or OTA 1520: Medical Specialties	1 or 3
Mathematics Elective - SUNY Gen Ed	3-4
PSY 1510: General Psychology or SOC 1510: Introduction to Sociology	3
Program Core Electives choose from the following list: BIO 1500, BIO 1510, BIO 2510, BIO 2520, BIO 2531, BIO 2532, BIO 2760, CHE 1500, CHE 1530, CHE 1550, CMM 1610, CMM 2100, CMM 2500, CSC 1560, HCR 1450, HCR 1460, HCR 2010, HCR 2020, HCR 2100, HCR XXXX, HCR XXXX, HIT 1410, HIT 1420, HUM 1510, HUM 1550, HUS 1210, INT 1500, INT 1555, OTA 1510, OTA 1530, PHE 1310, PHE 1510, PHE 1530, PHE 1590, PHE 1620	8-11
TOTAL CREDIT:	28

IMPORTANT POINT:

- Because the topic sequence varies among colleges, it is strongly recommended that both A & P I and II are taken at the same institution to prevent transfer problems.

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. Students interested in earning the certificate in individual studies should consult with their faculty advisors to ensure proper selection of courses. **Program is also available online.**

CERTIFICATE REQUIREMENTS	CREDITS
ENG 1510: English Composition I	3
Mathematics and Sciences Elective	3
Program Core Electives choose a combination of electives to create specialization	21
Social Sciences Elective	3
TOTAL CREDITS	30

IMPORTANT POINT:

- 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: 5312
minimum credit hours required: 28

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.

CERTIFICATE REQUIREMENTS	CREDITS
CSC 1510: Intro to Computer Sciences, CSC 1560: Computer App Software I, or MCT 1380: Introduction to Solid Modeling	3-4
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	4
MCT 1270: Machine Theory and Operations	3
MCT 1280: Computer Numerical Control of Machine Tools	3
WLD 1360: Gas Metal Arc Welding	3
TOTAL CREDITS	28

IMPORTANT POINT:

- To complete the program in two semesters, students must begin in the fall.

CERTIFICATE

Information Technology

curriculum code: 1498 | HEGIS code: 5101
minimum credit hours required: 30

This certificate program provides the student with strong computer user skills and an understanding of fundamental IT concepts. Students who complete the IT certificate are ready for job responsibilities in areas of information processing and IT support such as help desk assistant, information processing support specialist, or in computer sales. This certificate also affords the student with a good foundation for further academic work in a wide range of computer-related degree programs. **Program is also available online.**

CERTIFICATE REQUIREMENTS	CREDITS
CSC 1520: Introduction to Cybersecurity	3
CSC 1530: Introduction to HTML & CSS	3
CSC 1570: Programming Concepts/Applications	3
CSC 1580: Computer Hardware & System Software	3
CSC 2510: Introduction to Networks	3
ENG 1510: English Composition I	3
Mathematics Elective - SUNY Gen Ed	3
Program Core Electives choose from BUS 1500 or any CSC course not already required within the program core requirements, except CSC 1510	3
Social Sciences Elective	3
Elective	3
TOTAL CREDITS	30

IMPORTANT POINT:

- Several upper-level computer science courses are only offered online.

CERTIFICATE

Law Enforcement Technology

curriculum code: 1658 | HEGIS code: 5505
minimum credit hours required: 41

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.

CERTIFICATE REQUIREMENTS	CREDITS
CRI 1370: Radar Lidar	2
CRI 1390: Breath Analysis	2
CRI 2250: Law Enforcement Academy I	10
CRI 2260: Law Enforcement Academy II	6
CRI 2380: Law for the Law Enforcement Officer	3
CRI 2420: Standardized Field Sobriety Test	3
CRI 2470: Law Enforcement Practicum	4
ENG 1530: English Composition II	3
PHE 2460: Physical Education/Law Enforcement	2
PHE 2470: Defensive Tactics for Law Enforcement	2
PSY 1510: General Psychology or SOC 1510: Introduction to Sociology	3
SPA 1530: Spanish for Law Enforcement	1
TOTAL CREDITS	41

CERTIFICATE

Machine Tool Technology

curriculum code: 2027 | HEGIS code: 5315
minimum credit hours required: 26

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 an overall understanding of the field. Students will also develop skills in basic mathematics and writing appropriate to a machinist position.

CERTIFICATE REQUIREMENTS	CREDITS
MCT 1240: Engineering Drawing with AutoCAD	4
MCT 1270: Machine Theory and Operations	3
MCT 1280: CNC Manual Programming of Machine Tools	3
MCT 1300: Machine Tool Technology II	3
MCT 1310: Industrial Safety & Quality Practices	2
MCT 1320: Production Processes & Maintenance Awareness	2
MCT 1340: Manufacturing Drawing and GD&T	4
MCT 1380: Introduction to Solid Modeling	3
MCT 2340: Dimensional Metrology	2
TOTAL CREDITS	26

CERTIFICATE

Multimedia Production

curriculum code: 1785 | HEGIS code: 5012
minimum credit hours required: 30

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.

CERTIFICATE REQUIREMENTS	CREDITS
ART 1670: Digital Photography I	3
ART 1730: Graphic Design I	3
CMM 1710: Digital Video Production	3
CMM 1750: Rhetoric of Vision and Sound	3
ART 1730: Graphic Design I	3
ENG 1510: English Composition I	3
Mathematics and Sciences Elective	3
CSC 1510: Introduction to Computer Science is recommended	
MUS 1730: Music and the Digital Studio	3
ENG 1510: English Composition I	3
Social Sciences Elective	3
Total Credits	30

IMPORTANT POINT:

- To complete the program in two semesters, students must begin in the fall.

CERTIFICATE

Tourism & Hospitality

curriculum code: 2984 | HEGIS code: 5011
minimum credit hours required: 31-32

This certificate is designed flexibly for students who, upon completion, may either 1) directly obtain entry-level employment in the tourism or hospitality industry such as front desk operations, food service manager, or travel agent or 2) complete the AAS-Business Administration degree for employment in a management position within the tourism and hospitality industry or 3) complete the AS-Business Administration degree in preparation to transfer seeking a bachelor's degree in Tourism and Hospitality.

CERTIFICATE REQUIREMENTS	CREDITS
BUS 1500: Introduction to Business	3
BUS 1700: Introduction to Tourism & Hospitality	3
BUS 1710: Sustainable Tourism Planning & Development	3
BUS 2012: Tourism & Hospitality Internship	3
BUS 2700: Special Topics in Tourism & Hospitality	3
CSC 1560: Computer Application Software I	4
ENG 1510: English Composition I	3
Choose one of the following: BUS 1510: Principles of Financial Accounting BUS 2570: Principles of Management BUS 2580: Management & Organizational Behavior BUS 2630: Human Resource Management	3-4
Mathematics Elective - SUNY Gen Ed	3
Social Sciences Elective	3
TOTAL CREDITS	31-32

CERTIFICATE

Web Design

curriculum code: 1846 | HEGIS code: 5104
minimum credit hours required: 29

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.

CERTIFICATE REQUIREMENTS	CREDITS
CSC 1520: Introduction to Cybersecurity	3
CSC 1530: Introduction to HTML & CSS	3
CSC 1570: Programming Concepts/Applications	3
CSC 1590: Computer Programming	4
CSC 2410: Web Programming	3
CSC 2660: Database Management	4
ENG 1510: English Composition I	3
Mathematics Elective - SUNY Gen Ed	3
Social Sciences Elective	3
TOTAL CREDITS	29

IMPORTANT POINT:

- Several upper-level computer science courses are only offered online.

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 REQUIREMENTS	CREDITS
ENG 1510: English Composition I	3
MCT 1240: Engineering Drawing with AutoCAD	4
Social Sciences Elective	3
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 GTAW	3
TOTAL CREDITS:	31

IMPORTANT POINT:

- To complete the program in two semesters, students must begin in a fall semester.

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 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 2020-21. The college reserves the right to cancel course offerings if enrollment is insufficient. Current course, degree, and certificate information can be found at sunyjc.edu. JCC also offers non-credit courses, seminars, and workshops. For more information, contact the Workforce Readiness Center.

Requisite Definitions

Students who have completed pre/corequisites with a passing grade at another institution must provide a copy of their unofficial transcript at the time of registration.

Prerequisite

A course or other requirement that must be completed prior to enrolling in another course.

Corequisite

A course or other requirement that must be completed during the same semester as another course.

Eligibility

Refers to an academic readiness to take certain courses through successful completion of previous coursework or placement testing.

Recommendation

A condition of enrollment that a student is advised to meet, but not required to meet.

Placement Test

The college placement test assesses skills in mathematics, reading, and writing. If students choose to take any course for which there is a placement test prerequisite, they must take the appropriate test. As a rule, full-time students take the complete test during the application process 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, writing, or math prerequisite unless they qualify for an exemption.

Permission of Instructor

A course with this notation requires the student to meet with the 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 prerequisite background, the student should contact the instructor of the course. If, in the estimation of the instructor, the student meets the prerequisites in some other way, the instructor may notify the Registrar's Office, either by email or by signing an instructor's permission card, which the student can then present to the registrar's office on the Jamestown Campus, the Student Services Center on the Cattaraugus County Campus, or the main office at the North County Center. In the absence of the instructor, the waiver may be signed by the discipline coordinator/director, or dean. Students cannot register for courses for which they do not have a pre/corequisite, permission from the instructor via email, or a signed waiver form.

Special Statement Regarding Sequential Coursework

In the case of sequential coursework (i.e. math and English) where the student's entry point may be determined by way of a placement procedure or successful completion of other coursework in the sequence, a student will have met a prerequisite or corequisite for a course in the sequence if they are eligible to register for a higher level course for which the current course is a prerequisite. That is, if a student is eligible to take course C in a sequence (where course A is a prerequisite for course B, and course B is a prerequisite for course C), the student has met pre- or corequisites for both course A and course B.

Current course, degree, and certificate information can also be found at sunyjc.edu.

AMERICAN SIGN LANGUAGE

ASL 1510 Introductory Sign Language I

Students will learn to interact effectively and appropriately in ASL at the novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the Deaf community. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C fall, spring. 3 credit hours.*

ASL 1520 Introductory Sign Language II

Students will learn to interact effectively and appropriately in ASL at the novice-high level with people from other language and culture backgrounds. Students will communicate and reflect upon education, travel, leisure, and storytelling in the Deaf community. *Prerequisite: ASL 1510; or two years high school ASL. J fall, spring; C fall, spring. 3 credit hours.*

ANTHROPOLOGY

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 without supports or Corequisite: ENG 1510 with supports. J fall; C fall. 3 credit hours.*

ANT 1520 Intro 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 without supports or Corequisite: ENG 1510 with supports. 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 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

ANT 2010 Anthropology Internship I

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. *Prerequisite: completion of at least 12 college-level credits with a GPA of 2.0 or better. J summer. Variable credit hours.*

ANT 2020 Anthropology Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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 1510 without supports or Corequisite: ENG 1510 with supports. 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 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally. 3 credit hours.*

ANT 2560 Intro 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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-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 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally. 3 credit hours.*

ANT 2590 Sex, Sexuality, and Gender

Students will learn about sex, sexuality, or gender practices and concepts both from around the world and here in the United States. Students will be able to compare and contrast people's understanding of the body and its development, how people come to understand their own sex and gender characteristics, and the place that each one of us occupies in terms of our sex, sexuality, and gender behaviors. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

ANT 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally. 3 credit hours.*

ARABIC

ARA 1510 Introductory Arabic I

Students will learn to interact effectively and appropriately in Arabic at the novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the U.S. and the Arabic-speaking community. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally; Online occasionally. 3 credit hours.*

ARA 1520 Introductory Arabic II

Students will learn to interact effectively and appropriately in Arabic at the novice-high level with people from other language and culture backgrounds. Students will communicate and reflect upon education, travel, leisure, family and community celebrations in the U.S. and the Arabic-speaking community. *Prerequisite: ARA 1510; or two years high school ARA. J occasionally, C occasionally. 3 credit hours.*

ART

ART 1500 Art & Design Appreciation

This course will introduce students to contemporary art & design. Using basic materials and processes, students will engage in hands-on projects that explore the visual language. Assigned readings and class presentations will expose students to a range of contemporary art making practices and themes, expanding their understanding of what "art" and "design" can be. *No requisites. 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 requisites. 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 requisites. 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. *No requisites. J spring. 3 credit hours.*

ART 1550 Art in Culture I

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. *Prerequisite/Corequisite: ENG 1530. J fall; C occasionally. 3 credit hours.*

ART 1560 Art in Culture II

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. *Prerequisite/Corequisite: ENG 1530. J spring; C occasionally. 3 credit hours.*

ART 1590 Ceramics I

Students will gain a working knowledge of fundamental and advanced studio work in clay preparation, hand building, throwing, mold making, slip casting, glaze preparation, decorating techniques, and firing techniques. *No requisites. J fall, spring. 3 credit hours.*

ART 1610 Studio Projects - Ceramics

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art.

Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.

ART 1611 Studio Projects-Computer Graph

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 1612 Studio Projects-Painting

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 1613 Studio Projects - Photography

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 1620 Studio Projects - Ceramics

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 1621 Studio Projects-Computer Graph

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. 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. *No requisites. J occasionally. 3 credit hours.*

ART 1730 Graphic Design I

Students will be introduced to graphic design concepts and skills as a form of visual communication. Fundamentals of language and principles of graphic design structure with an emphasis on media for development of ideas and imagery. Students will research, create thumbnails, refine sketches, and work up visual solutions, integrating these components into their design projects. Students focus on the details of page composition and the relationship of space to clarity, legibility and aesthetics. *No requisites. J fall, spring. 3 credit hours.*

ART 1740 Typography and Layout

Students will explore the impact of well designed typography to any visual medium that uses text, including video, film, print publications, and web-based platforms. This course is an in depth exploration of type as form. Students begin with a close study of letterforms followed by projects that explore basic principles of typography such as hierarchy and alignment, visual sequences, and grid systems. An essential course for students interested in pursuing a career in graphic design. *Prerequisite: ART 1730. J spring. 3 credit hours.*

ART 1750 Graphic Design II

Expanding on visual communication processes covered in Graphic Design I, students develop concepts and create word/image relationships in a variety of formats. History of graphic design and exploration of current design trends are further explored. Students will consider the role of the audience and diverse perspectives. Integration of digital and traditional studio techniques are encouraged. *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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

ART 2020 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 2510 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. *Prerequisite/Corequisite: ART 1510 or ART 1530. 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 their own images in a personal, distinctive, and effective way. *Prerequisite: ART 2510. J occasionally. 3 credit hours.*

ART 2540 4D Design

Students will be introduced to concepts and basic

principles of designing in time and develop an awareness of time-based problems with a sensitivity to the tools of time-based media, including video editing software. Projects explore contemporary practices in photography, video, media literacy, and socially engaged art. *Prerequisite/Corequisite: ART 1670, ART 2550, or CMM 1710. J fall, spring. 3 credit hours.*

ART 2550 Animation

Students will be introduced to animation as a contemporary art and design form. Students will use Adobe Creative Software or Blender in addition to emerging software to create standalone and interactive animations based upon a story or theme. The course will begin with an introduction to the history, types and basic principles of animation as well as an overview of animation software. Students will continue to develop skills through concept-based assignments. *Prerequisite/Corequisite: ART 1510. J fall, spring. 3 credit hours.*

ART 2560 Art+Design: Portfolio & Professionalism

Students will focus on the process of preparing a professional portfolio to present to potential employers, transfer schools and art professionals. This hands-on course is designed for students interested in pursuing a career in art, design or creative fields. Students will create a new body of art or design work in their chosen concentration (painting and drawing, photography and related media, video, printmaking, ceramic/sculpture, computer art, and graphic design). Throughout the course, students will learn how to organize, present and talk about their work as well as prepare resumes and artist statements. It is strongly recommended that students take this course the semester prior to applying to transfer institutions or before applying for jobs. *Prerequisite: ENG 1510 and at least one ART studio course. J fall, spring. 4 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. J occasionally. 3 credit hours.*

ART 2610 Studio Projects- Ceramics

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2611 Studio Projects-Computer Graph

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the

arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2612 Studio Projects-Painting

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2613 Studio Projects - Photography

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2620 Studio Projects - Ceramics

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2621 Studio Projects-Computer Graph

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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable credit hours.*

ART 2624 Studio Projects - Print Making

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, print making, 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 experience may be initiated by visual arts faculty. Students achieving 12 credit hours in art studio problems must obtain permission from the arts and humanities dean to take additional coursework (for credit) in art. *Prerequisite: One studio art course in the concentration area. J occasionally. Variable 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. *Eligibility: MAT 1590; Prerequisite: ENG 1510. J fall; C occasionally. 3 credit hours.*

BIOLOGY

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. *Prerequisite/ Corequisite: ENG 1510. J fall, spring; C spring. 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, human sexuality and reproduction, 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

BIO 1515 Biology of Amphibians/Reptiles

Students will learn the basic organismal biology, anatomy and physiology, evolutionary history, classification, behavior, and ecological relevance of amphibians and reptiles. In addition to basic amphibian and reptile biology topics highlighting unique features of these charismatic and often poorly-understood animals will be discussed. Students will examine amphibians and reptiles as part of our environment including inter and intra-specific interactions, environmental pressures and conservation issues. Students will explore the biomedical relevance of amphibians and reptiles to mankind as biological indicators, sources of medically relevant pharmacological agents as well as significant threats to human health in some parts of the world (snake bite, crocodile attacks). Current conservation issues surrounding global decline in amphibian species and other future threats to the continued survival of these groups will be discussed. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J spring. 1 credit hour. 1 credit hour.*

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 without supports or Corequisite: ENG 1510 with supports. J occasionally; Online occasionally. 1 credit hour.*

BIO 1525 Wildflowers of Spring

Students will explore the beauty and biology of our local spring wildflowers, and gain a fascinating glimpse into the identification, classification, evolution, survival strategies, conservation challenged, and ecological significance of our springtime ephemerals. Complex co-evolutionary strategies for pollination, seed dispersal, and defense against herbivory will be examined, and ecological relationships and interdependencies among fungi, flowers, and animals will be explored. Various threats to active plant communities, such as habitat loss, climate change, loss of pollinators, and impacts of invasive species will be described and discuss. Lectures

will incorporate multimedia content, outdoor fieldwork, and hands-on exploration and identification of our backyard blooms in local fields, forests, and wetlands. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J spring. 1 credit hour. 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 without supports or Corequisite: ENG 1510 with supports. J occasionally; Online occasionally. 1 credit hour.*

BIO 1550 Intro to Environmental Science

Students will study environmental science emphasizing the history of environmental concerns, biomes, and how species interact with each other's and their environment (air, water, and soil). Through lecture and laboratory discussions and activities, students will investigate biological resources, population dynamics, toxicology, energy resources, land use management, and other related topics. This course is appropriate for both science and non-science majors. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports; Corequisite: MAT 0550 or Eligibility: college level mathematics. J fall. 4 credit hours.*

BIO 1551: Intro to Environmental Science - Lecture

Students will study environmental science emphasizing the history of environmental concerns, biomes, and how species interact with each other's and their environment (air, water, and soil). Through lecture and laboratory discussions and activities, students will investigate biological resources, population dynamics, toxicology, energy resources, land use management, and other related topics. This course is appropriate for both science and non-science majors. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports; Corequisite: MAT 0550 or Eligibility: college level mathematics. J fall. 4 credit hours.*

BIO 1552: Intro to Environmental Science - Lab

Through laboratory discussions, activities, and investigations, students will study environmental science emphasizing the history of environmental concerns, biomes, and how species interact with each other and their environment (air, water, and soil). Students will investigate biological resources, population dynamics, toxicology, energy resources, land use management, and other related topics. This course is appropriate for both science and non-science majors. *Corequisite: BIO 1551; Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall.*

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 without supports or Corequisite: ENG 1510 with supports. J occasionally; Online occasionally. 1 credit hour.*

BIO 1570 Principles of Cell & Molecular Biology

Students will identify, understand, and interpret fundamental biological principles such as the chemical foundations of life, cell structure and function, cellular metabolism, photosynthesis, cellular respiration, cellular reproduction, and classical, human and molecular genetics. *Prerequisite/Corequisite: ENG 1510 and CHE 1500 (or higher) - unless high school chemistry was passed; Prerequisite/corequisite: MAT 0550 or Eligibility: MAT 1590 (or higher). J fall, spring; C fall. 4 credit hours.*

BIO 1580 Principles of Ecology & Evolution

Students will identify and evaluate the general tenets of evolutionary theory, identify and apply principles of ecology and biodiversity, identify the major episodes in the geological history of life, and evaluate and describe the evolutionary history of the Earth's major plant and animal groups. Laboratory may include one or more outdoor experiences. *Prerequisite/Corequisite: ENG 1510 and CHE 1500 (or higher) - unless high school chemistry was passed; Prerequisite/corequisite: MAT 0550 or Eligibility: MAT 1590 (or higher). J spring; C spring. 4 credit hours.*

BIO 1830 SURI: Environmental I

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 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: ENG 1510 and BIO 1550 or BIO 1570 or BIO 1580. J summer. 4 credit hours.*

BIO 2010 Biology 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring; C fall, spring. Variable credit hours.*

BIO 2013 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring; C fall, spring. Variable credit hours.*

BIO 2020 Biology Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring; C fall, spring. Variable credit hours.*

BIO 2022 Biotechnology Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring; C fall, spring. Variable credit hours.*

BIO 2023 Environmental Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring; C fall, spring. Variable credit hours.*

BIO 2510 Anatomy & Physiology I

This first of two sequential human anatomy and physiology courses is designed for students who have had little or no previous study of the body or the physical and chemical principles on which body structure and function is based. In this course, students will learn basic chemistry and physics, cytology, and histology. Students will study the following organ systems: integumentary, skeletal, muscular, cardiovascular, lymphatic, and respiratory. In the accompanying laboratory, students will learn basic terminology, microscopy, animal dissection, organ dissection, and experimental process and protocols. *Prerequisite/Corequisite: ENG 1510; Prerequisite: CHE 1500 (or above)-unless high school chemistry was passed. J fall, spring; C fall, spring. 4 credit hours.*

BIO 2520 Anatomy & Physiology II

In this second of two sequential human anatomy and physiology courses, students will study water, electrolyte, and acid-base balance, and the following organ systems: urinary, digestive, endocrine, nervous, and reproductive. In the accompanying laboratory students will perform animal dissection, organ dissection, and will implement experimental process and protocols. *Prerequisite: BIO 1570 or BIO 2510. J spring; C spring. 4 credit hours.*

BIO 2531 Microbiology

Students will identify the microorganisms of importance to medicine, industry, and the natural world. Topics include microbial taxonomy; cultivation; metabolism; genetics; physical, chemical, and chemotherapeutic agents of microbial control; host defense mechanisms and immunology; biology; epidemiology; and selected bacterial, fungal, protozoan, and viral pathogens of

medical significance. *Prerequisite: ENG 1510 and BIO 1570 or BIO 2510. J fall, spring; C fall, spring. 3 credit hours.*

BIO 2532 Microbiology - LAB

Students will become skilled in appropriate techniques for handling bacterial cultures, identifying specimens and implementing and evaluating various standard diagnostic procedures. *Prerequisite: ENG 1510 and BIO 1570 or BIO 2510. 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 evolutionary 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 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: ENG 1510 and BIO 1550 or BIO 1570 or BIO 1580. J fall. 3 credit hours.*

BIO 2560 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. *Prerequisite: ENG 1510 and BIO 1570; Prerequisite/Corequisite: CHE 1550 or higher. J occasionally. 4 credit hours.*

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. *Prerequisite: ENG 1510, BIO 1550 or BIO 1570. J occasionally; C 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. *Prerequisite/Corequisite: ENG 1530. J occasionally. 3 credit hours.*

BIO 2620 Tropical Biology

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 biodiversity 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. *Prerequisite: ENG 1510, BIO 1550 or BIO 1570, and permission of the instructor. Rigorous physical activities, including swimming, snorkeling, and hiking are required. J occasionally; C occasionally. 3 credit hours.*

BIO 2650 Ecology

Students will be introduced to the interactions between living organisms and their physical, chemical and biological environment. Several levels of ecological organization will be examined, including the study of different types of populations, communities and ecosystems. Topics include population structure and growth, species interaction, energy flow, nutrient cycling, succession, and applications to current environmental management issues. Students will perform ecological experiments in the field as well as in the laboratory. *Prerequisite: ENG 1510, BIO 1570 or BIO 1550; Prerequisite/Corequisite: MAT 1590 or higher. J spring. 4 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: ENG 1510 and BIO 1550 or BIO 1570 or BIO 1580. 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, physiology, behavior, and ecology of botanical organisms through the study of cells, tissues and organs, life cycles and reproductive strategies, evolutionary relationships and trends, taxonomic classification, and related contemporary issues. Laboratory includes off-campus field trips and outdoor fieldwork assignments. *Prerequisite: ENG 1510 and BIO 1550 or BIO 1570 or BIO 1580. J fall. 4 credit hours.*

BIO 2760 Nutrition

Students will evaluate the importance of carbohydrates, lipids, proteins, vitamins, minerals and water, energy metabolism, nutritional needs throughout the life cycle, nutrition and disease states, food safety, and consumer issues dealing with nutrition. *Prerequisite: ENG 1510 and BIO 1550 or BIO 1570. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

BIO 2800 Cell 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. 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 cycles 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: ENG 1510 and BIO 1570; Prerequisite/Corequisite: CHE 1550 or higher. J occasionally; C occasionally. 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 1510, BIO 1570, and BIO 1550 or BIO 1580 or BIO 1830 or BIO 2550 or BIO 2650 or BIO 2660 or BIO 2670. J summer. 4 credit hours.*

BUSINESS

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. *No requisites. J fall, spring, C fall, spring, Online fall, spring. 3 credit hours.*

BUS 1360 Keyboarding/Word Processing

Students will learn the fundamentals of skill building using Microsoft Word. Document formatting for business correspondence, reports, and tables will be emphasized. A major emphasis is placed on increasing speed/accuracy and improving proofreading skills. *No requisites. J spring, fall; C spring, fall. 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/ coordinating travel and meetings, and communication skills. *No requisites. Online spring. 3 credit hours.*

BUS 1430 Entrepreneurship & Innovation

This course explores entrepreneurship within the context of an innovation economy. Students will learn skills and processes associated with developing an entrepreneurial mindset such as design thinking, innovative problem-solving, and creativity. Using lean entrepreneurship principles, students will engage in a process to identify a social or economic problem, propose and evaluate possible solutions, and recommend a business model that meets the needs of users in an identified market. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally; Online occasionally. 3 credit hours.*

BUS 1500 Intro 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 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C fall, spring; Online occasionally. 3 credit hours.*

BUS 1510 Princ/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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports, and MAT 0600, MAT 1500, or higher. J fall, spring; C fall, spring; Online occasionally. 4 credit hours.*

BUS 1520 Princ/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 without supports or Corequisite: ENG 1510 with supports. 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 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C occasionally. 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 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. *Prerequisite: ENG 1510. J occasionally; C occasionally. 3 credit hours.*

BUS 1700 Introduction to Tourism and Hospitality

Students will discover career options within the tourism and hospitality industries. Coverage includes industry

pioneers and their contributions; the different forms of industry businesses including independent, chain, franchise, and e-commerce; the daily functions of lodging and food service; and the role of customer service within the industry. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

BUS 2010 Business Internship I

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: A minimum of 9 credits of BUS 1400+ and minimum GPA of 2.0. J fall, spring; C fall, spring. Variable credit hours.*

BUS 2020 Business Internship II

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: BUS 2010. J fall, spring; C fall, spring. 4 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 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. 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. Projects simulating real-life situations will reinforce word processing and desktop publishing skills. *No requisites. 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. 5 credit hours.*

BUS 2430 Computerized Accounting

Students will gain an understanding of how principles learned in BUS 1510 are applied in a computerized accounting environment. From setting up a new company to recording transactions and preparing financial statements and reports, students will complete hands-on assignments and projects in real-world accounting simulations. *Prerequisite: BUS 1510. Online, spring. 3 credit hours.*

BUS 2440 Special Topics in Accounting

Students will explore a unique set of topics in accounting. The focus of the course is intended to be different with each offering, but topics might include Payroll Accounting, Cost Accounting, and Case Studies in Ethics. *Prerequisite: BUS 1510 and BUS 1520. Online, spring. 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 a global economy. *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. *Prerequisite/Corequisite: 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. *Prerequisite/Corequisite: 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/Corequisite: ENG 1530. J fall, spring; C spring. 3 credit hours.*

BUS 2570 Princ 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. *Prerequisite/Corequisite: ENG 1530. 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 application to performance of individuals working in organizations. Students will study key attitudes and behavior that affect productivity. Upon course completion, students will demonstrate an understanding 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. *Prerequisite/Corequisite: ENG 1530. J spring; C spring. 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. *Prerequisite/Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

CHEMISTRY**CHE 1500 Intro 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. *Prerequisite/Corequisite: ENG 1510; Eligibility: college level math (or prerequisite/corequisite MAT 0550). J fall; C spring. 3 credit hours.*

CHE 1530 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. *Prerequisite/Corequisite: ENG 1510; Eligibility: college level math (or prerequisite/corequisite MAT 0550). J fall; C fall; Online occasionally. 3 credit hours.*

CHE 1550 General 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 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; Prerequisite/Corequisite: ENG 1510; Prerequisite/Corequisite: MAT 1590 or higher (or Eligibility: MAT 1600). J fall, spring; C fall. 4 credit hours.*

CHE 1560 General 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; Prerequisite/Corequisite: MAT 1600 or higher, (or Eligibility: MAT 1710). 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, alkynes, and cyclic hydrocarbons as well as alkylhalides, alcohols, and ethers. Aromatic compounds will be introduced and stereochemistry and effects of solvents will also be investigated. A broad spectrum of classical organic reactions will be examined in the lab using microscale techniques. *Prerequisite: CHE 1560. J fall. 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, 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.*

CHINESE

CHI 1510 Introductory Mandarin I

Students will learn to interact effectively and appropriately in Mandarin at the novice-low to novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the U.S. and the Mandarin-speaking community. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally. 3 credit hours.*

COMMUNICATION

CMM 1510 Intro 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. *Prerequisite: ENG 1510. 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 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C fall, spring. 3 credit hours.*

CMM 1630 Intro 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 requisites. J Spring. 3 credit hours.*

CMM 1700 Intro to Social Media Mktng

Students will be introduced to foundational concepts in social media marketing and explore connections to strategic communication and public relations. In this course, students will gain hand-on experience with digital forms of communication and will learn to master wide range of social media tools and platforms. Students will demonstrate proficiency in social media strategy, including: goal planning, audience analysis, content planning, specified social media tactics, and success evaluation. Most importantly, students will partner with a local business to develop a social media plan and then implement that plan throughout the semester. At the completion of this course, students will have the necessary knowledge and skill set to launch an effective social media campaign. *Prerequisite: ENG 1510. J fall, spring. 4 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. *Prerequisite: ENG 1510. 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 film, 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. *Prerequisite: ENG 1510. 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/voicemail 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. *Prerequisite: ENG 1510. 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. *Prerequisite: ENG 1510. J fall, spring; C occasionally. 3 credit hours.*

CMM 2510 Intro 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. *Prerequisite: ENG 1510. J fall; C fall. 3 credit hours.*

CMM 2530 Media Writing

Students will be introduced to the basic formats, principles, and techniques necessary for media writing. Students will practice writing in a variety of formats including: blogs, film and TV scripts, commercials, Public Relations, radio interviews, podcasts, and other developing forms of media writing all with great attention to audience, tone, and purpose. Digital media portfolios will be produced throughout the course and will demonstrate students' ability to write a diverse collection of media texts. *Prerequisite: ENG 1530. J Spring. 3 credit hours.*

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 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. *Prerequisite/Corequisite: ENG 1530. 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.*

CMM 2840 Film Study and Appreciation

Students will learn the film as a world art form and social document, focusing attention on major areas of film, such as history, criticism, and visual literacy. Students explore a range of film productions from silent films to current releases and examine various approaches to film criticism. *Prerequisites: ENG 1530. J Spring. 3 credit hours.*

CMM 2560, 2561, 2562, 2563, 2564, 2565 Com/Media Arts/Internship I-VI

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 duties 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: ENG 1510. J occasionally. 1 credit hour.*

COMPUTER SCIENCE

CSC 1510 Intro 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 requisites. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

CSC 1520 Introduction to Cybersecurity

Students will be introduced to the basics of computer security, also known as cybersecurity. The course will also provide students with a basic understanding of computer hardware, software, and networks, so students can understand the types of security weaknesses and the defense strategies needed to minimize those vulnerabilities. Students will explore multiple case studies to understand techniques used by hackers and the weaknesses that allowed those attacks to be successful. This course introduces the topics covered by the CompTia Security+ Certification. Additional coursework will be needed prior to taking the CompTia Security+ exam. *No requisites. Online fall. 3 credit hours.*

CSC 1530 Introduction to HTML & CSS

Students will study HTML language, usability concepts, and embedding JavaScript programming code. Students will design web pages using tables, forms, cascading style sheets, multimedia, and JavaScript. Students will also learn how to publish a web page with video clips and sound. *No requisites. J fall; C fall; Online fall. 3 credit hours.*

CSC 1560 Computer Application Software 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. *Corequisite: any developmental MAT course or eligibility for any college-level MAT course. 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. *Eligibility: MAT 1590 or higher. J fall, spring; C fall; Online fall, spring. 3 credit hours.*

CSC 1580 Computer Hardware & System Software

Students will study the design, installation, configuration, and maintenance of hardware and software components of a computer. 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, operation systems, and diagnostic utilities are covered. *No requisites. J fall, spring; C spring; Online spring. 3 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. 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 programming language such as Java. *Prerequisite: CSC 1590. J occasionally; C occasionally; Online occasionally. 4 credit hours.*

CSC 1610 Computer Programming SCI/ENR

Students will use a microcomputer as a computation and analysis tool in engineering and scientific calculations. Students will study problem solving, numeric data storage and precision limitations, structured algorithm design, and numerical analysis methods. Students will write computer programs in C/C++ to solve mathematical problems specific to the science and engineering fields. The principles of program control structures will be explored, including: selection, loops, functions, and recursive functions. *Eligibility: MAT 1720 or higher. J occasionally; C occasionally; Online occasionally. 3 credit hours.*

CSC 1680 Intro to Visual Basic

Students will learn to develop user-friendly, Windows-based business applications using Microsoft Visual Basic.Net. Topics include screen design, program organization, control structures, subprograms, arrays, and file maintenance. Students use Visual BASIC to communicate with other Windows-based applications such as Microsoft Excel and Access. Problem solving techniques and structured programming practices are emphasized. *Prerequisite: CSC 1590. Online occasionally. 3 credit hours.*

CSC 1760 Computer Application Software II

Students will further their study of topics from CSC 1560 using a software package such as Microsoft Office. Database topics include action queries, custom reports and forms, macros, and modules. Students spend a major portion of the semester developing an application using a relational database. Spreadsheet topics include macros, charts, and data analysis tools. Some advanced features of word processing such as directories and forms are included. *Prerequisite: CSC 1560. J occasionally; C occasionally; Online fall. 3 credit hours.*

CSC 2010 CSC Internship I

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

CSC 2020 CSC Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. 3 credit hours.*

CSC 2330 Apps/Trblshng/Comp/User Sp

This course is designed to provide Information Technology majors and other computer related majors, with communications skills and technical skills necessary for troubleshooting and user support. Topics include: problem solving methodologies, operating systems (installation, customization, compatibility and troubleshooting), help desk operation, service request tracking and analysis, hardware and software needs assessment, training and instructional methodology and application troubleshooting. *Prerequisites: CSC 1560 and CSC 1580. J occasionally; C occasionally; Online occasionally. 3 credit hours.*

CSC 2410 Web Programming

Students will study client and server side programming techniques using current scripting languages. Projects will emphasize the design of websites that interface with databases. Students will spend a substantial amount of out-of-class time working on computer projects. *Prerequisite: CSC 1530 and CSC 1570. J occasionally; C occasionally; Online fall. 3 credit hours.*

CSC 2450 CIT Capstone

Students investigate current topics in computer information technology. Regular class sessions center on investigation of these issues with students leading the discussion. Students will reflect on and discuss ethics as it pertains to the field of computing. Students prepare for entry into the workplace through professional writing assignments and discussions of workplace survival skills. *Prerequisite: Student must be within one semester of graduation in the A.A.S. Information Technology or Computer Information Systems degree program or have permission of the instructor. Online spring 3 credit hours.*

CSC 2470 Network Administration

This course introduces the fundamentals of local area network administration. After a brief review of computer network hardware, students are introduced to and examine leading network operating systems. Students will gain familiarity and experience in the installation, configuration, and management of network operating systems through a combination of lecture and hands-on lab. *Prerequisite/Corequisite: CSC 2510. J occasionally; C occasionally; Online fall. 3 credit hours.*

CSC 2480 Adv/Ntwrkng/Computer/Security

Students will gain a greater understanding of computer networks with an emphasis on network security. Topics will include law and ethics, network policies, IT audits, system inventoring, remote control, traffic monitoring and routing, malicious codes such as viruses, WAN interfacing, the Internet, addressing, TCP/IP utilities, RAS, VPN, firewalls, encryption, and security issues. Students will use a variety of software tools to evaluate the security effectiveness and operational efficiency of different computer systems and configurations. *Prerequisite: CSC 1570, CSC 1580, and CSC 2510. J occasionally; C occasionally; Online occasionally. 3 credit hours.*

CSC 2510 Introduction to Networks

Students will explore topics in computer networking including networking design and architecture, data transmission, standards, and protocols. Local area networks (LAN) and wide area networks (WAN) will be studied along with the technologies that support the Internet. Upon course completion, 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/Corequisite: CSC 1570. J fall, spring; C spring; Online fall. 3 credit hours.*

CSC 2540 Intro to Systems Analysis

Systems analysis and design determines the direction and scope of information system projects. Upon course completion, students will demonstrate the ability to discuss solutions to business problems, interviewing techniques, process analysis, the system life cycle, construction of data flow diagrams, interface design options, and project management. Students will apply the concepts to real problem situations. *Prerequisite: CSC 1570 or CSC 1760. 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 1570 or CSC 1760. J occasionally; C 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.*

COOPERATIVE EDUCATION

CED 1050 Cooperative Education - Freshman

Students learn to identify the skills necessary to work in business and technology. College credit is awarded for the knowledge they gain from working in positions related to their majors. The student is evaluated by the program coordinator and their supervisor. *No requisites. J occasionally. 1 credit hour.*

CED 1060 Cooperative Education - Freshman

Students learn to identify the skills necessary to work in business and technology. College credit is awarded for the knowledge they gain from working in positions related to their majors. The student is evaluated by the program coordinator and their supervisor. *No requisites. J occasionally. 1 credit hour.*

CED 2050 Cooperative Education - Sophomore

Students learn to identify the skills necessary to work in business and technology. College credit is awarded for the knowledge they gain from working in positions related to their majors. The student is evaluated by the program coordinator and their supervisor. *No requisites. J occasionally. 1 credit hour.*

CED 2060 Cooperative Education - Sophomore

Students learn to identify the skills necessary to work in business and technology. College credit is awarded for the knowledge they gain from working in positions related to their majors. The student is evaluated by the program coordinator and their supervisor. *No requisites. J occasionally. 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 Intro 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 goals and objectives within specific units of each agency. *Prerequisite/Corequisite: CRI 1510. 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 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, calibration and set up 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. 2 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 1400 Domestic and Family Violence

Students will examine basic issues related to Domestic and Family violence, with an emphasis on training related to domestic incidents/violence. Students will learn about the goals of police response and proper identification of officer safety tactics when approaching the scene of a domestic incident. *Prerequisite/Corequisite: CRI 1320 or CRI 1510. J fall, spring; C fall, spring. 1 credit hour.*

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; Prerequisite: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 1430 Inmate Classification

This course provides a base of knowledge of the Inmate Classification program 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, and 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 1510 Intro to Criminal Justice

An interdisciplinary survey of the American criminal justice system with specific topical emphasis on crime, law enforcement, courts, and corrections. 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 criminal justice students and those interested in social sciences. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C fall, spring. 3 credit hours.*

CRI 1520 Intro 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. *Prerequisite/Corequisite: CRI 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. *Prerequisite/Corequisite: CRI 1510. J occasionally; C occasionally. 1 credit hour.*

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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

CRI 1600 Introduction to Intelligence Studies

Students will be introduced to the discipline of intelligence and gain understanding of how intelligence systems function, how they fit within the policymaking systems of free societies, and how they are managed and controlled. Students will learn terms and concepts unique to this field and become acquainted with entities within the intelligence community. Students will engage in a historical overview of national security and intelligence policies and strategies from WWII to present. *Prerequisite: ENG 1510. J fall; C spring. 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 in securing, executing, and court presentation of search warrants and evidence seized pursuant to a warrant. *Prerequisite/Corequisite: CRI 1510. 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. *Prerequisite/Corequisite: CRI 1510. J occasionally; C occasionally. 1 credit hour.*

CRI 1650 Hostile Situation Management

Students will learn how to recognize and resolve hostile situations in law enforcement which includes domestic conflicts, hostage situations, and routine calls for service. Students will also learn how to apply successful coping strategies during stressful conflicts. *Prerequisite/Corequisite: CRI 1510. 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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. *Prerequisite/Corequisite: CRI 1510. 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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. *Prerequisite/Corequisite: CRI 1510. 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 as methods of 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 2250 Law Enforcement Academy I

New York State mandates training in 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. *Prerequisite: Successful completion of New York state mandated law enforcement application process (see Chautauqua County sheriff's academy director for detailed instructions and format); Corequisites: CRI 2380, PHE 2460, and CRI 2470. J fall. 10 credit hours.*

CRI 2260 Law Enforcement Academy II

New York State mandates training in 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. *Eligibility: student must be current Chautauqua County Sheriff's Academy recruit. J occasionally; C occasionally. 6 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 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: The 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 registry 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 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 II is a continuation of Police Refresher I. Students must pass both Refreshers I and II in sequential order before they can receive a certificate to work as a police officer. Refresher II builds on what was instructed in the refresher I course. *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 registry 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 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. *Prerequisite: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2370 Criminal Investigation

Analyzes the basic procedures used in the investigation of a criminal matter. Students are required to demonstrate proper crime scene investigation techniques via photographing, sketching, and evidence collection for crimes against property and crimes against a person as well as study interview and interrogation techniques and courtroom demeanor and testimony. *Prerequisite: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2380 Law/Law Enforcement Officer

Students will develop knowledge in recognizing elements of New York State and Federal Law. *Corequisite: CRI 2250, CRI 2460, CRI 2470, and compliance with New York state regulations. J fall. 3 credit hours.*

CRI 2420 Standardized Field Sobriety Test

Students will develop knowledge about how drugs impair human functions. Students will gain practical skills in administering standardized field sobriety testing as well as investigative skills in relation to intoxicated drivers. *Eligibility: student must be current Chautauqua County Sheriff's Academy recruit or New York state certified police/peace officer. J occasionally. 3 credit hours.*

CRI 2470 Law Enforcement Practicum

This experiential format places the student in the field for on-the-job training. Students will apply their academic learning in real settings and are assigned to certified field instructors who will evaluate the individual on a daily basis. Evaluations are based primarily on knowledge of the law, interpersonal skills and initiative, familiarity with forms, and the overall quality of demeanor expected of law enforcement officers. *Corequisite: CRI 2250, CRI 2380, CRI 2460, and compliance with New York state regulations. J fall. 4 credit hours.*

CRI 2510 Police Community Relations

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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2520 Police Administration

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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2530 Criminal Law

Course includes an analysis of the origin and general principles of criminal law. Incorporates substantive criminal law with emphasis on the elements of each crime and the proof required to prosecute or defend the crime charged. Students are required to apply various judicial decisions to appropriate class discussions. *Prerequisite: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2540 Criminalistics

Provides students with an overview of the role of forensic science in investigation. Students will learn about the application of scientific and technical methods used in the discovery, collection, evaluation and presentation of physical evidence. *Prerequisites: CRI 1510, CRI 2370, ENG 1530, and sophomore standing. J occasionally; C occasionally. 3 credit hours.*

CRI 2550 Ethics in Criminal Justice

Students will explore many of the ethical problems confronting legal system 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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2560 Criminal Justice Internship

Offers a classroom seminar and an assignment with a specific criminal justice agency or office matching an individual student's academic study and/or career goal. Students must relate theoretical concepts to the pragmatic operations of their placement agency and present those experiences in a seminar format. *Prerequisite: CRI 1510; Prerequisite/Corequisite: ENG 1530; GPA 2.5 or better and permission of the instructor. J spring; C spring. 3 credit hours.*

CRI 2570 Organized Crime in the US

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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2580 Introduction to Terrorism

Students will examine the complex and often misunderstood subject of terrorism. Students will learn to distinguish acts of terrorism from other types of violence, study the various objectives and ideologies of historical and contemporary terrorist groups, and learn about terrorist organizational and operational methods. *Prerequisite/Corequisite: ENG 1530. J occasionally, C occasionally. 3 credit hours.*

CRI 2610 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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2620 Intro to Probation and Parole

Students will explore the history, purposes, and development of probation and parole as correctional practices and will learn about the successes and problems, as well as the future, of these practices. *Prerequisite: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2640 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: ENG 1510, CRI 1510. 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: ENG 1510, CRI 1510. J occasionally; C occasionally. 3 credit hours.*

CRI 2660 Advanced Terrorism Studies

Students will engage in an in-depth examination of key aspects of contemporary terrorism, including the emergence, evolution, and tactics of homegrown violent extremists and specific terrorist organization. Students will critically analyze and assess various government and non-government responses to terrorism, discussing assigned readings on these topics. Students will develop individual research topics and conduct semester-long research. *Prerequisite: CRI 2580. 3 credit hours.*

CRI 2670 Intelligence Analysis for Homeland Security

Students will examine different types of intelligence methods, tools and techniques, basic data collection and management strategies and tools, and the various types of intelligence used throughout the public and private sectors. Students will delve deeper into intelligence theories, including psychology of intelligence and alternative analysis. Student research will culminate in a writing and briefing project employing intelligence methods and briefing tactics learned throughout the semester. *Prerequisite/Corequisite: ENG 1530, CRI 1510. J spring; C fall. 3 credit hours.*

CRI 2680 The Constitution and Homeland Security

Students will develop a solid understanding of how the United States Constitution and its ongoing interpretation has shaped the homeland security landscape. Students will apply ethical theories and knowledge of the

Constitution to analyze significant national security problems and their changing nature in the 21st century, discussing relevant court cases as appropriate. Students will study the role of intelligence professionals and federal, state, and local law enforcement authorities in upholding constitutional law while preventing and disrupting terrorism. *Prerequisite: ENG 1510, CRI 1510. J fall; C spring. 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 requisites. 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 requisites. 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 requisites. 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 price controls, and international trade. This course is not a substitute for ECO 2610-2620. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

ECO 2610 Macroeconomic Principles

Students will be introduced to how 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. *Prerequisite/Corequisite: ENG 1530; Eligibility: MAT 1590 or higher. 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. *Prerequisite/Corequisite: ENG 1530; Eligibility: MAT 1590 or higher. J fall, spring; C fall, spring; Online occasionally. 3 credit hours.*

EDUCATION**EDU 1230 Working with Children**

Students will examine the skills needed to work with children and the key milestones in child development. Students will explore the importance of developing professionalism in the field of education to help shape the lives of children, the quality of life in our communities, and the future. By the end of the course, students will be able to determine if a career working with children is right for them. *No requisites. J fall, spring; C fall, spring. 3 credit hours.*

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: ENG 1510*

without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 1 credit hour.

EDU 1260 Health/Safety/Nutrition/Child

Students will focus on basic considerations for establishing and maintaining a safe, healthy, and developmentally appropriate environment for young children. Ways to promote good health and nutrition are presented, and prevention and reduction of injuries are explored. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

EDU 1290 Intro 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 the activities and materials of the early childhood profession. Students will also complete 40 hours of fieldwork in a local childcare center. *Prerequisite/Corequisite: ENG 1510. 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/Corequisite: ENG 1510. 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. *Prerequisite/Corequisite: ENG 1510. J 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 40 hour internship in a local school. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall, spring; C spring. 3 credit hours.*

EDU 2010 Education Internship I

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: EDU 1290 or higher, completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

EDU 2020 Education Internship II

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: EDU 1290 or higher, completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

EDU 2150 Infant/Toddler/Development/Edu

Students will increase their knowledge about the developmental needs and program requirements for infants and toddlers. They will do this by strengthening their observation skills, reading, and discussing current research and trends in infant/toddler care, and applying theory in field experiences. Students will plan and implement developmentally appropriate activities based on the needs of a specific child or groups of children within their field setting. Special attention will be given to the development of the whole child, the child as the curriculum, respectful and responsive relationships, intentional and purposeful interactions, and the environment as a teaching tool. A minimum of 20 hours will be spent in the field experience. *Prerequisite: EDU 1290. J occasionally; C occasionally. 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. *Prerequisite: EDU 1290 or EDU 1510 with a C or better and permission the education faculty. Application required. 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 2330 Behavior Management-Inclusive Classroom

Students will be introduced to methods, strategies, and techniques used in the management of elementary and secondary classrooms. Students will develop appropriate classroom management skills and strengthen their understanding of the relationships among classroom environment, classroom behavior, and learning. Students will gain knowledge of disciplinary and management models, strategies to increase achievement and motivate learners, and skills to manage inclusive classrooms. Students will create a classroom management plan that aligns with their philosophy of education. *J, fall spring; Olean, 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. *Prerequisite/Corequisite: ENG 1530 and either PSY 1510, EDU 1510, or HUS 1210. 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/Corequisite: 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. *Prerequisite/Corequisite: ENG 1530; Prerequisite: PSY 1510. 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 during 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. *Prerequisite/Corequisite: 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/Corequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

EDU 2510 Phlsphy/Tchnqs-Early Childhood

Students will examine the basic concepts of a child's psychological and intellectual development in relation to methods and techniques appropriate 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 PSY 2520 and EDU 1290. J occasionally; C occasionally. 3 credit hours.*

EDU 2650 Award Winning Young Adult Lit

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. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ELECTRICITY/ELECTRONICS

ELC 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. *Eligibility MAT 1590 or Corequisite MAT 0550. J fall. 3 credit hours.*

ELC 1220 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. *Eligibility MAT 1590 or Corequisite MAT 0550. 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. *Prerequisite ELC 1200. J spring. 3 credit hours.*

ELC 2220 Advanced PLC

Students will learn about the programming and applications of a Programmable Logic Controller (PLC). This course will focus on program troubleshooting, hardware troubleshooting, data manipulation, math instructions, subroutines, and event-driven and time-driven sequences. Advanced topics such as HMI devised, PID, applications to robotics, data communications, and SCADA will be discussed. *Prerequisite: ELC 1220. 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. Prewriting skills including brainstorming and developing supporting details are explored. This course is intended for students with a greater level of proficiency in a language other than English. Placement by TOEFL, Accuplacer, and/or interview. *J occasionally. 3 imputed credit hours.*

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. Placement by TOEFL, Accuplacer, and/or interview. *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. Placement by TOEFL, Accuplacer, and/or interview. *J occasionally. 3 imputed credit hours.*

ELI 0650 ELI - Reading I

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. Placement by 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 life skills vocabulary will be addressed. Students will also gain assistance in building aural and oral communication skills and will focus on note taking and dictation. Academic vocabulary and an introduction to simple gerunds and infinitives will be targeted. There is a requirement of two hours of conversational time each week outside of class time which will be arranged individually. This course is intended for students with a greater level of proficiency in a language other than English. Placement by TOEFL, Accuplacer, and/or interview. *J occasionally. 3 imputed credit hours.*

ELI 0750 ELI - Speak & Listen II

Students will continue vocabulary building, pronunciation, and intonation continue to be improved upon. Based on student level, the course continues the 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. Placement by TOEFL, Accuplacer, and/or interview. *J occasionally. 3 imputed credit hours.*

ENGLISH

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. *Corequisite: ENG 1510. J fall, spring; C fall, spring. 3 imputed credit hours.*

ENG 0500 Composition I Workshop

Students will work in a supportive classroom setting with their peers and a workshop instructor to ensure they have the tools needed for success in ENG 1510. Students will drive class instruction through their questions about ENG 1510 course content, processes, and assignments. Additionally, students will spend time workshoping draft compositions and will engage in discussion about successful time management and overcoming barriers to success in college. *Corequisite: ENG 1510. J fall, spring; C fall, spring. 2 imputed credit hours.*

ENG 1510 English Composition I

Students will develop skills in critical reading, rhetorical analysis, and argument. Students will read rhetorically and critically, and will analyze a variety of texts on current, inter-disciplinary topics. The course focuses on writing for specific audiences and purposes with an emphasis on academic composing. As such, students will develop skills that prepare them for academic and professional writing as they practice recursive writing processes and learn to enter conversations through informed and effective academic expression. *Corequisite: Support courses as determined by college placement. 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: ENG 1510. J fall, spring; C fall, spring. 3 credit hours.*

ENG 1540 Into to Literary Studies

Students will explore the concept of the literature and its history, be introduced to and interrogate the literary canon, and learn to read across literary genres: narrative, poetry, and drama. Students will read texts that represent a variety of perspectives, periods, and cultures and in doing so will develop foundational skills for literary analysis. *No requisites. J fall, spring; C fall, spring. 3 credit hours.*

ENG 1580 Introduction to Technical Writing

Students will write to suite the methods, forms, and standards required by the 21st century job market. They will compose documents designed to meet the needs of specific audiences and purposes in a variety of media: correspondence, proposals, short-reports, descriptions, outlines, instructions, and abstract. Clarity, conciseness, and correctness will be emphasized, and assignments will give students experience in collaborative writing, document design, and selecting sources for integrity and reliability. Students will also become familiar with composing related ethical and cyber-security issues appropriate to the workplace. *Prerequisite: ENG 1510. J fall; C fall. 3 credit hours.*

ENG 2010 English 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. 3 credit hours.*

ENG 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.*

ENG 2510 World Lit - Enlightenment

Students will read, discuss, and analyze some of the most enduring and important works of literature up to the 17th century. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2520 World Lit 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. *Prerequisite: ENG 1530. 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. *Prerequisite: ENG 1530. J fall, spring; C occasionally. 3 credit hours.*

ENG 2550 American Lit 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. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2560 American Lit 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. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2570 The Gothic Novel

Students will trace the history of Gothic literature starting with Horace Walpole's novel *The Castle of Otranto*. Significant attention will be given to the influence of the Gothic novel in writing throughout the Romantic and Victorian ages and Modern literature. In addition to literature, students will also explore Gothic influences on architecture, art, film, and popular culture. *Prerequisite: ENG 1530. J fall, spring; C fall, spring. 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. *Prerequisite: ENG 1530. J 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 viewpoints of both reader and writer. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2600 Women in Literature

Students will examine literature to analyze the ways in which it represents women's roles and identities throughout history and across cultures. Students will analyze the diversity of women's experiences as both authors of and characters in literary texts, exploring these from feminist and gender studies perspectives. *Prerequisite: ENG 1530. J fall, spring; C fall, spring. 3 credit hours.*

ENG 2610 Brit Lit through Shakespeare

Students will read, discuss, and write about ideas prompted by the British literature of the Middle Ages and Renaissance. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2620 Brit Lit since Shakespeare

Students will read, discuss, and write about ideas prompted by the British literature post Shakespeare up through the 20th century. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2650 Award Winning Young Adult Lit

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. *Prerequisite: ENG 1530. J spring. 3 credit hours.*

ENG 2660 Literature Goes to Hell

Students will examine various works of literature, art, and music which include the Underworld, Hades, Hell, and the devil. These motifs are examined in a way that refers to the cultures and time periods from which they sprang. These are discussed as literary themes, not necessarily as religious ones. *Prerequisite: ENG 1530. J occasionally, C occasionally. 3 credit hours.*

ENG 2730 World Mythology

Students will gain a background in the classical mythology of various cultures. Students will study creation myths and the stories of the major heroes, gods, and goddesses. Students may learn about applications of myth in modern works of literature, arts, and music. *Prerequisite: ENG 1530. J occasionally. 3 credit hours.*

ENG 2740 Newswriting and Editing

Students will practice most forms of journalism found in newspapers, magazines, and broadcasting studios. Emphasis is on the individual student's writing. *Prerequisite: ENG 1530. J fall; Online occasionally. 3 credit hours.*

ENG 2830 Shakespeare

Students will be introduced to the work and times of Shakespeare. The play's the thing and will be the main focus of the course, yet films, recordings, and class readings may be used as aids in appreciating and visualizing the plays. Selected comedies, tragedies, romances, and sonnets are read and discussed. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

ENG 2840 Film Study and Appreciation

Students will learn the film as a world art form and social document, focusing attention on major areas of film, such as history, criticism, and visual literacy. Students explore a range of film productions from silent films to current releases and examine various approaches to film criticism. *Prerequisite: ENG 1530. J spring. 3 credit hours.*

ENG 2850 Literature of the Bible

Students will read Old and New Testament selections and will discuss their various interpretations. Some historical background is provided, but emphasis will be on the archetypal figures and themes which have greatly influenced much of our imaginative literature. *Prerequisite: ENG 1530. 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. *Prerequisite: ENG 1530. C occasionally. 3 credit hours.*

ENG 2890 Creative Nonfiction

Students will explore creative nonfiction by practicing literary techniques in conjunction with telling true stories. Students will examine various subgenres of creative nonfiction including memoir writing, travel writing, personal essays, lyric essays, and literary journalism. *Prerequisite: ENG 1530. J spring; C occasionally. 3 credit hours.*

ENGINEERING

ENR 1560 Intro 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. *Prerequisite/Corequisite: MAT 1590 (or eligibility: MAT 1600). J fall. 4 credit hours.*

ENR 2010 Engineering Internship I

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

ENR 2020 Engineering Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. 3 credit hours.*

ENR 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: MAT 1720 and PHY 1710. 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. *Prerequisite: PHY 1710; Prerequisite/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; Prerequisite/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 (Mohr's 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: 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 Kirchhoffs laws, voltage and current division, resistance and source combinations, and superposition. Basic techniques are expanded to include dependent sources, mesh analysis, nodal analysis, Thevenin's and Norton's 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/Corequisite: MAT 1720. J fall. 3 credit hours.*

ENTREPRENEURSHIP

ENT 1440 Small Business Management

Students will have the opportunity to develop the knowledge and skills needed by the business owner in the areas of accounting, marketing, and management. Special emphasis is given to the soft skills needed to succeed in an evolving business environment such as communication, adaptability, self-motivation, and ethical decision-making. Accounting topics include the purpose, design, and use of various financial statements. Additionally, students will learn to define target markets and plan appropriate promotional strategies including digital and social media marketing. Other topics to be discussed include effective team building, networking, and customer service. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. Online, fall. 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 without supports or Corequisite: ENG 1510 with supports. 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 without supports or Corequisite: ENG 1510 with supports. 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. *Prerequisite: minimum 6 credits of BUS/ENT. J occasionally. 3 credit hours.*

ENT 1490 Launching Ventures

Students will explore valuable processes and resources that will prepare them to start their own business now or in the future. Students will develop customer understanding as well as identify, evaluate, and recommend solutions that meet customer needs. Students will establish and validate a business model, then explore important aspects of new venture creation such as intellectual property, legal forms of ownership, sources of funding, market research, and resources that support new businesses in their region. *No requisites. Online, spring. 3 credit hours.*

FRENCH

FRE 1510 Introductory French I

Students will learn to interact effectively and appropriately in French at the novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the U.S. and the French-speaking community. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

FRE 1520 Introductory French II

Students will learn to interact effectively and appropriately in French at the novice-high level with people from other language and culture backgrounds. Students will communicate and reflect upon education, travel, leisure, family and community celebrations in the U.S. and the French-speaking community. *J occasionally; C occasionally. 3 credit hours.*

FRE 2510 Intermediate French I

Students will learn to interact effectively and appropriately in French at the intermediate low level with people from other language and culture backgrounds. Students will communicate and reflect upon beliefs and values as related to one's identity, citizenship, and health and wellness in the U.S. and the French-speaking community. *Prerequisite: FRE 1520; or three years high school French. J occasionally. 3 credit hours.*

FRE 2520 Intermediate French II

Students will learn to interact effectively and appropriately in French at the intermediate low/mid level with people from other language and culture backgrounds. Students will communicate and reflect upon public and personal identity, contemporary life, and sciences and technology in the U.S. and the French-speaking community. *Prerequisite: FRE 2510; or four years high school French. J occasionally. 3 credit hours.*

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 without supports or Corequisite: ENG 1510 with supports. 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. *Prerequisite/Corequisite: ENG 1510; [Corequisite: MAT 0550 OR Eligibility: college level math]. J occasionally. 4 credit hours.*

GLG 1520 Historical Geology

Students will identify and interpret the scientific theories explaining the physical and biological evolution of Earth, with an emphasis on the North American continent, using stratigraphic, fossil, and radiometric evidence. Laboratory projects and field trips include the use of geologic maps, cross-sections, and the study of faunal succession using fossil specimens. *Prerequisite: GLG 1510 or 1550. J occasionally. 4 credit hours.*

GLG 1550 Earth Science

Students will identify and explain basic concepts in geology, oceanography, and meteorology, including mineral and rock formation, plate tectonics, mountain building, weathering and soils, erosional and depositional processes, geologic hazards, oceans, and the atmosphere. Optional field experiences are offered. This is an introductory course for students with little or no science background. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J fall. 3 credit hours.*

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 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. *Prerequisite/Corequisite: ENG 1510; Eligibility: MAT 1590. J fall. 3 credit hours.*

GLOBAL STUDIES

GLS 1500 Introduction to Global Studies

Using a historical perspective of systemic forces, students will learn about major challenges facing our world today and will develop an understanding of the interconnectedness of people, places, institutions, and circumstances around the world. Students will bring together different insights regarding population trends, resource management, climate change, technological advancements, global conflict, and the role of governance and economics in supporting equitable societies, while emphasizing the role of the individual and their relationship to the larger global economy. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

GLS 2010 Global Studies 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. 3 credit hours.*

GLS 2500 Global Studies Capstone

Students will design and implement a single original global studies project of choice, [subject to instructor approval] that seeks to reinforce comprehension of course lectures and program content through academic research and a public demonstration of the work. In doing so, students will consider the ways in which their chosen program electives fit into the field of global studies and a globalized world. *Prerequisites: ENG 1530, GLS 1500, and student must be within one semester of graduation in the AA Global Studies degree program or have permission of the instructor. J spring; C spring. 3 credit hours.*

HEALTHCARE STUDIES

HCR 1200 Intro to Healthcare

Students will explore career pathways in clinical healthcare. To achieve this goal, students will examine the main aspects of a career in clinical healthcare including underlying science principles, basics of clinical practice, and clinical healthcare profession options. Additionally, students will participate in career enrichment experiences, develop soft skills, and learn how to identify and address barriers to college completion. *No requisites. J fall, spring; C fall, spring. 3 credit hours.*

HCR 1210 Introduction to Disease

Students will acquire fundamental knowledge about the characteristics of common diseases, including their prevention and treatments, which can be applied in an entry-level healthcare position. *No requisites. J fall, spring; C fall, spring. 1 credit hour.*

HCR 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.*

HCR 1460 Personal Health and Safety

Students will study emergency medical problems as they relate to sudden illness, accidents, environmental emergencies, and life threatening situations. Students

will learn about the structures, functions, diseases, and health maintenance steps pertaining to the muscular, skeletal, cardiovascular, nervous and respiratory systems. Additional topics include legal responsibilities, bleeding, shock, soft tissue injuries, musculoskeletal injuries, syncope, diabetic emergencies, seizures, strokes, poisoning, opium overdose, anaphylactic shock and alcohol abuse. The course will be taught by an instructor certified to deliver the American Heart Association curriculum that prepares the students to take certifying exams in (1) Basic Life Support (CPR/AED) and (2) Heartsaver First Aid. Upon successful completion of the certification exams, students have the option to pay the fee to obtain the American Heart Association certificates. This course is designed for either science or non-science majors. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J occasionally. 3 credit hours.*

HCR 2100 Kinesiology

Students will understand human movement and the physical and physiological principles upon which it depends. Analyses of motion and biomechanics based on anatomical, mechanical and physiological principles will be explored. Additionally this course will introduce various conditions and how they impact biomechanics. Students will explore various scientific fields that are the foundation of kinesiology and investigate careers related to the field of kinesiology. *Prerequisite: BIO 1500 or BIO 2510. 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. *Prerequisite/Corequisite: ENG 1510. J fall, spring; C fall. 3 credit hours.*

HIS 1520 World History Since 1500

Students in this introductory historical survey course will study and evaluate the cultural changes and continuities of selected world societies during the Modern Era, from the sixteenth century CE, to the present from a western perspective. They will use social sciences methods to research, interpret, and communicate historical understanding through the use of primary and secondary sources. The shaping of the modern age and its legacy for the world today will be stressed, as will the implications for the future of the global community. *Prerequisite/Corequisite: ENG 1510. J fall, spring; C spring. 3 credit hours.*

HIS 1530 US History Before 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 political, social, cultural, scientific-technological, economic, and natural developments that shaped the United States during its formative years; when the American republic was founded, 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. *Prerequisite/Corequisite: ENG 1510. 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. *Prerequisite/Corequisite: ENG 1510. J fall, spring; C fall, spring. 3 credit hours.*

HIS 2010 History 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable 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/Corequisite: 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/Corequisite: 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. *Prerequisite: ENG 1510. 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. *Prerequisite: ENG 1510. 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. *Prerequisite/Corequisite: ENG 1530. C occasionally. 3 credit hours.*

HIS 2610 Intro to Women's History

Students will explore the diversity of women's experiences within the larger context of United States history from the colonial era to the present. Concepts of gender, power, race/ethnicity, and cultural identity will be considered alongside women's contributions to the political, economic, social, and cultural life of the nation. Special emphasis will be given to the diverse experiences of women of different races, ethnicities, social classes, regions, and ages, as seen through a variety of sources and media. *Prerequisite/Corequisite: ENG 1530. J spring; C occasionally. 3 credit hours. 3 credit hours.*

HEALTH INFORMATION TECHNOLOGY

HIT 1410 Medical Terminology

Focuses on medical terminology as it occurs in the anatomical systems of the human body. Students will learn the basic principles of medical word building, pronunciation, and use of medical terms. Students will also learn about all human anatomical systems, the study of common diseases, procedures, and abnormalities. *No requisites. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

HIT 1420 Health Data Procedures

Students will learn procedures to become effective in the administrative duties necessary in today's state-of-the-art medical office. Students will examine medical records management, filing procedures, medicolegal communications, appointment scheduling, telephone procedures, insurance form completion, medical coding, medical transcription, and financial recordkeeping. *No requisites. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

HIT 1460 Electronic Health Record Mgm

Students will be introduced to the health information technology utilized in electronic health record (HER) systems and fiscal management. Students will obtain hands-on experience through integrated practice management of software to obtain a comprehensive picture with an emphasis on quality assurance, legal, and ethical practices of documenting the clinical and administrative tasks that take place for a total patient encounter. *No requisites. J fall, spring, C fall, spring, Online fall, spring.*

HIT 2430 Healthcare Doc & Med Transcript

Provides students with the training necessary to demonstrate mastery in transcribing medical reports. Realistic dictation from healthcare facilities will give students the experience of listening to a variety of medical terms, different accents, and various medical reports. *Prerequisites: HIT 1410 and HIT 1420. Online fall, spring. 3 credit hours.*

HIT 2440 Medical Coding I (CPT)

Students are introduced to procedural coding. Students will learn CPT and HCPCS coding systems, and how to relate coding procedures to office operations, medical reimbursement, and medical billing. *Prerequisites: HIT 1410 and HIT 1420. C fall; J fall; Online fall. 4 credit hours.*

HIT 2450 Medical Coding II(ICD-10-CM)

Students are introduced to ICD-9/10-CM coding classification systems. Students will learn how diagnostic coding procedures relate to medical reimbursement and office operations. *Prerequisites: HIT 1410 and HIT 1420. C spring, J spring; Online spring. 4 credit hours.*

HIT 2460 Health Insurance & Reimbursement

Students will gain an understanding of clinical classification systems, reimbursement methodologies, and financial management as it relates to health information management procedures. The course includes completion of CMS-1450 and CMS-1500 billing claims for inpatient, outpatient, emergency department, and physical encounters as well as review of inpatient cases to identify issues of fraud and abuse. *Corequisite: HIT 2440 or HIT 2450. J fall, spring, C fall, spring, Online fall, spring. 4 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 requisites. 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. C occasionally. 3 credit hours.*

HUMAN DEVELOPMENT

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 requisites. J fall, spring; C fall, spring. 3 credit hours.*

HUM 1310 Exploring Occupations

Students will learn how to locate and explore occupational resources. They will be able to identify characteristics of occupations including the nature of the work, job responsibilities, employment outlook, salary and benefits, and education, training, and/or experience needed. Students will conduct informational interviews to share with the class. *J fall, spring; C fall, spring. 1 credit hour.*

HUM 1320 Growth and Goal Setting

Students will learn the positive impact of a growth mindset on their decision making and practice basic life problem solving skills. Students will learn how their values and expectations impact their motivation for success in academic, career and life goals. Students will gain the skills to effectively set realistic, measurable goals and make a plan to achieve them. *No requisites. J fall, spring; C fall, spring. 1 credit hour.*

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. *No requisites. 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. *No requisites. J fall, spring; C fall. 2 credit hours.*

HUMAN SERVICES

HUS 1210 Intro 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. *Prerequisite/Corequisite: ENG 1510. 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 without supports or Corequisite: ENG 1510 with supports. J occasionally, C occasionally. 1 credit hour.*

HUS 1280 Intro to Family Systems

Students will examine the systems theory approach to family organization and functioning, integrating the theory and beginning clinical interventions used in working with families. Topics include the family life cycle, family structure, assessment techniques, family crises, and parent-child interaction. *Prerequisite/Corequisite: ENG 1510. J fall, spring; C fall. 3 credit hours.*

HUS 1310 Studies/Alcohol/Chem Depend

Students will examine the physical and pharmacological effects resulting from the use and abuse of alcohol and other substances. Topics include alcohol use and abuse, alcoholism, the disease concept, recent research theories about alcoholism and other substances, and other relevant social issues. The New York State Division of Alcoholism and Alcohol Abuse has reviewed this course and found it consistent with approved standards for 45 hours of CASAC counselor education/training. Provider number ED0056AL OASAS. *Prerequisite (or Corequisite): ENG 1510. J fall, occasionally spring; C fall, occasionally spring. 3 credit hours.*

HUS 1410 Generalist Practice Skills

Students will be introduced to the fundamental skills, techniques, and strategies used in the helping professions. Students will develop and practice each step in the case management process from engagement to termination. Utilizing a systems framework, students will learn to interview and assess client needs, identify community resources, and apply problem solving

strategies and evidence-based interventions. Students will further explore the legal and ethical responsibilities of the practitioner, and demonstrate documentation skills involved in service planning. Students will learn to present in a case conference and explore methods for evaluating client success and helper effectiveness. *Prerequisite: HUS 1210 (not required if pursuing the Certificate in Addictions Counseling). J spring, occasionally fall; C spring, occasionally fall. 3 credit hours.*

HUS 2210 Field Placement I-Social Work

Students will gain practical experience participating in a minimum of 135 hours of supervised work in a human service agency. Students will also participate in a weekly seminar which focuses on developing knowledge of agency networking, teamwork, applied ethics, and communication skills. The seminar also focuses on students' experiences, problems, and special interests. The student, faculty coordinator, and agency supervisor 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. *Prerequisite: HUS 1210 with a C or better, a minimum of 3 credits of human services electives with a C or better, HUS 1410, and permission of the human services faculty; Application required; must be a program major. Social science majors transferring to a four-year social work of human services program may also apply. J fall, spring; C fall, spring. 5 credit hours.*

HUS 2215 Field Placement: Addictions I

Students will gain practical experience participating in a minimum of 135 hours of supervised work in an OASAS approved addiction setting under the supervision of a qualified health practitioner (QHP). All students will fulfill a learning contract which includes practical training in the following areas: Screening, intake, orientation, assessment, evaluation and intervention, referral, treatment planning, counseling, crisis intervention, patient education, case management, reporting and record keeping, and consultation with other professionals. Students will participate in a weekly seminar which focuses on developing knowledge of agency networking, teamwork, applied ethics, communication skills, and integration of theory with practice. The seminar also focuses on students' experiences, problems, and special interests. Students are responsible for assigned readings and a weekly written log of the field experience in addition to other assignments. *Prerequisite: HUS 1310 (with a C or better), HUS 1410, and a minimum of three additional credits of Addictions core coursework or demonstrated employment. J spring, occasionally fall; C spring, occasionally fall. 5 credit hours.*

HUS 2220 Field Placement II

Students will gain practical experience participating in a minimum of 135 hours of supervised work in a different agency or using a higher skill set than used in HUS 2210. 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 practicum and seminar. Students are responsible for assigned readings and a weekly written log of the field experience in addition to other assignments. *Prerequisites: HUS 2210 with a C or better and permission of the human services faculty. Application required; must be a program major. J spring, occasionally fall; C spring, occasionally fall. 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. *Prerequisite: PSY 1510. J fall, spring; C 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. *Prerequisite: ENG 1530, HUS 1210; Sophomore standing. Recommended to*

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. *Prerequisite/Corequisite: ENG 1530 and either PSY 1510, EDU 1510, or HUS 1210. J occasionally; C occasionally. 3 credit hours.*

HUS 2370 Intro to Gerontology

Students will examine an interdisciplinary perspective of the aging process and the social environments of older adults. Physical, psychological, and social changes are covered. Topics include theories of aging, demographic changes, ageism, vulnerable populations, and problems of income, retirement, housing, and health care. Emphasis is on the particular needs of the older adult and the resources and services available nationally and locally. Field trip included. *Prerequisite: HUS 1210 or PSY 1510 or SOC 1510. J occasionally. 3 credit hours.*

HUS 2400 Ethics/Issues-Addiction Services

Students will develop a personal and professional framework for ethical action and become more effective in addressing ethical issues in the field of addictions counseling. This course addresses ethics for counselors in the field of chemical dependency and other addictions by presenting an overview of ethical thought and the basics of ethical decision making. The major focus will be professional ethics as they relate to addictions counseling, and on the CASAC canon of ethics. This course is intended to deepen the student's awareness of new and emerging ethical issues and provide the tools necessary for the entry-level professional. *Prerequisite: HUS 1310. J fall; C fall. 3 credit hours.*

HUS 2430 Alcohol/Chem Depend:Treatment

Builds on previous alcoholism and substance abuse courses to provide an overview of methods used in the field of chemical dependency. Specific focus is on the primary skills required of counselors: group and individual counseling, treatment planning, diagnostic assessment, psycho-social assessment, and case management. The course assumes a working knowledge of alcoholism and other addictions and a prior course in interviewing is suggested. The New York State Division of Alcohol and Substance Abuse has reviewed this course and found it consistent with approved standards for 45 hours of education/training for the CASAC. Provider number ED0056AL OASAS. *Prerequisite: HUS 1310 or extensive employment in a chemical dependency agency. Prior interviewing course suggested. B.S. and M.S. level individuals are permitted to enroll if they have prior counseling education. HUS 1280 and HUS 2230 recommended. J spring; C spring. 3 credit hours.*

INTERNATIONAL EDUCATION

INE 2730 Semester Abroad

The student should consult with the study abroad coordinator to determine the appropriate course number(s) to register for because credit hours vary. Offers programs in many countries including Australia, Ecuador, England, Ireland, and Spain. Programs consist of courses taken at a college or university in the host country. Credit hours earned vary by program and session. Students can choose courses in the humanities, social sciences, business, and internships for service professions. Classes are conducted in English and other languages. Students may take a conventional semester abroad, studying at a university, or they may also engage in service learning 20 hours per week, while attending a university abroad. Financial aid for which a student is eligible applies to these programs as well. Application deadline for the summer session is March 1; for the fall semester it is April 1; and for the spring semester it is November 1; with some exceptions for certain programs. *Prerequisite: completion of at least 12 college-level credits with a GPA of 2.0 or better. J fall, spring. Variable credit hours.*

INTERDISCIPLINARY STUDIES

INT 1500 Student Achievement

Students will develop the skills necessary to reach their educational goals, including improved study skills, communication skills, and time management skills. Students will examine academic challenges faced by college students and will understand the significance of personal responsibility in achieving their goals. *No requisites. J fall, spring; C fall, spring. 2 credit hours.*

INT 1555 Inquire

This course engages first-year students in hands-on academic exploration while preparing them to navigate

the challenges and opportunities of higher education. Students will develop the intellectual skills needed for college-level inquiry by actively exploring the various sides of a single, challenging question or issue. While the specific topic of inquiry varies from section to section, all instructors employ a problem-based, interdisciplinary approach to learning that helps students make connections across fields of study. Students will engage their critical thinking skills as they generate questions, organize information, evaluate evidence, and weigh alternative perspectives. In the process, they will become acclimated to the culture of higher education at JCC. *No requisites. J fall, spring; C fall, spring; Online occasionally. 2 credit hours.*

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. *Prerequisite/Corequisite: ENG 1510. J fall. 3 credit hours.*

INT 2800 Science Connections

A science outreach opportunity for science majors, students in this course design and present hands-on science investigations for elementary students in physical science, biology, chemistry, and earth science/geology. *Prerequisite: science major with sophomore standing and permission of instructor. J spring. 1 credit hour.*

LEADERSHIP DEVELOPMENT

LDR 1300 Leadership Engagement

Students will focus on the understanding of leadership theory and elements of self-awareness, understanding personal leadership style, and followership as it applies to the leader/follower relationship. The goal of this course is to focus on students' leadership style and to prepare them for further leadership study and application. Students will be guided through self-exploration exercises to liberate the leader within themselves. *No requisites. J fall, spring; C fall, spring. 3 credit hours.*

LDR 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. *Prerequisite: ENG 1510. J occasionally; C occasionally. 3 credit hours.*

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 requisites. J occasionally; C occasionally. 1 credit hour.*

LIB 1600 Information Resources for Research

Students will develop basic skills in research techniques using a variety of print and web-based information resources. Focus is on location and retrieval of information, and evaluation and ethical use of resources. *No requisites. 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

MATH FOR EDUCATORS

MAE 2510 Math for Elementary Teachers I

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, relations and functions, estimation, number theory, 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: Fulfillment of the math requirement in the student's degree program. J fall. 3 credit hours.*

MAE 2520 Math for Elementary Teachers II

This is the second course in the Math for Elementary Teachers sequence. Students will develop the skills necessary to effectively teach mathematics at the elementary school level. Topics of study will include problem solving, operations within a variety of number systems (integers, rationals, reals), statistical problem solving and data analysis, principles of probability, and various topics in geometry. 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. *Prerequisite: MAE 2510. J spring.*

MATHEMATICS

MAT 0530 Essential Mathematics

Students will engage in the study of mathematics for everyday life. This course integrates fluency with numbers, proportional reasoning, percentages, basic algebra, and communicating quantitative information. Applications are emphasized throughout to help students improve their basic quantitative reasoning skills. Students will also learn the value of productive persistence in the learning process. This course prepares students to take MAT 1500 - Problem Solving with Mathematics. *No requisites. J fall, spring; C fall, spring. 5 imputed credit hours.*

MAT 0550 Algebra Fundamentals

Students will learn basic algebra skills necessary for further study in mathematics and other disciplines that involve quantitative problems. Topics include a review of arithmetic and Real numbers, linear equations and inequalities, the Cartesian coordinate system, unit analysis, properties of exponents, polynomial arithmetic, factoring techniques, the quadratic formula, and an introduction to right triangle trigonometry. Problem solving and applications are emphasized. *No requisites. J fall, spring, C fall, spring. 4 imputed 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: any developmental MAT course or eligibility for any college-level MAT course. Prerequisite/Corequisite: ENG 1510. 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 0550 (or higher) or as determined by college placement. 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 0550 or as determined by college placement. 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: MAT1590 (or higher); or as determined by college placement. J fall, spring; C fall, spring; Online fall, spring. 4 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. 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 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, two- and three-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 of matrices. A 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 Equations

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.*

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. variable 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 requisites. 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 free-hand 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. *No requisites. J fall. 4 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 1500; Prerequisite/Corequisite: MAT 1590. J spring. 3 credit hours.*

MCT 1270 Machine Theory and Operations

Students will learn the function and operation of basic chip producing machine tools such as lathes, drill, milling machines, saws, and grinders. *Eligibility MAT1590 or Corequisite MAT0550. 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. J spring. 3 credit hours.*

MCT 1300 Machine Tool Tech. II

Students will gain exposure to setting up 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, 1270; Eligibility MAT1590. J spring. 3 credit hours.*

MCT 1310 Industrial Safety & Quality Practices

Students will learn the safety habits and quality control practices necessary within typical industrial settings. This course will cover knowledge needed to successfully complete a national certification test on safety and quality offered through the Manufacturing Skills Standards Council (MSSC). *No requisites. J fall; C fall. 2 credit hours.*

MCT 1320 Production Processes & Maintenance Awareness

Students will learn the basics of production processes and the operational maintenance operations within typical industrial settings. This course will cover knowledge needed to successfully complete a national certification test on production and maintenance offered through the Manufacturing Skills Standards Council (MSSC). *No requisites. J spring; C spring. 2 credit hours.*

MCT 1340 Manufacturing Drawings & GD&T

Students gain further exposure to actual manufacturing drawings and other information provided. The first part of the course covers the ability to read, interpret, and construct manufacturing drawings. The second part introduces students to geometric tolerance and dimensioning. *Prerequisite: MCT 1240; Prerequisite/Corequisite: MCT1380; Eligibility: MAT1590. J spring. 4 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. *No requisites. J spring. 3 credit hours.*

MCT 2010 Technology Internship I

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally. Variable credit hours.*

MCT 2020 Technology Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally. 3 credit hours.

MCT 2210 Mechanical Drives

Students will learn the basics of mechanical power transmission systems and the relevant components. The students will gain basic understanding of basic functions and properties of mechanical systems and safe operational requirements. Troubleshooting techniques are introduced for performing preventative maintenance, as well as identifying and resolving mechanical failures. *No requisites. J occasionally; C occasionally. 3 credit hours.*

MCT 2220 Automation & Robotics

Students will learn the various components, devices, and machines used in modern automation systems along with a study of their related electronics. Students learn the techniques of testing and troubleshooting incorporated in the industrial control setting in a team setting. Students will construct and troubleshoot an automated system including programming and sensors. *No requisites. J fall; C spring. 3 credit hours.*

MCT 2230 Mechanics of Materials

Students will learn stress, strain, and the mechanical properties of materials, tension, compression, torsion, and beams. Topics such as columns, welded and riveted connections, combined stress, stress concentrations, thermal stresses, and pressure vessels are discussed. *Prerequisites: MCT 1250, Eligibility MAT1600. J spring. 4 credit hours.*

MCT 2270 Mechanics of Energy Systems

Students will analyze and solve problems involving thermodynamic systems. Students will study thermodynamic processes, including cycles. Applications will focus on fluid dynamics and energy conservation, and heat transfer. *Prerequisite: PHY 1500, Eligibility MAT1600. J fall. 4 credit hours.*

MCT 2280 Advanced CNC Programming

Students will continue learning computer numerically control (CNC) programming, but move into advanced programming of three, four, and five-axis CNC machines. CAD/CAM is introduced and illustrated. Students will be exposed to Fanuc and Haas controllers. *Prerequisites: MCT 1280 Eligibility MAT 1590. J fall. 3 credit hours.*

MCT 2300 Machine Tool Tech. III

Students will gain additional exposure in setting up and running CNC machine tools such as lathes, mills, and EDM equipment. Students will concentrate on the set-up and machining utilizing CNC programs of more complex parts using the CNC equipment. *Prerequisites: MCT 1300 Eligibility MAT 1590. J fall. 3 credit hours.*

MCT 2340 Dimensional Metrology

Students gain exposure to basic and state of the art requirements for inspection and measurement of machined parts and assemblies. Students will be introduced to the various types of inspection equipment. The students will also have hands-on exposure to metrology via a CMM (Coordinate Measurement Machine) and an optical comparator. Students will hear of state of the art advances in measurement techniques from industry representatives. *Prerequisites: MCT 1340 and MAT 1590 or higher. J spring. 2 credit hours.*

MCT 2380 Advanced Solid Modeling

Students will extend their knowledge by using the parametric solid modeler in industrial design application. Skills are developed to support applications in the area of feature patterns, molded and cast parts, sheet metal applications, lofting, and sweeps. Assembly modeling and editing is covered as well as detailing of parts and assemblies. Links to other applications such as publication bill of materials, CAM, analysis package, and other CAD systems are also featured. *Prerequisite: MCT 1380. J fall. 3 credit hours.*

MCT 2410 Computer Aided Manufacturing

Students will gain exposure to the principles and procedures used in PC based CAD/CAM part programming and manufacturing. Course is based on the use of local industry standard CAM software. The PC-based CAM system will be used to produce complex machined parts from detailed solid models on advanced CNC machine tools. *Prerequisites: MCT 1380, MCT 2280 and MCT 2300. J spring. 3 credit hours.*

MCT 2420 Manufacturing Process I

Students will learn traditional manufacturing processes. Topics include processes such as casting, hot and cold working, injection molding, powdered metallurgy and finishing, as well as MTL props and their effect on the

manufacturing process, and lean manufacturing. Labs consist of tours of traditional manufacturing plants and a project which requires 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 1380. J spring. 3 credit hours.*

MUSIC

MUS 1510 Music Appreciation

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. *No requisites. J fall. 3 credit hours.*

MUS 1520 Introduction to Music Industry

Students will survey a variety of career opportunities in the music industry, including artist management, entrepreneurship, recording, performance, venue management and operation, publishing, law, public relations, marketing, A&R representation, broadcast media and film. Students will gather information about various career paths in the industry, and will evaluate the relationships between those potential career paths. Students will develop written and oral communication skills essential to the music industry through the preparation of relevant documents and materials such as letter of inquiry, recording reviews, press releases, and press kits. *No requisites. J occasionally. 3 credit hours.*

MUS 1530 Historical Survey-Rock & Roll

Students will study the roots and development of Rock/Soul/Pop music from its earliest manifestations to the current state of pop music. Through readings, lectures, listening to musical examples, and video footage, they will experience the birth and development of this genre of musical expression, which has been the dominant musical form in the U.S. since the 1950's. *No requisites. J spring. 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 requisites. 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 are 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 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 requisites. J fall, spring. 1 credit hour.*

MUS 1620 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 requisites. J fall, spring. 1 credit hour.*

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 requisites. 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 requisites. J fall, spring. 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 requisites. 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 Introduction to Sound Recording

Students will experience an introduction to the field of audio and the art of sound recording. Through lecture and lab-based instruction, students will learn fundamental principles of sound and how to apply them effectively in a professional studio environment. Students will understand and utilize the college's recording facilities and equipment to engineer and complete assigned projects. Additional studio hours are required. *No requisites. J fall, spring. 4 credit hours.*

MUS 1720 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 requisites. C occasionally. 2 credit hours.*

MUS 1730 Music Technology

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. *Prerequisite: MUS 1710. J occasionally. 3 credit hours.*

MUS 1740 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 1750 Music Ensembles: Chorus 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 requisites. J fall, spring. 2 credit hours.*

MUS 1760 Music Ensembles: Chorus 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 1750. J fall, spring. 2 credit hours.*

MUS 1830 Music Ensembles: Jazz 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 requisites. J fall, spring. 2 credit hours.*

MUS 1840 Music Ensembles: Jazz 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 1830. J fall, spring. 2 credit hours.*

MUS 1850 Music Ensembles: Rock 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 requisites. J fall, spring. 2 credit hours.*

MUS 1860 Music Ensembles: Rock 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 1850. J fall, spring. 2 credit hours.*

MUS 1870 Music Ensem: Concert Band 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 requisites. J fall, spring. 2 credit hours.*

MUS 1880 Music Ensem: Concert Band 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 1870. J fall, spring. 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 requisites. J occasionally. 2 credit hours.*

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 requisites. J fall. 2 credit hours.*

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. 2 credit hours.*

MUS 2520 Practices and Issues in Music Business
Students will comprehensively explore various aspects of the music business including publishing, copyright, contracts, licensing, the recording industry, artist management, tour management, marketing, fundraising, promotion, distribution, internet streaming, and others. Music industry ethics and the fundamentals of self-employment and self-promotion will be examined. The development of the industry will be discussed, and current issues and opportunities in the music business will be studied. *Prerequisite: MUS 1520; Prerequisite/Corequisite: ENG 1530. J occasionally. 3 credit hours.*

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 2610 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 requisites. J fall, spring. 1 credit hour.*

MUS 2620 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 requisites. J fall, spring. 1 credit hour.*

MUS 2630 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 requisites. J fall, spring. 1 credit hour.*

MUS 2640 Applied Music-Private
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 requisites. J fall, spring. 1 credit hour.*

MUS 2720 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. J occasionally. 2 credit hours.*

MUS 2740 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 2750 Music Ensembles: Chorus III
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 third in the sequence and will cover new and different music literature. *Prerequisite: MUS 1760. J fall, spring. 2 credit hours.*

MUS 2760 Music Ensembles: Chorus 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 2750. J fall, spring. 2 credit hours.*

MUS 2830 Music Ensembles: Jazz III
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 third in the sequence and will cover new and different music literature. *Prerequisite: MUS 1840. J fall, spring. 2 credit hours.*

MUS 2840 Music Ensembles: Jazz 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 2830. J fall, spring. 2 credit hours.*

MUS 2850 Music Ensembles: Rock III
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 third in the sequence and will cover new and different music literature. *Prerequisite: MUS 1860. J fall, spring. 2 credit hours.*

MUS 2860 Music Ensembles: Rock 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 2850. J fall, spring. 2 credit hours.*

MUS 2870 Music Ensem: Concert Band III
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 third in the sequence and will cover new and different music literature. *Prerequisite: MUS 1880. J fall, spring. 2 credit hours.*

MUS 2880 Music Ensem: Concert Band 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 2870. J fall, spring. 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. 2 credit hours.*

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. 2 credit hours.*

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 medications. Select ethical-legal principles are introduced. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports; and MAT 1500 or higher. Prerequisite/Corequisite: BIO 2510. 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 intervention, 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 first introduced in NUR 1510. Students will provide safe, holistic, culturally competent patient-centered care across the life span. The coursework emphasizes individuals experiencing simple/acute health disruptions in biophysical and psychosocial dimensions. Practice will occur in a variety of healthcare settings. Students will focus on assisting patients to reestablish health/wellness with emphasis on maternal, newborn, pediatric and surgical patients. Select ethical legal principles are reinforced. Students will continue to learn the preparation and administration of medications. *Prerequisites: NUR 1510 and successful completion of BIO 2510 with a grade of C or better; Co-requisites: BIO 2520 and PSY 1510. J occasionally. 8 credit hours.*

NUR 1540 Summer Nursing Clinical Experi
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 a 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 2520 with a grade of C or better. J summer; C summer. 1 credit hour.*

NUR 2050 Nursing Internship I
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 II
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 Part I, and successful completion of NUR 1520, BIO 2510 and BIO 2520 with a grade of C or better. J spring, C spring. 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 intervention, 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 continue to learn the preparation and administration of medications. *Prerequisite:* NUR 1520, PSY 1510, ENG 1530, BIO 2520 with a grade of C or better. *Corequisite:* NUR 2550, NUR 2350 (Part I). *Prerequisite/Corequisite:* BIO 2531, BIO 2532, and PSY 2510. J fall; C fall. 8 credit hours.

NUR 2520 Health Restoration/Maint II

Students will continue to develop 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) and Quality and Safety Education for Nurses (QSEN) competencies and the three roles of the Associate Degree nurse (provider of care, manager of care, and member within the discipline) 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. *Prerequisite:* NUR 2510 and NUR 2550. *Corequisite:* NUR 2360 and NUR 2560. *Prerequisite/Corequisite:* 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. This 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

This course presents an introduction to occupational therapy including history, philosophical base, values, ethics, practice framework and roles and responsibilities of the OT and OTA. Students will be introduced to the development of theories and how they can be used, along with frames of reference and models of practice, to develop interventions. The OT practice framework and terminology associated with the profession will be discussed. *Prerequisite/Corequisite:* ENG 1510; *Prerequisite:* Acceptance into the OTA program. J fall. 3 credit hours.

OTA 1520 Human Conditions Across the Lifespan

This course provides an overview of human development across the lifespan and the effects that congenital diseases, genetic conditions, disability, trauma, and injury have on occupational performance. Students will learn common conditions seen in occupational therapy practice with emphasis on etiology, clinical course, management, and prognosis. Students will explore the influences of health, wellness on an individual, their family, culture and society. *Prerequisite:* acceptance into OTA program. J fall. 3 credit hours.

OTA 1530 Fundamental Skills of OT I

This is the first course in a series of two that focus on development and refinement of skills and knowledge needed for occupational therapy practice. Students will apply the knowledge learned in Foundations of Occupational Therapy and will be introduced to standardized and non standardized assessments, documentation, and activity analysis. Intervention planning, including concepts of grading and modifying activities will be explored. Students will begin to 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. 1 credit hour.

OTA 1620 Psychosocial Concepts/Techniques

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/Corequisite:* PSY 2560. J spring. 2 credit hours.

OTA 1630 Fundamental Skills of OT II

Students will build upon the knowledge gained in OTA 1530 to further develop skills necessary for professional practice. Advanced application of the following skills will occur: treatment planning, task analysis, documentation, and evidence based practice. Professionalism skills of advocacy, inter and intraprofessional communication, and cultural awareness will be discussed. Additionally students will be introduced to practical skills of checking vital signs, basic transfers, range of motion and goniometry. *Prerequisite:* OTA 1530 with a grade of C or better. J spring. 1 credit hour.

OTA 1640 OT 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 and OTA 1530 with a grade of C or better. J spring. 2 credit hours.

OTA 1650 Growing Years: Birth-Young Adult

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 birth to 21 years of age. Occupational assessments will be explored and relevant treatment techniques will be reviewed. Learning about treatment delivery models of children with disabilities will emphasize naturalized environments and family centered models. *Prerequisite/Corequisite:* ENG 1530; *Prerequisite:* OTA 1520 and OTA 1530 with a grade of C or better. 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 various community settings, under the direction of an occupational therapy practitioner. Preparation for and exposure to practice settings and patient interaction are the primary focus of this course. Through reflection and discussion, application of knowledge about the profession will be practiced. HIPAA regulations, mandated reporter requirements, and universal precautions will be addressed. Background checks will be completed in preparation for student experiences working with the pediatric population. *Prerequisite:* OTA 1510 and OTA 1530 with a grade of C or better. J spring. 1 credit hour.

OTA 2520 Adulthood and Aging

Students will focus on the role occupational therapy plays in working with older adults and families across the continuum of care. Students will learn the influence the aging process has on physical, sensory, and cognitive functions and their relationship to functional capabilities. Psychosocial aspects of aging and how environment, culture, and values impact lifestyle and occupational performance will be discussed. Students will share an understanding of theories, issues, and clinical skills specific to practice in geriatric rehabilitation, home health care, long-term care, adult day care programs, and community practice, including wellness and prevention programs. *Prerequisite:* OTA 1520 with a grade of C or better. J fall. 2 credit hours.

OTA 2540 Community Based Practice

Students will analyze social injustice, health care disparities, and explore civic engagement and leadership opportunities in the region. Service learning projects, following the principles of occupational therapy profession, will be developed and implemented to meet identified needs in the community. *Prerequisite:* OTA 1700 with a grade of C or better. J fall. 1 credit hour.

OTA 2550 Tech. & Enviro. App for Living

Students will investigate various high and low tech aids to daily living that can improve occupational performance for consumers across the lifespan. Skill in selection, application, adaptation, and modification of items and environments will be developed. *Prerequisite:* OTA 1530 and OTA 1640 with a grade of C or better. J fall. 2 credit hours.

OTA 2560 OT Interventions II

Students will explore and develop therapeutic interventions to meet the needs of adults in various contexts. Frames of reference, models of practice and scientific evidence will be used to guide treatment planning. *Prerequisite:* OTA 1640 with a grade of C or better. J fall. 2 credit hours.

OTA 2570 Classroom to Clinic-Prep

Students will learn skills needed to transition from the classroom to the field. Students will identify Level II fieldwork expectations, explore the supervisory and interdisciplinary team relationships, review professional and ethical behavior, review AOTA, NBCOT and licensure requirements, develop a resume and cover letter, and begin preparation for job searching. *Prerequisite:* OTA 1630 and OTA 1700 with a grade of 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 and OTA 1630 with a grade of C or better. J fall. 3 credit hours.

OTA 2700 Fieldwork IIA: Principles/Pract

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 prior OTA courses with a grade of C or better. J spring. 5 credit hours.*

OTA 2720 Fieldwork IIB: Service Mgm

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 with a grade of C or better. J spring. 5 credit hours.*

PHYSICAL EDUCATION

PHE 1300 Athletes & Academic Success

Students will be acclimated and oriented into the daily tasks of a student-athlete in higher education and the roles of intercollegiate athletics. The coursework is designed to enhance the student athlete's college experience. The course will guide the student athlete toward a successful experience both academically and athletically. The course will include: lectures, video presentations, role playing, discussions, guest speakers, and activities that will promote success both in the classroom and on the field of competition. *No requisites. J fall, spring. 1 credit hour.*

PHE 1310 Healthy Weight Management

Students will focus on a comprehensive and healthy approach to tackle the issues of behavior change and weight management. Students will develop a weight management program through lifestyle change based upon exercise science, nutritional science and behavioral science. The student will gain the ability to turn that knowledge into practical strategies and an individualized program. *No requisites. J fall, spring; C fall, spring. 3 credit hours.*

PHE 1480 Personal Trainer Cert Prep

Students 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. *No requisites. J spring, fall. 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 an 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 requisites. J occasionally; C occasionally. 1 credit hour.*

PHE 1510 Intro 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 requisites. J 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 requisites. J fall, spring. 1 credit hour.*

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. *No requisites. 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 requisites. J spring. 1 credit hour.*

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, diaphragmatic breathing, and breath awareness. The course includes lectures on yoga philosophy, postures, diet, 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. *No requisites. J fall, spring; C occasionally. 1 credit hour.*

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. *No requisites. J occasionally. 3 credit hours.*

PHE 1610 Intro 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 requisites. J fall, spring. 1 credit hour.*

PHE 1620 Fitness Concepts/Applications

Students will apply fundamental concepts of health-focused fitness, which include: flexibility, muscular strength, muscular endurance, cardiovascular health, and body composition. Students will learn how to incorporate and benefit from proper warm ups, cool downs, weight training, plyometrics, HIIT and SARQ training, lower back care, injury prevention, relaxation techniques, and nutrition in their personal workout routines. Upon completion of the course, students will be able to create a personalized fitness program designed specifically for them, based on body typology, muscle fibers, resting heart rate and body composition. *No requisites. J occasionally; C occasionally. 3 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. *No requisites. J fall, spring. 1 credit hour.*

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 requisites. J fall, spring. 1 credit hour.*

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 requisites. J fall, spring. 1 credit hour.*

PHE 1660 Intro to Life Fitness

Students will be introduced to The Life Fitness system of strength equipment. The course will introduce students to the Life Fitness philosophy of strength development, concepts of form and individual strength program development. *No requisites. J fall, spring. 2 credit hours.*

PHE 1670 Intro 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. *No requisites. 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 musculature and training techniques. *No requisites. J fall, spring. 1 credit hour.*

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 features repetition and resistance combined with normal body movements. Music and games will add variety and interest to the program. *No requisites. J occasionally; C occasionally. 1 credit hour.*

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. *Prerequisite: PHE 1660 or PHE 1680. J fall, spring. 1 credit hour.*

PHE 1710 Individualized Swimming

Students will be provided instruction in beginning swimming basics. Students will demonstrate skill in drownproofing, elementary backstroke, backstroke, sidestroke, crawl stroke, trudge stroke, and breaststroke. Improvement in swimming ability and cardiovascular health for all levels of swimmers are the main course objectives. *No requisites. J occasionally; C occasionally. 1 credit hour.*

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 requisites. J fall. 1 credit hour.*

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 requisites. 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 requisites. J occasionally. 1 credit hour.*

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 requisites. J occasionally. 1 credit hour.*

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 requisites. J occasionally. 1 credit hour.*

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 requisites. 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 requisites. J fall, spring. 1 credit hour.*

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. *No requisites. J occasionally. 1 credit hour.*

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 requisites. J spring. 1 credit hour.*

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 sport. 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 requisites. J spring. 1 credit hour.*

PHE 1820 CPR for the Professional Rescu

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 requisites. 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 requisites. J occasionally. 1 credit hour.*

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 requisites. J fall, spring. 2 credit hours.*

PHE 1850 Bowling/Golf

Students will demonstrate the fundamental skills, rules, and strategies of both sports. *No requisites. J fall, spring. 1 credit hour.*

PHE 1860 Archery/Foil Fencing

Students will learn the basic fundamentals, rules, and strategies of each activity. *No requisites. J occasionally. 1 credit hour.*

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. *No requisites. J spring. 1 credit hour.*

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. *Prerequisite: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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, preventive techniques, and rehabilitation. *Prerequisites: PHE 1500 and CPR and first aid certification; Corequisite: 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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. *Corequisite: CRI 2250, CRI 2380, CRI 2470, and compliance with NYS regulations. J fall. 2 credit hours.*

PHE 2470 Defensive Tactics/Law Enforce

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 2500 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. *Prerequisite/Corequisite: BIO 2510. J fall, spring. 3 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 specific results. Students will develop an understanding of how the body responds to exercise, diet, stress, and other influences. *No requisites. J occasionally. 3 credit hours.*

PHE 2880 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. *No requisites. J occasionally. 3 credit hours.*

PHE 2501 - 2508 Athletic Part-50

Student athletes, who successfully complete participation in a NJCAA sport season, will learn about the competitive fundamentals of participation in an 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 requisites. J occasionally; C occasionally. 1 credit hour.*

PHILOSOPHY**PHL 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 requisites. J occasionally. 2 credit hours.*

PHL 1510 Intro to Philosophy

Students will gain an understanding of the Western philosophical tradition and the influences 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. *Prerequisite: ENG 1510. 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. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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 Intro 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. 3 credit hours.*

PHL 2720 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 problems such as informed consent, patient rights, confidentiality, euthanasia, genetic testing, and medical resource allocation. *Prerequisite: ENG 1530. J occasionally; C occasionally. 3 credit hours.*

PHYSICS**PHY 1500 Foundational Physics**

Students will use various experiments to learn the fundamental phenomena, principles, and laws of physics. Topics will include: motion, Newton's laws, torque, and the principles of work and energy. Students will look at physics both conceptually, where verbal reasoning will be emphasized, as well as quantitatively, where students will utilize algebra to model the physical world. No previous knowledge of physics is assumed. *Prerequisite (or corequisite) ENG 1510, Eligibility: MAT 1590 or higher or Prerequisite: MAT 1500. J fall. 4 credit hours.*

PHY 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.

Eligibility: MAT 1500 or higher; Prerequisite/Corequisite: ENG 1510. J spring. 3 credit hours.

PHY 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. *Prerequisite: ENG 1510, MAT 1590, high school physics or PHY 1500. J fall; C occasionally. 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. *Prerequisite: MAT 1600, and PHY 1610 or PHY 1710. 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. *Prerequisite: ENG 1510, MAT 1710, and high school physics or PHY 1500 or PHY 1610. J spring. 4 credit hours.*

PHY 2010 Physics Internship I

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally. Variable credit hours.*

PHY 2020 Physics Internship II

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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally. 3 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: MAT 1720, PHY 1710. J fall. 4 credit hours.*

PHY 2710 Analytical Physics II

Students continue their investigation into physical phenomenon 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. Students will also study geometric and physical optics. The course will end with perplexing problems of noncovariance of the electromagnetic theory of Maxwell. The answers to these questions lead to the study of modern physics topics. *Prerequisite: PHY 1710; Prerequisite/Corequisite: MAT 2650. J fall. 4 credit hours.*

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 Schrodinger, 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 Schrodinger theory of quantum mechanics and solutions to the Schrodinger equation. In the laboratory students will repeat a number of historical experiments including the determination of the speed of light, the charge and 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 varieties 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 without supports or Corequisite: ENG 1510 with supports. 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 a variety 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 without supports or Corequisite: ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.*

POL 1550 Intro 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 without supports or Corequisite: ENG 1510 with supports. 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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. *Prerequisite: ENG 1510. 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. *Prerequisite: ENG 1510. 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. *Permission of instructor required. J occasionally. 3 credit hours.*

PUBLIC SAFETY TECHNOLOGY

PST 1020 Intro 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 requisites. 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 without supports or Corequisite: ENG 1510 with supports. 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-defeating approaches. Students are expected to apply what they have learned to their own lives. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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 without supports or Corequisite: ENG 1510 with supports. C fall. 3 credit hours.*

PSY 2010 Psychology Internship

Students receive on-the-job experience consisting of up to 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C 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 cultural diversity and interpersonal processes as they relate to individual personality. *Prerequisite: ENG 1510. 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. Emphases will be placed on integrating theory and research and appreciating the practical application of life span development to real-life concerns and problems. *Prerequisite: ENG 1510. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.*

PSY 2520 Child Development

Students will demonstrate an understanding of development from conception to adolescence, including knowledge of research methods, theories, and factual information. They will apply that knowledge to 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:* ENG 1510. 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:* ENG 1510. 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 will be able to critically analyze various types of group process. 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:* ENG 1510. 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:* ENG 1510. J fall, spring; C fall. 3 credit hours.

PSY 2560 Abnormal Behavior

Students will demonstrate mastery of past and current theoretical perspectives on abnormal behavior. Students will critically evaluate 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:* ENG 1510. J fall, spring; C fall, spring; Online fall, spring. 3 credit hours.

PSY 2570 Human Sexuality

Students will gain an understanding concerning male and female sexual anatomy and physiology, abortion, childbirth, contraception, AIDS, and other sexually transmitted diseases. Students will also show knowledge and understanding through exams and a project, in the areas of sexual arousal, sexual attitudes, adolescent and childhood sexuality, and marital, premarital, and extramarital sexual interactions. *Prerequisite:* ENG 1510. J fall; C spring. 3 credit hours.

PSY 2580 Forensic Psychology

Students will apply the methods and theories of psychology to the criminal justice (legal) system. Specifically, students will gain and understanding of how the field of psychology and psychological research has been applied in law enforcement, the judicial process, and the corrections process. Issues of morality, the criminal personality, eyewitness testimony, the use of psychological evaluation, jury selection, criminal profiling, child custody evaluation, police, and inmate counseling are among several major topics covered. Since this course focuses on the criminal justice system, it will not include civil litigation. *Prerequisite:* ENG 1510. J fall; C fall. 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 understand love and friendship 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:* ENG 1510. J occasionally. 3 credit hours.

PSY 2710 Transpersonal Psychology

Students will demonstrate knowledge of the study of consciousness and different states of awareness. Research in the areas of ESP, dreaming, drug experiences, meditation, and peak experiences is 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:* ENG 1510. J occasionally. 3 credit hours.

RELIGION

REL 1510 Intro 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 without supports or *Corequisite:* ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.

REL 1520 Intro 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. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.

REL 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 without supports or *Corequisite:* ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.

REL 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. *Prerequisite:* ENG 1510. J occasionally. 3 credit hours.

REL 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:* ENG 1510. J occasionally; C occasionally. 3 credit hours.

RUSSIAN

RUS 1510 Introductory Russian I

Students will learn to interact effectively and appropriately in Russian at the novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the U.S. and the Russian-speaking community. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. J fall. 3 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. J occasionally; C occasionally. 3 credit hours.

SOCIOLOGY

SOC 1510 Intro 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 without supports or *Corequisite:* ENG 1510 with supports. 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 without supports or *Corequisite:* ENG 1510 with supports. 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. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. 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. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. 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. *ENG 1510 without supports or Corequisite: ENG 1510 with supports. 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. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. 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. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. 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 will be able to compare and contrast people's understanding of the body and its development, how people come to understand their own sex and gender characteristics, and the place that each one of us occupies in terms of our sex, sexuality, and gender behaviors. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. J occasionally; C occasionally. 3 credit hours.

SOC 2600 Popular Culture

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.

SPANISH

SPA 1500 Spanish in the Workplace

Students will develop basic communication skills in Spanish appropriate to careers or services whose clients are Spanish speakers. Recommended primarily for students who have had some introduction to Spanish, the focus is on proficiency in comprehension and oral response. Students are introduced to relevant aspects of Hispanic culture. *Prerequisite:* ENG 1530. *Strongly recommend completion of SPA 1510, SPA 1520, or equivalent.* J fall, spring; C occasionally. 2 credit hours.

SPA 1510 Introductory Spanish I

Students will learn to interact effectively and appropriately in Spanish at the novice-mid level with people from other language and culture backgrounds. Students will communicate and reflect upon personal and public identity, family and community, and contemporary life in the U.S. and the Spanish-speaking community. *Eligibility:* ENG 1510 without supports or *Corequisite:* ENG 1510 with supports. J fall; C fall. 3 credit hours.

SPA 1520 Introductory Spanish II

Students will learn to interact effectively and appropriately in Spanish at the novice-high level with people from other language and culture backgrounds. Students will communicate and reflect upon education, travel, leisure, family and community celebrations in the U.S. and the Spanish-speaking community. *Prerequisite: SPA 1510; or two years high school Spanish. J spring; C spring. 3 credit hours.*

SPA 1530 Spanish for Law Enforcement

Students will be prepared to communicate in Spanish in the law enforcement setting. Students will have the opportunity to focus on communicative scenarios that are typical of police officers working with the public using appropriate vocabulary and cultural insights. No requisites. J fall. 1 credit hour.

SPA 1540 Spanish for Healthcare Professionals

Students will be introduced to communication common to the healthcare setting. Students will learn healthcare focused vocabulary and explore culture needed to serve the Spanish-speaking population. *Prerequisite: SPA 1510; or one year high school Spanish. J, spring. 3 credit hours.*

SPA 1600 Globalize Your Mind I

Students will study Spanish in preparation for living with a native family and engaging with the local community. Students will explore the social, historical, and cultural richness of the Spanish speaking country. This course is a prerequisite for SPA 1601. *Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports. J spring, C spring. 1 credit hour.*

SPA 1601 Globalize Your Mind I (Travel)

Students will study Spanish via one on one or small group instruction with a native Spanish speaking instructor. They will explore the social, historical, and cultural richness of the Spanish speaking country while living with a native family and engaging with the local community. Through the language instruction, community engagement, cultural excursions, and independent exploration students will analyze the role they may play and the influence they may have in a diverse world. *Prerequisite: SPA 1600. J spring, C spring. 2 credit hours.*

SPA 2010 Spanish 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

SPA 2510 Intermediate Spanish I

Students will learn to interact effectively and appropriately in Spanish at the intermediate low level with people from other language and culture backgrounds. Students will communicate and reflect upon beliefs and values as related to one's identity, citizenship, and health and wellness in the U.S. and the Spanish-speaking community. *Prerequisite: SPA 1520; or three years high school Spanish. J occasionally. 3 credit hours.*

SPA 2520 Intermediate Spanish II

Students will learn to interact effectively and appropriately in Spanish at the intermediate low/mid level with people from other language and culture backgrounds. Students will communicate and reflect upon public and personal identity, contemporary life, and sciences and technology in the U.S. and the Spanish-speaking community. *Prerequisite: SPA 2510; or four years high school Spanish. J occasionally. 3 credit hours.*

SPA 2530 Intro 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. *Prerequisite: SPA 2510 or four years high school SPA. J 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. *Eligibility: SPA 2510. J occasionally. 3 credit hours.*

SPA 2560 Latin American Civ/Culture

Students will learn about the challenges Latin Americans face today by exploring the lived experiences of people

past and present within the context of the convergence of indigenous, African, and European descent. In doing so, students will develop an understanding of the complex and often contradictory interrelationships that exist between diverse cultural traditions and ethnicities and the systems and institutions that frame their lives. *Prerequisite: ENG 1510. J occasionally. 3 credit hours.*

SPA 2600 Globalize your Mind II

Students will study Spanish at the intermediate level in preparation for living with a native family and engaging with the local community. Students will explore the social, historical, and cultural richness of the Spanish speaking country. This course is a prerequisite for SPA 2601. *Prerequisite: SPA 1520. J spring; C spring. 1 credit hour.*

SPA 2601 Globalize your Mind II (Travel)

Students will study Spanish at the intermediate level via one-on-one or small group instruction with a native Spanish speaking instructor. Students will review the fundamentals of the Spanish language, but special attention is given to the continuing development of students' presentational, interpersonal, and interpretive language skills at the intermediate level. They will explore the social, historical and cultural richness of the Spanish speaking country while living with a native family and engaging with the local community. Through the language instruction, community engagement, cultural excursions, and independent explorations, students will analyze the role they may play and the influence they may have in a diverse world. *Prerequisite: SPA 1510. J spring; C spring. 2 credit hours.*

SPORT MANAGEMENT**SPT 1300 Introduction-Sport Management**

Students will be introduced to the profession of sport management and kinesiology with particular focus on basic domains and principles related to sport management. Additionally, students will explore career options in sport management and kinesiology. *No requisites. J fall. 3 credit hours.*

SPT 1310 Foundations-Coaching & Teaching

Students will develop an understanding of the various components of the coaching profession with emphasis on coaching philosophy, sport pedagogy, sport psychology, and sport physiology. All students will have an opportunity to become certified in the Coaching Principles portion of the American Sport Education Program (ASEP). Students will also be provided an overview of the philosophical and sociological aspects of coaching, coaching trends, and related issues. *No requisites. J fall. J occasionally. 3 credit hours.*

SPT 1320 Sport in Society

Students will learn about the relationships between sports, culture, and society through the application of concepts, and theories. Topics to be presented may include, but will not be limited to violence in sport, gender and sport, race and sport, sport and the media, and sport and politics. *No requisites. J fall. 3 credit hours.*

SPT 1330 Recreation & Fitness Program Planning

Students will examine the principles, policies, and procedures utilized in program development and delivery for public, private, and commercial fitness/recreation settings. The course will place special focus on understanding participant leisure behavior and needs and then creating programming to respond to those needs. *No requisites. J fall. J occasionally. 3 credit hours.*

SPT 1350 Sport Media

Students will examine the field of sport media as it relates to the sport industry. Students will be introduced to the relationship between sport and the media while analyzing their historical development. Additionally, students will be introduced to sport through various media outlets while analyzing sport media managements. Lastly, students will assess the future of sport media and the different trends and strategies within the industry. *No requisites. J occasionally. 3 credit hours.*

SPT 1550 Sport Promotion and Marketing

Students will explore promotion and advertisement, marketing, and sales as they pertain to the sport enterprise, including decision making and planning from the sport manager's perspective and sponsorship strategies utilized in the sports industry. Specific topics include: the nature of sport marketing, studies of sport consumers and consumer behaviors, marketing analytics, the sport product, managing sport brands, licensing, pricing and promotions, sales, electronic media, public relations, and the marketing mix. Also examined will be the legal aspects of sports marketing and ideas for future trends. *Prerequisite: ENG 1510. J occasionally. 3 credit hours.*

SPT 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.*

SPT 2010 Sports Management 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. *Prerequisite: completion of at least 12 college-level credits with a GPA of 2.0 or better. J occasionally; C occasionally. Variable credit hours.*

SPT 2330 Youth Sport Administration

Students will examine the youth sport movement by exploring a broad overview of the major topics in the area. Specifically, the course prepares students as program directors by focusing on related issues such as sport specialization, burnout, overuse injuries, and parent and coaching education. Information garnered in this course is relevant for sport management personnel, fitness professionals, teachers/coaches, and/or athletic trainers. *Prerequisite: ENG 1510. J occasionally. 3 credit hours.*

SPT 2520 Ethical Leadership-Sport & Fitness

Students will examine leader behavior through an ethical lens based on case studies of past and present events in the business, educational, political, and sporting worlds. The leadership role of a sport or recreation manager, athletic administration, or fitness promotion professional in supervising subordinates and directing volunteers and other personnel within an organization will be chronicled. *Prerequisite: ENG 1510. J occasionally. 3 credit hours.*

SPT 2530 Sport History Through Film

Students will be presented with an overview of sport history in the United States from 1900 to the present. Utilizing film (i.e., past and present movies and documentaries) as the platform, students will examine social, political, and economic make-up and the ability of sport to effect and shape institutions. Particular focus will be given to social class, race and ethnicity, gender, community, technology, and commercialization through the media. *Prerequisite: ENG 1510. J occasionally. 3 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 costuming, makeup, scenic design, and the lighting necessary to stage a show are also examined. *No requisites. J 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, and African-American, Latino, 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. *Prerequisite/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. *Prerequisite/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. Performance skills are strengthened through acting exercises and methods. *No requisites. J fall. 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. *No requisites. J fall, spring. 1 credit hour.*

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 requisites. 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: completion of at least 12 college-level credits with a GPA of 2.0 or better. 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. *No requisites. J spring. 3 credit hours.*

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 oxy-fuel and plasma-arc cut metals of varying thicknesses as well as have an appropriate understanding of welding safety. *No requisites. 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. *No requisites. 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. *No requisites. 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. *No requisites. 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. *No requisites. 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; Eligibility: MAT 1590. 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; Eligibility: MAT 1590. 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; Eligibility: MAT 1590. 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 shear. The principles behind bending, punching, and fastening technologies will be discussed. *Prerequisites: WLD 2260; Corequisite: WLD 2450. 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. *No requisites. 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. *Corequisite: WLD 2350; Prerequisite: student must be within one semester of graduation or have permission of instructor. J spring. 2 credit hours.*

STATE UNIVERSITY OF NEW YORK

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 *Herkimer* | Hudson Valley Community College *Troy* | Jamestown Community College *Jamestown, Olean* | 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*

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Chancellor John B. King, Jr.
Please see the website for more information: <https://www.suny.edu/hr/compensation/unclassified/group-list/system-administration/>

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Jamestown Community College is supported by a regional partnership among Cattaraugus County, Chautauqua County, and the City of Jamestown.

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Edward A. Sundquist
Mayor of Jamestown

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President
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B.A., University at Buffalo
M.S., SUNY College at Buffalo
Ph.D., North Carolina State University

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Vice President, Workforce Development
B.A., University of Minnesota
M.S., Central Michigan 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

Marsha Hern (2004)
*Executive Assistant to the President &
Assistant to the Board of Trustees*
A.S., Jamestown Business College
A.A.S., Jamestown Community College
B.S., Houghton College

Michael Martello (2009)
Vice President, Administration
B.B.A., St. Bonaventure University
M.B.A., St. Bonaventure University

Nicolette M. Riczker (2015)
*Executive Director of Human Resources &
Chief Diversity Officer*
B.S., SUNY at Buffalo
M.P.S, Stony Brook University

Paula J. Snyder (1992)
*Executive Director of the Cattaraugus
County Campus*
B.S.N., SUNY Plattsburgh

Kirk D. Young (2014)
*Vice President,
Enrollment Management &
Institutional Advancement*
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

Debra Bablak (2017)
Assistant Professor, Nursing
B.S.N., Edinboro University
M.S.N., Robert Morris University

Brian Barone (2004)
Assistant Professor, Criminal Justice
A.S., Jamestown Community College
B.S., SUNY Fredonia
M.S., Mercyhurst College

Amanda Bartels (2011)
Associate Professor, Mathematics
B.A., M.S., University of Albany

Shannon E. Bessette (2000)
Professor, Anthropology
B.A., Cornell University
M.A., University of Oklahoma
SUNY Chancellor's Award for Excellence
in Teaching, 2015

Jonathan Blair (2022)
Instructor, Information Technology
B.S., University of Pittsburgh
M.S., Regis University

Sarah Bray (2013)
Associate Professor, Business
Cattaraugus County Campus
B.S., Alfred University
M.B.A., Saint Bonaventure University

Heather Burrell (2011)
*Associate Professor, Nursing;
Director, Nursing*
A.A.S., Jamestown Community College
B.S.N., Florida Hospital College of Health
Sciences
M.S.N., South University
D.N.P., Walden University

Frank Corapi (2006)
*Professor, Psychology;
Co-Director, Social Sciences;
Coordinator, Psychology;*
B.S., M.S., Gannon University

Dion Daly (2022)
*Assistant Professor, Business, Economics, &
Global Studies*
B.S. SUNY University at Buffalo
M.S., Buffalo State College
M.B.A., D'Youville College
Ph.D., SUNY University at Buffalo

Rose Dunn (2019)

Assistant Professor; Nursing
A.A.S., Jamestown Community College
M.A., Wilkes University

Neil Flory (2013)

Associate 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

Jennifer Forney (2021)

Assistant Professor; Business, Tourism, &
Hospitality
A.A.S., Monroe Community College
B.S., University of Pittsburgh
M.S., Canisius College
Ph.D., Iowa State University

Morgan Franchina (2021)

Counselor; Instructor
B.S., SUNY College of Technology at
Alfred
M.S.Ed., University of Missouri

Renee Funke (2009)

Professor; Education;
Director; Teacher Education
Coordinator; Teacher Education
Field Placement, Early Childhood, and
Leadership
B.S., M.S., SUNY Fredonia
C.A.S., SUNY Buffalo
Ph.D., Northcentral University

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Assistant Professor; Learning Center
Coordinator
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B.S., SUNY Fredonia
M.S., St. Bonaventure University

Tim Griffin (2019)

Assistant Professor; Mechanical Technology
& Mechatronics
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B.S., Tennessee Tech University
M.S., Virginia Tech University

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Coordinator; Welding Technology
A.S., Alfred State University
B.S., Ferris State University
M.S., Buffalo State College

Gilbert Higgins (2006)

Assistant Professor; English
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M.A., Clarion University of Pennsylvania

Jacob Hordych (2018)

Assistant Professor; Sport Management &
Physical Education Studies
B.S., Pennsylvania State University -
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M.S., Lock Haven University

Catherine Iannello (2003)

Professor; Human Services;
Director; Human Services & Addictions
Counseling
B.S., SUNY at Buffalo
M.S.W., University of Kentucky
SUNY Chancellor's Award for Excellence
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B.S.N., SUNY University at Buffalo
M.S.N., Case Western Reserve University

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Associate Professor;
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M.A., Ph.D., University of California

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Associate Professor;
Mathematics & Computer Science;
Director; Mathematics, Sciences &
Computer Technology
B.A., Mercyhurst College
M.A., Miami University
SUNY Chancellor's Award for Excellence in
Teaching, 2021

Tracy Kelly (2017)

Assistant Professor; Registrar
B.A., SUNY Buffalo
M.S., SUNY College at Buffalo

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Associate Professor; Reading and
Composition; Cattaraugus County Campus
Certificate, University Pittsburgh
B.A., University of Pittsburgh-Bradford
M.S., Buffalo State College
Graduate Certificate, Indiana University
Ph.D., Old Dominion University
SUNY Chancellor's Award for Excellence in
Teaching, 2020

Francis LaChappelle (2012)

Assistant Professor; Human Services;
Addictions Counseling; Psychology;
Coordinator; Human Services
Cattaraugus County Campus
B.S., University of Wisconsin-Stout
B.S., University of Wisconsin-Eau Claire
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B.A., Oberlin College
M.A., University of Delaware
A.B.D., Penn State Harrisburg
SUNY Chancellor's Award for Excellence in
Teaching, 2023

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Instructor; Art; gallery Academic Outreach
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B.F.A., SUNY New Paltz

Sung Jong (David) Lee (2008)

Assistant Professor; Computer Science;
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Sciences
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 B.S.N., Eastern Kentucky University
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 M.L.S., SUNY Buffalo
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 B.S.N., SUNY College at Buffalo

Sean Nowling (2012)

Assistant Professor, Physics
 B.S., Purdue University
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Professor, History;
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 Ph.D., SUNY Stony Brook

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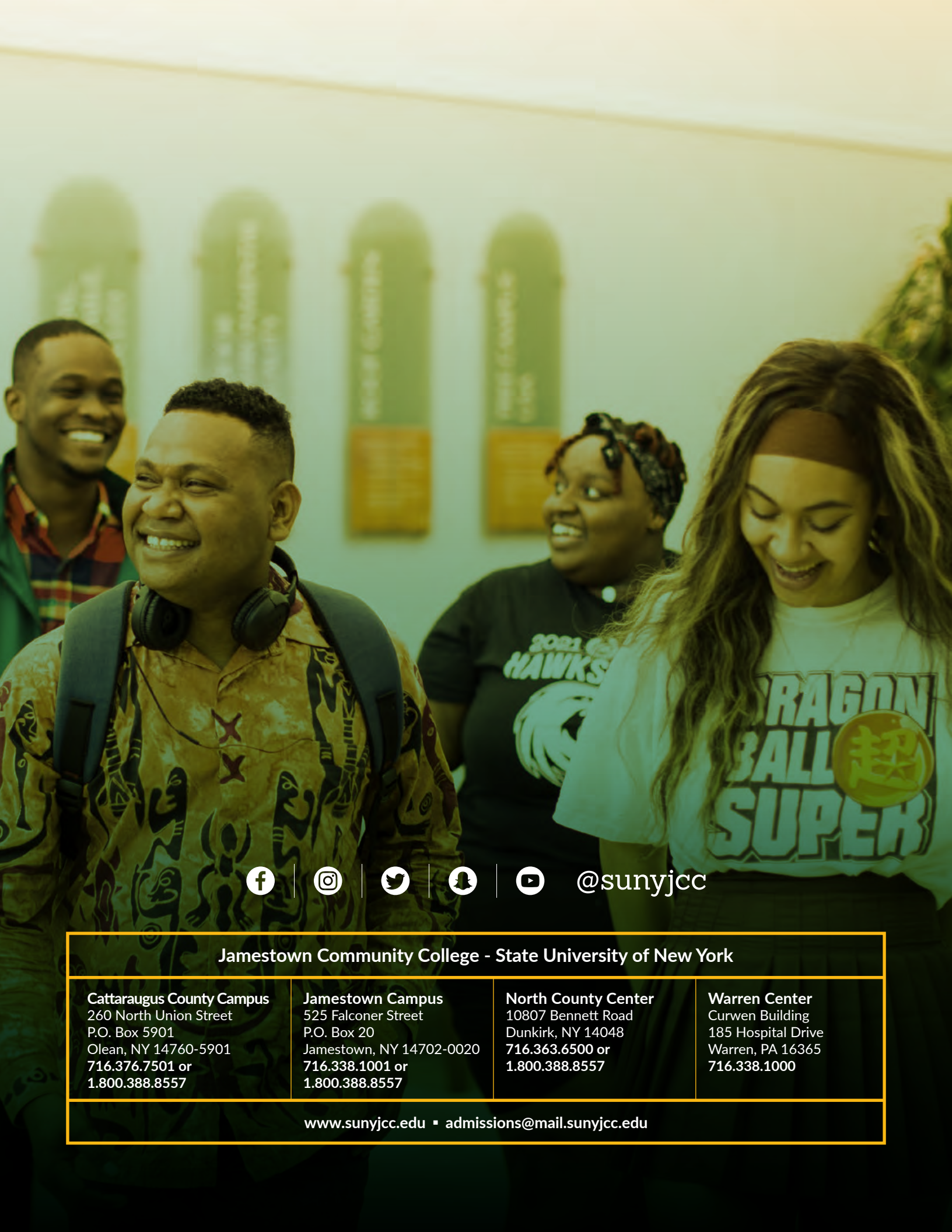
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