

# Cayuga

Community College

State University of New York

2008–2009 college catalog





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The official name of the institution is Cayuga County Community College. All references to Cayuga, the College, or Cayuga Community College in institutional communications are intended to be construed as such.

## Academic calendar: 2008–2009

## Fall Semester 2008

August	27	Wed	Orientation begins – Fulton
	28	Thurs	Orientation ends – Auburn
September	2	Tues	Weekday and evening classes begin
	8	Mon	Last day to change schedule (by 5:00 pm)
	6-7	Sat-Sun	Weekend classes begin
October	13	Mon	Columbus Day – only evening classes meet
	21	Tues	Midterm grades due
November	3-7	Mon-Fri	Advisement and current student registration
	10-14	Mon-Fri	Advisement and current student registration
	17	Mon	Open registration begins
	26-30	Wed-Sun	Thanksgiving break begins Wed. at noon – no classes
December	12	Fri	Fall semester classes end
	13-18	Sat-Thurs	Final exams (evening and weekend class exams given during regular class time)

## Fall 2008: Accelerated Weekend Degree Program Sessions

August	24	Sun	Session One begins
	29	Fri	Last day to change schedule (by 5:00 pm)
	31	Sun	Labor Day weekend – no classes
October	19	Sun	Session One ends
	26	Sun	Session Two begins
	31	Fri	Last day to change schedule (by 5:00 pm)
November	30	Sun	Thanksgiving break – no classes
December	21	Sun	Session Two ends

## Intersession 2009

January	5	Mon	Classes begin
	5	Mon	Last day to change schedule (by 4:00 pm)
	16	Fri	Classes end – final exams

## Spring Semester 2009

January	15	Thurs	Orientation begins – Fulton
	16	Fri	Orientation ends – Auburn
	17-18	Sat-Sun	Weekend classes begin
	20	Tues	Weekday and evening classes begin
	26	Mon	Last day to change schedule (by 5:00 pm)
February	19-22	Thurs-Sun	Winter break – no classes
March	10	Tues	Midterm grades due
	11	Wed	Assessment Day – only evening classes meet
	23-27	Mon-Fri	Advisement and current student registration
	30-April 1	Mon-Wed	Advisement and current student registration
April	2-12	Thurs-Sun	Spring break – no classes
	13	Mon	Open registration begins
May	8	Fri	Spring semester classes end
	9-14	Sat-Thurs	Final exams (evening and weekend class exams given during regular class time)
	17	Sun	Commencement

**Spring 2009: Accelerated Weekend Degree Program Sessions**

January	4	Sun	Session One begins
	9	Fri	Last day to change schedule (by 5:00 pm)
February	22	Sun	Winter break – no classes
March	1	Sun	Session One ends
	8	Sun	Session Two begins
	13	Fri	Last day to change schedule (by 5:00 pm)
April	5 & 12	Sun & Sun	Spring break – no classes
May	10	Sun	Session Two ends

**Summer 2009: Session I - 4 Weeks**

May	20	Wed	Classes begin
	22	Fri	Last day to change schedule (by 4:00 pm)
	25	Mon	Memorial Day – no classes
June	17	Wed	Classes end
	18	Thurs	Final exams

**Summer 2009: Session II - 6 Weeks**

June	22	Mon	Classes begin
	24	Wed	Last day to change schedule (by 4:00 pm)
July	3	Fri	Independence Day holiday – no classes
August	3	Mon	Classes end
	4-5	Tues-Wed	Final exams

**Summer 2009: Accelerated Weekend Degree Program Session**

June	7	Sun	Session begins
	12	Fri	Last day to change schedule (by 4:00 pm)
July	5	Sun	Independence Day weekend – no classes
August	2	Sun	Session ends

**Note on course availability**

Class days and times for courses to be offered in the next semester are published in course schedules at the start of registration. These may be viewed online at [www.cayuga-cc.edu](http://www.cayuga-cc.edu); click on Banner Login, then Class Schedule.

Students may be required to attend evening classes and/or classes in Auburn if they wish to complete certain degree or certificate programs outlined in this catalog.

Cayuga Community College reserves the right to cancel any course described in this or any other college publication. The College also reserves the right to change any rules governing curricula, administration, tuition, fees, admission, dates, course content, and regulations affecting students. Such changes may take effect whenever the administration and Board of Trustees deem necessary.

## Welcome to Cayuga Community College

Cayuga Community College, a unit of the State University of New York with locations in the cities of Auburn and Fulton, is a two-year community college sponsored by Cayuga County and governed by a 10-member Board of Trustees.

Committed to being the community college for both Cayuga and Oswego counties, the College offers transfer and career-oriented curricula on a degree and certificate basis through day, evening, Sunday, online, and summer sessions. For groups such as high school seniors, government agencies, retirees, and industrial, business and professional personnel, the College also offers credit and credit-free specialized instruction according to need and interest.

Founded under the sponsorship of the Auburn City School District in 1953 as Auburn Community College, the College changed its official name to Cayuga County Community College in 1975 when Cayuga County assumed sponsorship.

The Auburn campus is located in the seat of Cayuga County in New York State's Finger Lakes Region. The Fulton campus is located in Oswego County, just 10 miles from the southeast shore of Lake Ontario. Both locations offer a blend of rural and urban cultures with a rich variety of recreational and cultural opportunities including museums, parks, and theatrical and musical venues. The cities of Syracuse and Rochester are an easy drive from either location.

The Fulton campus, which originated in January 1994, has occupied its current premises since the summer of 2001. Fulton students are served by administrative offices and an Academic Support Center on the campus, and several degree programs can be completed entirely at the Fulton campus.

### Vision

As an interactive community united by a passion for academic excellence and human service, Cayuga Community College makes the globally significant locally relevant.

### Mission

Academically, financially, and geographically accessible to a diverse student population, Cayuga Community College provides a strong liberal arts foundation for further study and career preparation. The College also addresses identified community needs through targeted training and personal enrichment programs. By sustaining academic excellence within a supportive learning environment, the College, a careful steward of human and fiscal resources, serves as a valuable asset to the development of our local, regional, and global communities.

### Core values

Core values are understood as a set of principles derived from and consistent with the College's mission, to which all members of the College community commit, and which inform the College's character, drive its decisions, and energize its actions. The following core values have been recognized and adopted by the faculty, staff, and Board of Trustees of Cayuga Community College:

**Academic excellence:** The integrity and effectiveness of the College's academic programs and instruction as they develop both general and applied knowledge and skills.

**Student achievement:** Students' attainment of educational goals, personal and social growth, and success in career or further education.

**Accessibility:** Making post-secondary education available to all who may benefit.

**Open inquiry and dialogue:** Promoting and maintaining an academic community in which diverse perspectives and values may be freely expressed and debated across all levels of the institution.

**Humaneness:** Treatment of and respect for each other based on a mutual understanding of each one's unique value, quality, and potential as a part of a greater whole.

**Collegiality:** Encouraging broad participation and consultation that recognizes and values the concerns of all members of the College community.

**Service to the community:** Maintaining high standards of citizenship by partnering with local organizations to enhance the quality of life for community residents.

**Assessment and renewal:** Ongoing examination and evaluation of all aspects of the institution to enhance their contributions to the College mission.

**Stewardship:** Developing and expanding all resources – human, financial, material, and logistical – that will advance the College's mission.

### Accreditation

Cayuga Community College is accredited by the Commission on Higher Education, a unit of the Middle States Association of Colleges and Schools (3624 Market Street, Philadelphia, PA 19104-, 215-662-5606), the National League for Nursing (350 Hudson Street, New York, NY 10014) and the Society of Broadcast Engineers (PO Box 20450, Indianapolis, IN 46220). The College's programs are registered by the New York State Department of Education. The College holds institutional membership in the American Association of Community Colleges, Association of Presidents of Public Community Colleges in the State of New York, Faculty Council of Community Colleges, Association of Community College Trustees, and New York Community College Trustees of the State University of New York.

## The State University of New York (SUNY)

SUNY, the State University of New York, is a comprehensive public university system consisting of 64 campuses that provide a full range of educational opportunity across New York State. The educational, cultural, and economic impact of the SUNY system is felt not only throughout the state, but nationally and worldwide as well. The 30 locally-sponsored two-year community colleges operating under the program of the State University of New York offer degree programs that serve as job-entry educational experience or provide transfer preparation for a baccalaureate degree at a senior campus.

## Cayuga Community College Board of Trustees

The College is governed by a ten-member Board of Trustees. The Governor appoints four trustees for seven-year terms; five are appointed by the County Legislature for seven-year terms; a student trustee is elected annually to serve for one year. Trustees for the 2008–9 academic year are:

Joseph T. Michaud, Chair  
 Jeffrey L. Edwards, Vice Chair  
 Pamela S. Kirkwood, Secretary  
 Jane J. Bowen  
 John M. Camardo  
 John A. Karpinski, Esq.  
 Hon. Linda Murphy  
 Gina Speno  
 Linda P. Van Buskirk, Ph.D.  
 Christopher Green, Student Trustee

## Cayuga County Legislature

Roger A. Mills, Chairman  
 David R. Axton  
 Michael H. Chapman  
 Steven E. Cuddeback  
 George Fearon  
 Raymond E. Lockwood Jr.  
 Patrick V. Mahunik  
 Patrick F. McIntosh  
 Francis C. Mitchell  
 Linda Murphy  
 Christopher M. Palermo  
 Ann R. Petrus  
 Daniel Schuster  
 Daniel P. Sincebaugh  
 Peter A. Tortorici

## Cayuga administrative leadership

Daniel P. Larson, D.M.A.  
 President  
 Deborah L. Moeckel, Ph.D.  
 Vice President of Academic and Student Affairs/Dean of Faculty  
 Brenda L. Holland, MBA  
 Vice President of Administration/Treasurer  
 Jeffrey L. Hoffman  
 Executive Director, Cayuga Community College Foundation

## Cayuga faculty

In the latest survey of community college students across the SUNY system, Cayuga was rated #1 in quality of instruction. Credit for that high honor goes to the approximately 75 full-time and 150 part-time instructors who make up the Cayuga faculty. Cayuga instructors hold advanced degrees from universities across the country, and bring a broad range of professional experience from the academic world and beyond. The hallmark of the faculty is dedication to students. In student opinion surveys, Cayuga instructors consistently earn positive reviews for their competence and commitment. Members of the Cayuga faculty have earned dozens of awards and citations for educational excellence, including several SUNY Chancellor's Awards for Excellence.

## Cayuga students

Reasons for enrolling in Cayuga vary widely. While many students are pursuing a degree or certificate, a significant number take courses for other reasons: to gain specific job skills, explore an area of interest, pick up courses needed for a degree elsewhere, or prepare for transfer to another institution. With all of these goals in mind, Cayuga provides academic support, financial aid, and other resources to help keep all students continue making educational progress..

## Student profile, fall 2007

The following is a recent profile of the student population:

• Auburn campus	1,549
• Fulton campus	967
• Online, high school, other	1,534
• Total	4,050
• Full-time / part-time ratio	51 / 49%
• Transfer	364
• Continuing	1,776
• Returning	549
• Female / male ratio	60 / 40%
• Residents of Cayuga or Oswego County	75%
• Over age 22	41%

## Campus facilities

Directions to both Cayuga campuses are available on the College website at [www.cayuga-cc.edu](http://www.cayuga-cc.edu).

### Auburn campus

Cayuga Community College's main campus is located on Franklin Street in the City of Auburn.

#### Main Building:

The Main Building houses most student services offices, including Admissions, Financial Aid, Business, Registrar, Health Services, and Student Development. The offices of the president, vice presidents, deans, division chairs, and many of the faculty are in the Main Building, as are the Foundation and Alumni Association offices. The Main Building also houses art studios, chemistry labs, the computer-assisted design (CAD) lab, Geographic Information Technology lab, computer lab complex, electronics labs, piano lab and choral suite, a student recreation room, and the Irene A. Bisgrove Community Theatre.

#### Health-Business-Technical (Tech) Building:

The Health-Business-Technical (Tech) Building provides classroom space for business, criminal justice, science, and technical programs. Facilities in the Tech Building include faculty offices, interactive video and distance learning classrooms, a fully-equipped color TV studio, and the WDWN-FM (89.1) 3,000-watt stereo broadcast facility.

#### Library Building

Besides the main facilities of the Cayuga Community College Library (see page 13), the Library Building also houses classrooms, faculty offices, the Academic Support Center (see page 11), and Disability Services Office (see page 12).

#### Preschool Center

Located in the lower level of the Library Building, the College's Preschool Center provides daycare services to children age three to five. Sponsored by the Faculty-Student Association, the Center is licensed by New York State and accredited by the National Academy of Early Childhood Programs, a division of the National Association for the Education of Young Children (1509 16th Street NW, Washington, DC 20036). Although the Center was created to serve the needs of students and College staff, community members may enroll their children on a space-available basis.

#### Spartan Hall

Home to the Cayuga Café and the College bookstore as of 2007, Spartan Hall also houses classrooms, offices, and courts for basketball, tennis, racquetball, and volleyball; a fitness center with aerobic super circuit; weight training room; and locker rooms with saunas. Spartan Hall is in full compliance with Title IX and 504 regulations, providing equal facilities for men and women and special access and facilities for persons with disabilities.

#### Thomas F. Steenburgh Nature Center

The Steenburgh Nature Center, a solar classroom building, includes a large instructional room, laboratory prep room, and greenhouse. The nature center also includes a mile-long exercise circuit and nature trail with ponds, gardens, and gazebo.

#### James T. Walsh Regional Economic Center

The James T. Walsh Regional Economic Center features classrooms, seminar rooms, and event/reception space. The building is also home to the College's Business and Industry Center, offering standard and customized contract training for area employers. Also housed in the Regional Economic Center is on-campus space for employment and training programs and the New York State Department of Labor. The Institute for the Application of Geospatial Technology, headquartered in the Regional Economic Center, processes data from NASA satellites and other sources on a contract basis to support regional planning and development. IAGT also offers several educational programs, including student cooperatives and summer internships, training for K-12 teachers in classroom use of geospatial information technologies, and a summer career camp for middle school students.

#### Fulton campus

Since 1994, Cayuga Community College has provided a gateway to higher education in the Oswego County region. Depending on their course of study, students may complete requirements for some degrees entirely in Fulton. At the heart of the campus is the Learning Commons, with the campus library, more than 30 computer workstations, the Academic Support Center, and the Disabilities Services Office. The Fulton campus also features 14 general classrooms, a video distance-learning classroom, video conferencer room, computer labs, an art room, science suite, bookstore and student lounge.

## Academic policies and procedures

### Placement testing

All students who apply for matriculation into a degree or certificate program will be required to take placement tests in English and mathematics. Any non-degree-seeking student who wishes to take an English or mathematics course must take the placement test prior to registering. Students who have successfully transferred an acceptable college course in English and/or math from another college will not be required to take that portion of the exam.

### Rules and regulations

As an enrolled Cayuga student, you are expected to follow College rules and regulations as well as all local, state and federal laws. Incidents of misconduct and violation of the Student Code of Conduct are reported to the Director of Student Development, convener of the Faculty/Student Judicial Review Committee. If you are found in violation, you may be subject to disciplinary action ranging from admonition to expulsion.

#### Student Code of Conduct and Student Handbook

Faculty/Student Judicial Review Committee procedures, the Student Code of Conduct, and a complete list of possible sanctions are detailed in the Student Handbook. Additionally, a separate handbook (Right to Know) relating to Cayuga's Drug and Alcohol Policy, Prevention of Sexual Harassment, and Campus Safety and Crime Statistics is distributed annually to each student.

Besides being familiar with the Student Code of Conduct, you should be aware of the following rules:

- A. According to New York State law, firearms are not permitted on campus or in any College building. Also, any instrument to be used as a weapon and explosives of any kind are not permitted on campus.
- B. Use, distribution or possession of illegal substances is not permitted on campus. Such use, distribution or possession is a violation of college regulations and is subject to action by the Faculty/Student Judicial Review Committee.
- C. The use, possession and distribution of alcoholic beverages is not permitted on any and all locations operated by Cayuga Community College for employees, students, and its visitors, except for an occasion expressly sponsored by the President's Office. The policy regarding such events is available in the Student Handbook.
- D. Smoking is permitted outside specific entrances that are not marked as smoke-free. Except for these locations, tobacco use of any kind is prohibited anywhere on campus or college property. New York state law prohibits smoking in public buildings and areas of common use.

The College may initiate disciplinary proceedings for off-campus incidents involving violations of the Student Code of Conduct when the violation is committed while participating in a College sanctioned or sponsored activity, the violation

adversely affects the educational or service function of the college, or the violation adversely affects the individual's suitability as a member of the College community. In determining whether or not to exercise off-campus jurisdiction in such cases, the director of the Student Development Center will consider the seriousness of the alleged offense, the risk of harm involved, and/or whether the off-campus conduct is part of a series of actions which occurred both on and off campus.

### Late registration

Once classes have started, registration for 15-week courses is permitted no later than five school days after the first day of the semester.

### Dropping and adding courses

If you want to add or drop a course, you must do so through the Registrar's Office or by seeing your adviser. If you withdraw from a 15-week course after the third week of classes, you will receive a grade of W.

### Withdrawal

If you want to withdraw from the College, you must obtain a formal withdrawal form from the Student Development Center, complete and return the form to the Registrar's Office. Unless this procedure is followed, your withdrawal will not be official and you will not qualify for a refund if the withdrawal is done during the refund period for that particular semester. A withdrawal after the refund period has ended will result in a W grade for each course in which you were enrolled.

### Cancellation of classes

If the registration in any course is insufficient, the course may be canceled at the discretion of the vice president of academic and student affairs.

### Individual / independent study

Under special circumstances it is possible to complete a course through individual or independent study. Details are available from division chairs.

### Auditing courses

The intention to register for an audit or change from credit status to audit status must be given to the Registrar's Office by the 10th class day of a 15-week course. You do not receive credit for a course you audit. If you wish to audit a course, you should be aware of the following guidelines:

- Students who wish to audit a course after late registration must have the instructor's permission.
- There are no requirements for audit other than attendance.
- Students must meet college attendance requirements or the audit will be changed to W.
- Students must pay regular tuition for an audit.
- On a space-available basis, senior citizens (age 60 or older) with valid identification may audit credit courses at no tuition charge; certain fees may apply.

### Definition of full-time status

Fall or spring: Full-time status is defined as 12 to 19 credit hours of study per semester. Permission of the division chair is required to exceed 19 credit hours per semester.

Summer: A full-time academic commitment is considered to be 4 or more credit hours in Summer Session I and 6 or more credit hours in Summer Session II. Permission to exceed 15 credit hours (generally 6 in Summer Session I and 9 in Summer Session II) is required from a division chair, dean of Community Education, either of their designees, or a student development or admissions counselor. The maximum total credits for which a student may enroll in summer is 19. Note: Summer full-time study is an academic category and may not be applicable for financial aid or other purposes.

January intersession: Permission to exceed 6 credit hours is required from the division chair.

A credit hour is equivalent to 750 minutes of instruction. A laboratory credit hour is equivalent to 1,500 to 2,250 minutes of instruction.

### Attendance

The College's detailed attendance policy is included in the Student Handbook. It is your responsibility to be aware of the attendance policy and your individual instructors' policies on late or missing work. Failure to comply with the College attendance policy may result in dismissal from a course for poor attendance. If you are unable to attend classes on certain days because of religious beliefs, the following policy (Section 224-a of the Education Law as amended) applies:

- You shall not be expelled from or be refused admission to an institution of higher education for the reason that you are unable, because of your religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.
- If you are unable, because of your religious beliefs, to attend classes on a particular day or days you shall, because of such absence on the particular day or days, be excused from any examination, study or work requirements.
- It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to students who are absent from school, because of their religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which they may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
- If classes, examinations, study, or work requirements are held on Friday after 4:00 p.m. or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days where it is possible and practicable to do so. No special fees shall be charged for these classes, examinations, study, or work requirements held on other days.

- In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to you because of your availing yourself of the provisions of this section.
- If you are aggrieved by the alleged failure of any faculty or administrative official to comply in good faith with the provisions of this section, you shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of your rights under this section.

As used in this section, the term institution of higher education shall mean schools under the control of the board of trustees of the State University of New York or of the board of higher education of the City of New York or any community college.

### Classroom visits

Cayuga students other than those registered for a scheduled classroom course are permitted to visit that classroom under the following conditions.

- With the instructor's approval, a Cayuga student who is registered in another section of a course may attend the alternative section for up to three class meetings. Attending more than three class meetings will require the written approval of the instructor and the appropriate division chair.
- With the instructor's approval, a registered Cayuga student who is not enrolled in a particular classroom course may attend one class meeting of the course. Any additional visits will require the written approval of the instructor and appropriate division chair.

### Academic progress

#### Grading system

Final grades are calculated at the end of the semester. Using your Banner ID and password, you may view your grades online through the Banner self-service information system.

Grade	Quality points per credit hour
A	4.0
B+	3.5
B	3.0
C+	2.5
C	2.0
D+	1.5
D	1.0
F	0.0

The following are not calculated in the index:

INC	Incomplete (details follow)
W	Withdrawal from course without grade
R	Repeated D or F grade
IR	Illegal repeated grade
AUD	Audit

### Incomplete grade

An Incomplete is a temporary grade given when you are unable to complete a small part of the course requirements or cannot take the final examination due to illness or other justifiable circumstances. You must present a valid reason for not completing all requirements and must arrange with the instructor to complete the course. One semester is the maximum time permitted to complete coursework; otherwise the Incomplete will be changed to F and may result in academic probation or academic dismissal.

Incomplete grade for...	...must be completed by
Fall semester	Spring semester
Spring semester	Fall semester
Intersession	Spring semester
Summer session	Fall semester

### Midterm grades

If your instructors choose to report D and F grades at midterm, you will be informed. This grade is for guidance purposes only and is not entered on your permanent record.

### Academic warning

If your grade point index is below 2.0 but above the probation limits listed in the following section, you are on academic warning and are not in good academic standing. This appears only on your grade report.

### Academic probation

You will be placed on academic probation and limited to a 12-15 credit load if the following criteria apply:

Credits Attempted	Grade Point Average
12-15	At least 1.00 and less than 1.50
16-30	At least 1.50 and less than 1.70
31-45	At least 1.70 and less than 1.90
46 or more	At least 1.90 and less than 2.00

### Academic dismissal

A cumulative average of 2.0 (C) is one of the requirements for the associate degree or certificate. Your progress toward this goal is reviewed when you have attempted 6 or more credits; subsequent reviews take place at the end of each succeeding grading period. If you are within the following grade-point criteria you will be dismissed from the College:

Total Actual or Equivalent Credits Attempted	Grade Point Average
6-11	Less than .75
12-15	Less than 1.00
16-30	Less than 1.50
31-45	Less than 1.70
46 or more	Less than 1.90

Note:

- The College maintains eligibility rules for members of athletic teams and holders of major offices in various clubs.
- You are classified as a second-year student if all entrance deficiencies have been removed, all freshman requirements have been passed, and at least 28 credits have been earned.

- You cannot enroll in a course unless all prerequisites have been satisfied.

### Academic reinstatement

If you have been academically dismissed from the College, you may file a written appeal for reinstatement with the Academic Standing Committee c/o the vice president of academic and student affairs. Reinstatement applications are available in the Student Development Center and the office of the vice president of academic and student affairs. Appeals should include any extenuating circumstances hindering your academic progress. If needed, you should contact counselors in the Student Development Center for further information or assistance. You will be notified by letter of the decision rendered by the committee.

### Repeating a course

You may repeat any course in which you receive an F grade. If you receive a D or higher grade on the subsequent attempt, the latter grade will be counted in your cumulative index. The F grade remains in your permanent record and in your semester's index but is not counted in your cumulative index.

You may repeat only once any course in which you receive a D or D+ grade. If you receive a C or higher grade on the subsequent attempt, the latter grade will be counted in your cumulative index. The D or D+ grade will remain in your permanent record and your semester's index but will not be counted in determining your cumulative index. If on the subsequent attempt you receive a D+, D or F grade, both grades will remain in your permanent record and in your semester index but only the original D or D+ will be counted in determining your cumulative index.

If you repeat a course in which you earned an F grade and earn a D or D+ grade the second time, you may not repeat the course again and you may be unable to complete your degree or certificate program if the course being repeated requires a C or better grade. If you register to repeat a course in which you received a D or D+ grade and receive state financial aid, you may not count the credits of the course toward full-time eligibility status.

### Change of major

If you wish to change your major, request advisement and the proper forms from the Student Development Center.

### Multiple degrees

If you are interested in receiving more than one degree, you must meet with a Student Development Center counselor to complete a multiple degree contract. No second or third degree is granted without an approved contract on file in the Registrar's Office. Not all multiple degree combinations are allowed, so contact the Student Development Center as early as possible. Note: A certificate will not be awarded if you have completed degree requirements in the same field.

### Academic transcripts

Your signature is required for the release of your academic transcript. Address all requests to the Registrar's Office. You must include your social security number, date of birth, the name under which you attended Cayuga, approximate dates you attended, and the full address where the transcript is to be sent. All current and past fees and charges must be paid. No fee is charged for academic transcripts. Faxed, unofficial transcripts or a faxed request for an academic transcript each carry a fee of \$15 payable by Visa, MasterCard, or Discover credit card. Only unofficial transcripts may be faxed from the College, with an official copy also mailed to the same party. The fax number for the Registrar's Office is 315-255-9983.

Cayuga is in full compliance with the Family Education Rights and Privacy Act. Policies and procedures for access to and release of student records are available in the Student Development Center. The Student Handbook also details your rights concerning records and information practices.

### Academic honors

#### Dean's List

If you are a full-time student and you achieve a 3.5 or higher grade point average for an academic term, you will merit the distinction of being on the Dean's List. Recognition is given to those who qualify at the end of each semester, and the designation "Dean's List" will appear on your grade report.

If you are a part-time student, have completed at least 12 credits at Cayuga, and accumulated 6 or more credits with a 3.5 or higher grade point average during the semester just completed, you will be named to the Part-Time Student Dean's List. This honor will show on your grade report.

Note: Developmental courses bear no credit and do not carry quality points. Thus, they are not calculated into the semester or cumulative index. A developmental course carries equivalent credits, which are calculated into full-time status for purposes of attendance and financial aid eligibility. A student registered for one or more developmental courses might not qualify for the Dean's List or Honor Roll.

#### Honor Roll

If you are a full-time student whose quality point average is 3.0 to 3.499, you are eligible for the Honor Roll and are so notified each semester.

If you are a part-time student who has accumulated at least 12 credits at Cayuga, and were enrolled for six or more credits and achieved at least a 3.0 but less than a 3.5 grade point average during the semester just completed, you will be named to the Part-Time Student Honor Roll. This honor will be included on your grade report.

Note: Developmental courses bear no credit and do not carry quality points. Thus, they are not calculated in the semester or cumulative index. A developmental course carries equivalent credits, which are calculated into full-time status for purposes

of attendance and financial aid eligibility. A student registered for one or more developmental courses might not qualify for the Dean's List or Honor Roll.

### Phi Theta Kappa

Omicron Gamma Chapter of Phi Theta Kappa (PTK), the International Honor Society of Two-Year Colleges, recognizes high scholastic achievement of Cayuga students. Membership eligibility is based upon a GPA of 3.65 and community service. Invitations are extended to students each semester and an induction ceremony is held each spring. Visit [www.ptk.org](http://www.ptk.org).

### Graduation honors

The following honors are based on your grade point average:

Grade Point	
Summa cum Laude	3.80
Magna cum Laude	3.50
Cum Laude	3.25

Note: Spring semester grade calculation is not reflected in the cumulative grade point average used to determine academic honors in the commencement program.

### Grievance policies and procedures

It is the policy of Cayuga Community College to protect the rights and freedoms of students and other members of the campus community. The College has created internal policies and procedures to address student and consumer complaints and grievances. Policies exist for academic, consumer, discrimination, and sexual harassment complaints. Policies and grievance forms are available in designated offices and on the College website at [www.cayuga-cc.edu/student/grievance](http://www.cayuga-cc.edu/student/grievance).

#### Academic grievance

If a student has an academic complaint, or believes that he or she has been harmed by an inequitable or inappropriate implementation of the academic regulations and procedures of the College, the Academic Grievance Procedure shall be followed. Students are encouraged to discuss academic concerns with their instructor first. If not satisfied with the outcome of these discussions, the student may then appeal the decision to the instructor's division chair or immediate supervisor. Although the policy does allow for informal as well as formal complaint procedures, students should be aware that there are time limits designated in the policy, and they should seek assistance in resolving an academic conflict as quickly as possible. The Academic Grievance Policy and submission form are available in the Academic Programs office on the Auburn campus and in the main office on the Fulton campus.

#### Consumer complaint

The College has adopted an internal grievance procedure for the equitable resolution of complaints that do not relate to any other internal grievance procedure. The Consumer Complaint Procedure does not include complaints that are academic

(Academic Grievance Procedure), or related to any form of discrimination as defined in the Discrimination Grievance Procedure, or related to sexual harassment, as defined in the Sexual Harassment Policy, or any other complaint for which the College has established a more specific complaint or grievance process. The Consumer Complaint Procedure and submission form are available in the Office of Human Resources and in the Student Development Center on the Auburn campus, and in the main office on the Fulton campus.

### Discrimination grievance

The College has adopted an internal grievance procedure providing for prompt, equitable, and confidential resolution of complaints alleging discrimination on the basis of age, color, disability, national origin, race, religious creed, gender, sexual orientation, or veteran status. Complaints emerging from the Auburn campus, Fulton campus, or any other operation of the College should be addressed either to the affirmative action officer for employees (director of human resources) or to the affirmative action officer for the students (director of student development). The Discrimination Grievance Policy and submission form are available in the Office of Human Resources and in the Student Development Center on the Auburn campus, and in the main office on the Fulton campus.

### Sexual harassment grievance

The College is committed to maintaining a work and educational environment free from sexual harassment and has adopted an internal grievance procedure for the reporting and resolution of sexual harassment complaints. Complaints emerging from the Auburn and Fulton campuses or any other operation of the College should be addressed either to the affirmative action officer for employees (director of human resources) or to the affirmative action officer for students (director of student development). The Sexual Harassment Policy and submission form are available in the Human Resources Office and the Student Development Center on the Auburn campus, and in the main office on the Fulton campus.

## Resources and services for students

### Academic advising

Academic advisers help students select courses each semester and offer advice on academic matters. Day students are assigned a faculty member as an academic adviser. Evening students may receive academic advisement from Student Development counselors during the day and some evening hours. Adviser assignments are posted at the beginning of each semester. Ordinarily, the same adviser serves during the student's stay on campus. However, changes may be arranged through the Student Development Center.

Students who wish to change their major should contact a Student Development Center counselor. Some evening hours are available for evening and Sunday students.

### Academic Support Center

The Academic Support Center works with students at all levels to enable them to reach their full educational potential. The center also offers resources to help faculty develop alternative approaches to instruction. The center's professional specialists in writing, reading, mathematics, and study skills are available to address academic deficiencies and sharpen the skills necessary for college success. Peer tutors are trained to assist students in a variety of courses and majors. The tutor-training program is recognized and certified by the College Reading and Learning Association. Tutor trainees can enroll in the College's one-credit Foundations of Tutoring course, or participate in an equivalent series of workshops. This preparation ensures that tutors can assist their peers consistently and effectively.

The Academic Support Center provides

- Academic and leadership skill development
- Access to computer software programs
- Access to SUNY Learning Network
- Placement testing
- Individual and small-group professional and peer tutoring
- Practice tests and alternative testing arrangements
- Skill-building workshops and seminars

The Center's Office of Disability Services (see next page) extends appropriate and reasonable accommodations to every student with a qualified, documented disability.

At the Auburn campus, the Academic Support Center is located in the Library Building. At the Fulton campus, the Academic Support Center is located in the Learning Commons. Call or visit and ask for a tour.

Auburn campus	315-255-1743 x 2293
Fulton campus	315-592-4143 x 3028

### Athletics

Cayuga's intercollegiate sports teams for men and women are affiliated with the National Junior College Athletic Association (NJCAA) and compete in the Region III, Mid-States Athletic Conference at the Division III level. Regional competition can lead to national qualification, depending on postseason success. The College fields men's and women's intercollegiate teams in basketball, lacrosse, and soccer, as well as a Cayuga golf team. All students who wish to take part in any intercollegiate athletic program must have a current sports physical on file with the College's Health Services Office prior to participating in practices or game competition.

The College also offers students a fitness center, a recreational nature trail, and a variety of intramural sports and activities.

### Bookstore

Follett Higher Education Group operates bookstores at the Auburn and Fulton campuses. The Auburn campus bookstore is in Spartan Hall, adjacent to the Cayuga Café. Both outlets stock new and used textbooks and other materials required

for coursework. The bookstore also sells general reading titles, office and art supplies, College logowear and gift items, software packages at academic prices to students, faculty, and staff, and a variety of general merchandise. The bookstore is open to the public. For more information, visit [www.cayuga-cc.edu/student/bookstore](http://www.cayuga-cc.edu/student/bookstore) or call the bookstore at

Auburn campus	315-253-6367
Fulton campus	315-592-4143 x 3043

### Campus safety

The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education. The annual crime statistics report is available at <http://ope.ed.gov/security> and at [www.cayuga-cc.edu/safety.php](http://www.cayuga-cc.edu/safety.php). For a hard copy, contact the Office of Public Safety:

Auburn campus	315-255-1743 x 2461
Fulton campus	315-592-4143 x 3067

### Career Services Office

Services supporting career planning and job search through Cayuga's Office of Career Services include

- Online job and internship postings for students and alumni
- Annual job and career fairs
- Career counseling, research, and information on employers
- Individual assistance and workshops in résumé writing, interviewing techniques, and networking
- Workshops and presentations
- DISCOVER, a computer-assisted career information and guidance system providing personalized career exploration and details on careers and colleges throughout the U.S.

### Disability Services Office

Federal laws, Section 504 of the Rehabilitation Act of 1973, and the 1990 Americans with Disabilities Act protect qualified individuals with disabilities from discrimination on the basis of disability and guarantee equal opportunity for access to programs and services. Cayuga Community College complies with all applicable federal, state, and local laws and regulations regarding reasonable and appropriate services and accommodations for students with documented disabilities. Accommodations and services accessed through the Office of Disability Services may include but are not limited to

- Notetakers
- Time extensions for tests
- Alternative test sites
- Technology to assist reading and writing
- Magnification devices
- Physical accommodations, such as special classroom seating or architectural accessibility

Services and accommodations for all students with disabilities are coordinated through the Office of Disability Services, located within the Academic Support Center. In order for the College to provide appropriate and timely services and accommodations, students with disabilities must provide current and complete documentation as early as possible.

Students with sponsoring agencies, such as Vocational and Educational Services for Individuals with Disabilities (VESID), Aurora, or the Commission for the Blind and Visually Impaired, should contact the agency several weeks before the start of classes to make sure that all necessary paperwork is completed

Prospective and current Cayuga students who have a disability, or suspect they have a disability should contact the Disability Services Office.

The Office of Disability Services has locations at both campuses:

Auburn campus	315-255-1743 x 2422
222 Library Building (Academic Support Center)	
Fulton campus	315-592-4143 x 3027
Fulton Learning Commons	

### Health and accident insurance

It is recommended that students read the health and accident insurance brochure from the Health Services Office. The accident policy is mandatory for full-time students. Certain limitations apply for interscholastic sports-related injuries. Students are covered 24 hours a day throughout the school year. The sickness insurance is a basic plan. Whereas the accident insurance is comprehensive, the sickness insurance is more selective in coverage. Students may wish to obtain additional sickness insurance under their family's policy. The Health Services Office staff or Bergan and Young Insurance will answer questions concerning the policy. Call 315-253-6207 or visit their office at 34 Mary Street in Auburn.

### Health Services Office

The Health Services Office provides services including

- First aid and assistance with illness
- Medical referrals as needed and when appropriate
- Detailed information on immunization requirements under State Public Health Law (for students born after 1957 enrolling for 6 or more credit hours; students enrolled in online courses not involving group participation are not required to comply.)
- Processing of insurance claim forms for illness or accidents, medical bills and medicine receipts
- Tuberculosis skin testing for Nursing students
- Free health information brochures
- Notes communicating health absences to instructors when requested by students
- Immunization transcripts
- Health education programs
- Blood pressure screening

### Housing List

Students are responsible for arranging their own housing. A variety of off-campus housing options are available. The Student Development Center maintains a list of off-campus housing available each semester. The list includes apartments and room rentals offered by Auburn area landlords for

college students, and is posted at [www.cayuga-cc.edu](http://www.cayuga-cc.edu); click on Student Services, then Off-Campus Housing. While the College assumes no responsibility for inspecting, approving, or supervising off-campus housing, each landlord listed must sign a non-discrimination statement certifying that there will be no discrimination on the basis of race, gender, religion, national origin, age, disabilities or marital status.

Lattimore Hall, a privately-owned and -managed apartment building in downtown Auburn, was designed to offer housing specifically for Cayuga students from out of the area. With a capacity of approximately 90 students and an on-site professional staff, Lattimore Hall offers 3-, 4-, and 6-bedroom furnished suites with phone, cable, and internet access.

Students are encouraged to begin searching for housing early in the summer before starting at Cayuga.

Contracts with local bus services in Cayuga and Oswego Counties provide free bus transportation to full-time Cayuga students with proper identification.

## Library

The Cayuga Community College Library includes the Norman F. Bourke Memorial Library at the Auburn campus and the Library in the Learning Commons at the Fulton campus, as well as the Faculty Resource Center. While library facilities are open to the public, borrowing privileges are granted to Cayuga students, faculty, and staff; Cayuga alumni; residents of Cayuga and Oswego counties; and faculty and students from other SUNY colleges. These patrons may apply for library cards at the circulation desk at either campus.

The library teaches the campus community to locate, evaluate, and apply information for academic and personal use, through credit courses, workshops, course-related sessions, and individual assistance. Facilities include individual and group study areas, computer workstations with wireless internet access, and special equipment and assistance for users with disabilities.

The online catalog offers access to Cayuga's collection and those of other libraries in the SUNY system. Access to library resources, including links to a variety of research databases, is available through the College website. More than 80,000 books are available, as well as 4,000 video/DVDs, 1,300 music CDs, and other nonprint items. More than 440 journal, magazine, and newspaper subscriptions are stocked, with online access to the full text of more than 4,500 additional titles. Further resources are available through memberships in SUNYConnect, the South Central Regional Library Council, and OCLC, an international catalog and database. The library owns several special collections, including career, children's, law, and local history resources.

## Orientation

The College hosts an Orientation gathering at both campuses to provide information about campus policies, programs, and services. Students who attend Orientation meet faculty, staff, and fellow students, and gain useful insight that can help in their academic pursuits. Students also receive a copy of the College's Student Handbook, a valuable reference on College policies and procedures as outlined by the administration. See Academic Calendar (page 2) for Orientation dates.

## Student Development Center

Counseling and other student services are available in the Student Development Center in Auburn and in Fulton. All counseling sessions are confidential. Counselors can assist with questions and problems including

- Educational planning to help ensure that students meet degree requirements and prepare for transfer
- Career planning assistance (see page 12)
- Short-term, confidential crisis counseling
- Referrals to community agencies that offer psychological, family, and health counseling
- Seminars, credit, and credit-free courses in areas such as college success and career planning
- Transfer counseling (see page 29)



## Student life

Cayuga Community College recognizes that the educational experience in colleges should encompass more than classroom instruction. Thus Cayuga offers a wide variety of activities and services to complement academic preparation. These are managed through the Faculty-Student Association in conjunction with the Office of Student Development. The following organizations and activities are sponsored by the Faculty-Student Association.

### Clubs

New clubs are continually formed in Auburn and Fulton in response to student interests. The Student Handbook contains detailed information on the Student Activities Board, Student Government Organization, and current clubs. Information is also available from SGO members or the Student Activities Office in the Student Development Center or in the main office at the Fulton campus.

### Chorus

An opportunity for students interested in performing vocal and choral music. The chorus presents annual fall and spring concerts. Participation carries one academic credit.

### Collegian

The campus newspaper offers students hands-on experience in news, feature, sports, column, and headline writing; photography; layout; advertising; and business.

### Harlequin Productions (Theatre)

Students with or without prior experience can get involved in acting, directing, producing, stage management, lighting, set design, and costumes. Plays are selected to utilize the abilities of the students, with rehearsals scheduled to avoid conflicts with classes.

### Radio WDOWN

WDOWN (WIN-89 FM) is a 3,000-watt stereo broadcast facility, coordinated by the telecommunications program and operated by a student staff. Broadcasting and programming opportunities are open to telecommunication majors and all interested students.

### Student Activities Board (SAB)

Sponsors a variety of cocurricular activities and events for the College and local community. Arts and cultural programs feature noted artists, comedians, musicians, and other performers. Also on the SAB schedule are the annual Holiday Craft Fair and election-season campaigns to register and inform voters.

### Student Government Organization (SGO)

Represents the student body, oversees club activities, and guarantees that students' voices are heard within the College community.

## ACC/CCC Alumni Association

The alumni association was founded in 1959 to foster continuing interest in the welfare and development of the College. Formally titled the Auburn Community College/ Cayuga Community College Alumni Association, its mission is to promote and enhance relations among the alumni, the College community, and the general community. The Alumni Association Office is M-238, in the Main Building on the Auburn Campus. The Alumni Office can be reached at alumni@cayuga-cc.edu or 315-255-1743 x 2224 / 2454.

The ACC/CCC Alumni Association

- Publishes The Spartan, a newsletter on alumni and their achievements; organizes and assists in special events
- Honors faculty, staff and student achievements; publicizes donors, conducts the annual spring phone drive; solicits association board applications
- Organizes cultural, recreational, and volunteer experiences; offers keepsake alumni merchandise
- Invites nominations for annual distinguished alumni awards; conducts alumni association awards ceremonies

The Alumni Association sponsors or cosponsors

- Scholarships and commencement awards, BOCES grants and book grants for eligible students
- December graduation receptions
- College information days, freshmen orientations, job fairs and career days
- Special College events

Association involvement in the local area includes

- Excursions and other events open to the public
- Membership in the Cayuga County Chamber of Commerce
- Collaboration and participation in area civic organizations and events

### Graduate follow-up survey

The College sends follow-up surveys to each graduating class. Based on responses received, approximately half of recent Cayuga graduates are employed, most in full-time jobs related to their Cayuga degree or certificate. Almost half of recent graduates indicated that they are continuing their higher education. For information on agreements that assist Cayuga graduates in transferring to other institutions, see Transfer Planning, page 29.

## Admission to Cayuga

The Office of Admission at Cayuga Community College will strive to help you to best meet your goals and needs for a successful higher education experience. Admission to Cayuga is based primarily on high school graduation or GED. Preparation for certain programs will vary, and we can talk with you about the details during a campus visit. We strongly encourage you to visit Cayuga and meet with an admissions counselor to make informed decisions about your education.

### Planning to study in Auburn? Contact

Cayuga Community College Admissions Office  
197 Franklin Street, Auburn NY 13021  
315-255-1743 x 2242      admissions@cayuga-cc.edu

### Planning to study in Fulton? Contact

Cayuga Community College Admissions Office  
806 West Broadway Street, Fulton NY 13069  
315-592-4143 x 3003      admissions@cayuga-cc.edu

### To enroll in Cayuga after high school or GED

To pursue a degree or certificate at Cayuga after graduating from high school or completing your GED:

1. Submit the free Cayuga Community College application (available upon request from the College, at area high schools, and online at [www.cayuga-cc.edu](http://www.cayuga-cc.edu)). You may also apply through the SUNY application form; however, a fee payable to the State University of New York is required to process your application.
2. You must request that your official high school transcript be sent to the Admissions Office either in Auburn or Fulton, wherever you intend to take most of your classes (addresses above). If you have earned your GED, please forward the official score report, along with a high school transcript to assist in placement. If you earned college credits while studying in high school, please have the credit granting institution forward official copies of your transcript to the Registrar's Office in order to transfer those credits to your degree program at Cayuga. Additional GED transcripts are available from the NYS Department of Education. For information call 518-974-5906, request a mail-in form from Cayuga admissions, or visit the NYSED website at [www.emsc.nysed.gov/ged](http://www.emsc.nysed.gov/ged).
3. If you did not graduate from high school, or if you have an Individualized Education Plan (IEP) diploma, you may be admitted if it is determined that you have the ability to be successful at the college level. Our placement tests and/or your past academic achievement will be used to help determine your "ability to benefit" from college level work. In addition, federal financial aid guidelines require non-high school graduates to meet specific "ability to benefit" test scores.
4. If you are not yet age 16 as of June 30 in the academic year (July 1–June 30), you may not enroll full-time or receive financial aid. In order to take one or more courses, you

must meet with a Cayuga admissions counselor and must get approval from your parent, guidance counselor, and course instructor, as well as from the admissions counselor. You must also submit a completed Consent to Enroll form.

### Transfer students

1. Follow the process for high school students (see above).
2. Forward official college transcripts to the Registrar's Office to be used for placement purposes and review of transfer credit by the Registrar's Office.
3. For details on acceptance of transfer credits, please review the College's transfer policy (next page).

### Home-schooled students

The following guidelines are appropriate for home-schooled students applying for admission to Cayuga Community College. Home-schooled students are welcome to take classes at Cayuga Community College without the documentation listed below. However, certain requirements apply for financial aid consideration and for the awarding of a Cayuga degree or certificate. To earn a degree from Cayuga, documentation of completion of high school or the equivalent is necessary. The following are the only acceptable forms of documentation:

- An official, final high school transcript from the student's school district indicating graduation (only public schools or registered nonpublic schools are permitted by law and regulation to issue diplomas); or
- A letter on district letterhead from the relevant district superintendent certifying that the student has documented the satisfactory completion of the equivalent of a four-year high school program of study; or
- A GED achieved either by the State Education Department written exam; or
- Results of the College's placement tests: If on these you meet or exceed the "ability to benefit" scores set by the College, you can be matriculated and be considered for financial aid to begin studies and work toward satisfying the 24-credit option prescribed by the New York State Education Department. Details of the required credits are available through the Admissions Office.

### Evaluation

Once your file is complete in the Admissions Office, a careful and objective review will take place to best determine your academic needs. All students who have not completed an acceptable college-level English and/or mathematics course and/or high school calculus will be required to take Cayuga's placement test.

### Placement testing

You must take a placement test if you wish to register for an English or mathematics course or enroll in a degree or certificate program. However, if you have transferred credit for an acceptable course in English or mathematics from another college, and/or have completed high school calculus, you will not need to take that portion of the placement test.

## One-Stop Registration Days

One-Stop Registration Days allow new students to complete placement testing, advisement, and registration for classes in a single visit to the College. The Admissions Office arranges these days, and will notify you of your scheduling choices. Or, you may contact the Admissions Office to reserve your day.

If you cannot attend a scheduled One-Stop day, you may have to test and register on separate days. Once you have taken a placement test, you can register for classes by making an appointment with an admissions counselor. Contact the Admissions Office to make these appointments.

Please note: Acceptance by the College does not guarantee admission into any given degree program. You may be required to take additional preparatory coursework before acceptance into a specific program. Advisement regarding special preparation will be done during the registration process, or you may call to make an individual appointment with an admissions counselor.

Students interested in the Honors Study program must meet with an admissions counselor; see page 28 for details.

## Transfer policy

The College's registrar is responsible for evaluating all official college transcripts from students wishing to apply previous college work to current degree or certificate programs. The process is as follows:

1. Official academic transcripts from post secondary institutions that are accredited by the New York State Education Department or a regional or national accreditation agency recognized by AACRAO, are evaluated by the registrar at Cayuga Community College.
2. Official test scores as recognized by the American Council on Education (ACE) are evaluated by the registrar for applicable transfer credit.
3. Only courses that have a grade higher than a D+ and a numeric value higher than 1.6 as well as courses meeting the student's program of study requirements will be considered for transfer into Cayuga and will appear as transfer credit on an official academic transcript (no grades from previous colleges will be displayed nor calculated into the student's cumulative grade point average at Cayuga).
4. Credit transferred will be converted to semester hours; and when a partial credit hour results from the conversion it will be rounded down to the nearest whole credit.
5. To receive a certificate or degree from Cayuga Community College, 50% of the required credits must be earned at Cayuga. Only 12 credits earned elsewhere may be brought into a student's academic history after completion of 50% of the student's program of study.

Upon review of your transcript(s), credits accepted for transfer into a Cayuga degree program may be viewed in your self-service Banner information account, using your Banner ID and password. (Please contact the Registrar's Office if you have any

questions about Banner access.) If you wish to challenge this review, you may do so by contacting the registrar. You may be asked to submit a course description and/or course syllabus for review by the appropriate division chair to determine whether the course is similar in content to a Cayuga course; the division chair will render a decision to the registrar.

## Advanced standing

In addition to receiving college credit from other institutions of higher learning, students may also achieve advanced standing through successful completion of examinations in the following programs, or through other nontraditional educational experiences.

- College Level Examination Program (CLEP) Subject Exams
- New York State College Proficiency Examination Program (CPEP)
- New York Regents External Degree Program Examinations (REDP)
- College Entrance Examination Board Advanced Placement Examinations (CEEB)
- American College Testing Proficiency Examination Program (ACT/PEP)
- DANTES Subject Standardized Test (SST)
- United States Armed Forces Institute (USAFI) end of course examination

No candidate for a degree may transfer in more than 32 credit hours. Evaluation of credits appropriate for transfer is done individually. Transferred courses will have no quality point value in computing the student's total quality point average.

Department examinations may be offered for college credit at the department's discretion. The vice president of academic and student affairs and a division chair will determine any exceptions to the stated policy. The appropriate division chair must be contacted for more details (see listing on page 30).

## Nursing program

For information on applying to Cayuga's Nursing program, see page 59.

## Admission as an international student

Any applicant who is not a U.S. citizen or resident alien is considered an international student. Due to the length of time required to process international admissions credentials, early application is encouraged.

Cayuga welcomes international students, but we are unable to offer you financial aid. Therefore, you must submit documented evidence of financial resources to cover your expenses while attending Cayuga.

International students who wish to enroll in Cayuga Community College are required to obtain an F-1 visa. To begin the process, e-mail [admissions@cayuga-cc.edu](mailto:admissions@cayuga-cc.edu) and request an International Student Admissions Packet, or visit our website at [www.cayuga-cc.edu](http://www.cayuga-cc.edu) and follow the links to International Admissions Process.

## Registering for courses

### Registering as a new student

To become a full-time or part-time student pursuing a degree, you must matriculate (enroll in a degree program).

**Note:** If you wish to be considered for financial aid, you must be matriculated in a degree program.

Students (including current high school students) seeking matriculation into a degree program must apply for admission and register through the Admissions Office (see page 15).

Part-time students who are not seeking a degree may register for courses in the following ways:

- at the Registrar’s Office in Auburn or at the main desk in Fulton
- by mail or fax (complete and send the part-time registration form available on the web at [www.cayuga-cc.edu/admissions/registration](http://www.cayuga-cc.edu/admissions/registration))
- by phone (Auburn 315-255-1743, extension 2217 or 2218; Fulton 315-592-4143)

### Registering as a continuing student

Continuing full-time students register for courses following academic advisement from their assigned advisers. Continuing part-time students are encouraged to consult with an adviser (if assigned) or a student development counselor. A period of advisement and registration is held each semester to give current students first choice of classes for the next sessions. Dates are listed on the College’s academic calendar; see page 2 of this catalog or visit [www.cayuga-cc.edu/academics/calendar](http://www.cayuga-cc.edu/academics/calendar).

If you are a former student and wish to pursue a degree program, you must apply for readmission. Use the readmission form (available on the College’s website or from the Student Development Center) and fax it to 315-255-2117 (Auburn) or 315-592-5055 (Fulton), or mail it directly to the Student Development Center in Auburn or Fulton.

### Late registration

Registration for 15-week courses is permitted no later than five school days after the first day of the semester.

### Assistance with tuition and fees

Some employers provide tuition assistance for their employees; inquire through your employer’s human resources office. Your tuition may be deferred based on certain financial aid awards, such as TAP and Pell. Under special circumstances, outside agencies and companies providing tuition assistance to their employees may be billed at later dates. Deferred costs will be paid by the first aid disbursed to the student.

If you do not qualify for these types of aid, you must pay tuition and fees by the date shown on your bill.

For federal, state, and Cayuga financial aid programs, see page 19 of this catalog or visit [www.cayuga-cc.edu/financialaid](http://www.cayuga-cc.edu/financialaid).

## Tuition and fees

Tuition and fees are subject to change at the discretion of the College Board of Trustees. The following are costs for the 2008-9 academic year.

### Full-time students (12 credit hours / semester)\*

Tuition	
Cayuga County resident	\$1,695 / semester
Out-of-county NYS resident (with Certificate of Residence)	\$1,695 / semester
Out-of-state resident	\$3,390 / semester
Activity fee (all campus students)	\$80 / semester
Accident insurance**	\$33 / academic year
Health insurance†	\$90 / academic year
Technology fee (all campus/online students)	\$80 / semester
	\$90 / semester (over 19 credit hours)
Records fee	\$10 / semester (12 or more credit hours)

\*\* Required for full-time students

† Required for full-time students, unless already covered.

### Part-time students (1-11 credit hours / semester)

Tuition	
Cayuga County resident	\$132 / credit hour
Out-of-county NYS resident (with Certificate of Residence)	\$132 / credit hour
Out-of-state residents	\$264 / credit hour
Activity fee (all campus students)	\$7 / credit hour
Technology fee (all campus/online students)	\$7 / credit hour
Records fee	\$4 / semester

### Miscellaneous fees

Online course fee	\$8 / credit hour
(for courses conducted fully or partially online)	
Fitness Center fee (P.E. 161, 162, 163)	\$12
Books and supplies	vary by course requirements
Alumni Association contribution (optional)	\$10
Returned check fee	\$20 / check
Overnight letter	\$25 each

### Summer and intersession fees

The technology fee, records fee, and online course service fee (if applicable) are charged for summer and intersession. There is no activity fee for summer or intersession.

### Fees for nursing students only

Malpractice insurance	
(NURS 101-102, 214-215, 216-217)	\$28 / academic year
Uniforms (for 2 years; purchased separately)	approx. \$175
Nursing lab fee (NURS 101, 102, 212, 213, 214, 215, 216, 217)	\$10 / credit hour
Educational Testing Exam (NURS 216)	\$35
Nursing pin (NURS 216)	\$50

### Residence requirement

Regardless of residence status, all tuition bills initially show the out-of-state (double) tuition rate.

You are a Cayuga County resident if you have resided in New York State for one year and in Cayuga County for six months immediately preceding the first day of classes. Your tuition bill will initially show the double tuition rate. When you submit page 2 of your bill with your Cayuga County address completed, the double tuition charge will be removed. If the Business Office has questions about your address, further proof of residence may be required. For more information, contact the Business Office at 315-255-1743 x 2450.

If you are an out-of-county resident of New York State and you do not submit a current Certificate of Residence, or if you are an out-of-state resident, your tuition will remain at the double rate.

You are an out-of-county New York State resident if you have been a New York State resident for one year and have resided in a county other than Cayuga during the six months immediately preceding the start of classes. Your tuition bill will initially show the double tuition rate. Applications for a Certificate of Residence will be included with your tuition bill. You must obtain a Certificate of Residence and submit it with your payment. The Certificate of Residence must be signed by your County Treasurer and must be dated within 60 days of the first day of classes. A certificate obtained for the fall semester is valid through the following summer session, provided enrollment is continuous. If you are an out-of-county resident, you must submit a certificate each academic year.

You are an out-of-state resident if you do not fall in either of the two previous categories, or are residing in the United States on a student visa (F-1, J-1) or a work visa (B-1, B-2), regardless of the length of time you have resided here.

### Billing for tuition and fees

If you are an accepted student, you will be billed before the beginning of the semester. Tuition bills can be paid by cash or check (to Cayuga Community College) at the Business Office. Credit card payments must be made online through your self-service Banner information account. To do so, visit [www.cayuga-cc.edu](http://www.cayuga-cc.edu) and click on Banner Login. For more information, contact the Business Office at 315-255-1743 x 2450.

### Automatic bank deduction or credit card payment

You can also pay tuition automatically through the NBS/FACTS tuition management system. Each semester, this system will automatically deduct four equal payments (covering tuition and fees only) from your checking or savings account, or bills a credit card. For details, visit the college website at [www.cayuga-cc.edu](http://www.cayuga-cc.edu); click on Tuition and Fees, then Tuition and Fee Payment. Or call the Business Office at 315-255-1792 x 2450. NBS/FACTS is not available for summer or intersession classes.

### Refund policy

If you find it necessary to withdraw from college, you must complete a withdrawal form in consultation with a counselor, and submit that completed form to the Registrar's Office. Failure to attend class, notifying an office other than the Registrar's Office, or simply informing your instructor, does not constitute an official withdrawal for refund purposes. You may not withdraw from a course or the college by leaving a voice mail message. Tuition refunds are determined by the date the Registrar's Office receives notification.

The following refund schedules are in effect for both credit and non-credit developmental courses, e.g. Math 070, Engl 097. School days are Monday through Friday, including holidays. Certain college fees are not refundable. Check with the Business Office for detailed information.

The College does not provide refunds on medical grounds.

#### SCHEDULE 1 (A)

Courses more than 8 weeks in length

- Before the 1st day of the semester 100%
- During the 1st week of scheduled classes 75%
- During the 2nd week of scheduled classes 50%
- During the 3rd week of scheduled classes 25%
- After the 3rd week of scheduled classes no refund

#### SCHEDULE 1 (B)

Courses 8 weeks or less in length

- Before the 1st scheduled class 100%
- During the 1st week of scheduled classes 25%
- After the 1st week of scheduled classes no refund

Students receiving federal financial aid, including loans, who withdraw (officially or unofficially) before completing 60% of the semester will be subject to the federal return of Title IV funds calculation. This calculation is based on the percentage of the semester completed; generally the student is required to repay a portion of the federal financial aid which has been paid to the student. This calculation is mandated and must be applied regardless of the circumstances for withdrawal.

For credit-free courses (Leisure Learning or Business Industry Center/Workforce courses (BIC, CMSR, SAC, VOC prefixes) a 100% refund will be provided before the start of the course. No refund is available after the course begins.

For more information, contact the Financial Aid Office at 315-255-1743 x 2470.

## Financial aid

Financial aid is available. Cayuga is committed to making attendance possible for students who would otherwise be denied higher education because of inadequate funds.

### How to apply for financial aid: FAFSA

Once you have applied to the College through the Admissions Office, complete the Free Application for Federal Student Aid (FAFSA) online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Cayuga's school code is 002861. To submit the FAFSA, you (or parents of a dependent student) will need a Personal Identification Number (PIN) at [www.pin.ed.gov](http://www.pin.ed.gov) to be used as a personal signature.

Apply at least four weeks before the deadline, so the Financial Aid Office will have your processed forms by then. Forms received by April 15 will be considered for all available aid. Late forms may only be considered for Pell, TAP, APTS, and loans.

- If you are a New York State resident, complete the Tuition Assistance Program (TAP) application process (page 21).
- If you are a part-time student and a New York State resident, you may apply for Aid for Part-Time Study (APTS; see page 22) by July 1 for fall and by November 15 for spring.

You must reapply for financial aid each academic year.

Awards are based on need, eligibility, and available funds. First consideration goes to students showing the greatest need. Need is determined by comparing the expected family contribution, as calculated by a federal formula, with the cost of attending Cayuga. You may log on to your Banner self-service student information account check financial aid requirements, view awards, and accept financial aid.

Budgets used for financial aid vary depending upon your status, residency, and program. Standard budgets used for awarding financial aid are available in the Financial Aid Office. The following is an estimated budget for two semesters for a dependent full-time student living at home in Auburn or Fulton:

- Tuition \$3,390
- Fees \$300-400
- Books \$1,000

### Payment of financial aid

The cost of your tuition, fees and books may be deferred pending actual awards from Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, and Cayuga Grants and Scholarships. Tuition Assistance Program (TAP) and Aid for Part-time Study (APTS) awards can only be used for tuition. Awards (less any deferred costs) are disbursed to students after the refund period. Your address while attending college is on file at the Registrar's Office, and your check will

be mailed to you at this address. Contact the Registrar's Office if you need to change or correct your address.

The first disbursement of excess grant aid will be at the end of the fourth week of class. Since the process takes time, you should plan for your own living expenses during the first two months of school. Late financial aid, if available, may require four to eight weeks for disbursement.

### Maintaining eligibility for financial aid

Minimum federal and/or state standards stipulate that you must be in Good Academic Standing and maintain Satisfactory Academic Progress. Specific detailed regulations differ for federal and state aid but cover the same general areas (see pages 20–21). We will attempt to notify you if you fall below the minimum requirements. However, it is your responsibility to be aware of the standards and your own progress.

Aid programs are subject to change based on funding and regulations from governing agencies. Applications for most programs and current information on procedures, recipient selection, award schedules and allocation, and responsibilities of recipients are available in the Financial Aid Office.

### Reinstatement of financial aid

If you become ineligible for financial aid due to failure to meet minimum standards for Good Academic Standing and/or Satisfactory Academic Progress, it may be possible to re-establish eligibility if unusual circumstances can be proven. Ordinarily documentation will be required and circumstances must be of a one-time nature, such as illness or injury. Questions on these academic standards and reinstatement of aid should be directed to the Financial Aid Office.

### Student responsibilities

- Read and understand the financial aid procedures and applications.
- Repay loans received and provide documentation, when necessary, according to federal and state regulations.
- Inform the Financial Aid Office of any changes in status, address or resources.
- Maintain enrollment in an approved program.
- Maintain good academic standing and demonstrate satisfactory academic progress toward a certificate or degree.

Note: Changes in status or withdrawing from courses may jeopardize future aid or necessitate a repayment of awards. Therefore, you are advised to seek counseling in the Financial Aid Office before making changes.

### Federal financial aid

You may be eligible for federal aid from the Department of Education if you meet the following criteria:

- Are enrolled in a degree or certificate program
- Are a U.S. citizen or an eligible non-citizen

- Have a high school diploma or GED or show ability to benefit from a Cayuga education by earning a qualifying score on a federally approved test administered by Cayuga
- Demonstrate satisfactory academic progress
- Are not in default on a Perkins Loan, Stafford Loan, PLUS or SLS Loan at any institution
- Do not owe a refund of any federal financial aid at any institution
- Are registered with Selective Service, if required
- Have never been convicted of a drug-related offense

### Federal Pell Grant

This program, through which eligible undergraduate students may receive grants up to \$4,731 a year, is based on college costs and your family's expected contribution (determined by factors such as family income and assets, size of family and number of post-secondary students in the family.). Apply using the FAFSA (available online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov)). You will receive a Student Aid Report, which you should review and keep for your records. No repayment is required.

### Federal Supplemental Educational Opportunity Grants (FSEOG)

As an undergraduate student, you may receive federal grants ranging from \$100 to 4,000 per year. These grants are awarded based on exceptional need and circumstances. Apply through campus aid procedures. No repayment is required.

### Federal Work-Study

This program, supported through federal and college funds, is available to you if you are enrolled and can demonstrate financial need. Awards vary according to need and available funds. You may be employed either on- or off-campus with public or nonprofit agencies. Earnings must be used solely for educational purposes. Apply through campus aid procedures. Biweekly payment is made directly to you based on wage and hours worked. Work-study awards cannot be used as a deferral on your bill.

### Ford Federal Direct Loan

This loan is available if you need financial assistance and are attending Cayuga at least half time (six credits or more). You may borrow up to \$3,500 for the first year of a program and \$4,500 after the first year.

To apply, you must have submitted the Student Aid Report from the FAFSA. An origination fee and insurance premium will be deducted from the loan amount. Loans are disbursed in two separate checks over the loan period. Checks for first-time, first-year borrowers are disbursed 30 days after classes begin. Repayment begins six months after termination of study or if you drop below six credits.

Loan applications are available in the Financial Aid Office. The student must complete a promissory note online at

[www.dl.enote.ed.gov](http://www.dl.enote.ed.gov). All first-time borrowers must complete entrance counseling online at [www.dl.ed.gov](http://www.dl.ed.gov).

### Federal PLUS Loan

If you are a dependent student and your parents have no adverse credit history, they may be eligible for this program. Annual loan limits are based on cost of college attendance less other financial aid. An origination fee is deducted from the co-payable loan check. Repayment begins within 60 days at a variable interest rate not to exceed 10 percent. Contact the Financial Aid Office to apply.

### Veterans' benefits

The College is approved for full Veterans Administration educational benefits. If you are a veteran attending Cayuga for the first time, you should complete VA application forms at any local VA Office.

### Additional aid programs

Information on other aid programs is available in the Financial Aid Office. Among these are U.S. Bureau of Indian Affairs Aid to Native Americans, Regents Award for Children of Deceased or Disabled Veterans, Regents Award for Children of Deceased Police Officers and Firemen, and State Aid to Native Americans.

### Standards for Federal Aid

The following applies to Pell, Federal Direct Student Loans, PLUS, FSEOG, and College Work/Study.

#### Grade point average

Standards will be the same as the College standards. Students falling below these standards must apply to the Academic Standing Committee for reinstatement. The decision of the committee will determine if a student is allowed to return to the College. A student who is reinstated to the College who wishes to re-establish eligibility for Financial Aid may apply for a waiver showing extenuating circumstances. Forms are available in the Financial Aid Office.

#### Accumulated credits

The total accumulated credits will be checked after the final grading process for each semester. If deficiencies are found, they must be made up before a student can qualify for further federal financial aid. Grades of W, I, and Audit are not considered to have a status of passing and do not count toward accumulated credits.

#### Required accumulated credits

Credits Attempted	% of Credits Successfully Completed
1–11	0%
12–30	50%
31–45	60%
48–90	70%
Over 90	No Federal Aid

If you fall below this required completion rate, you will receive a one-time probationary semester in which to regain eligibility. After the probationary semester, if you have not regained eligibility, you may complete a Waiver Request in the Financial Aid Office if you can show extenuating circumstances.

- Equivalent credits are not included as Credits Attempted or Credits Successfully Completed.
- Repeated courses will count as Credits Attempted regardless of the reason for repeating, or the grade received.

### Second degree

Students who are pursuing a second degree or who have completed a degree change may apply for a waiver to be granted additional financial aid eligibility beyond the maximum time listed.

### Notification of loss of federal aid

An attempt will be made by the College to notify students who will not be eligible for federal financial aid for the next semester. An academic dismissal notice appears on a student's grade report for the semester. Letters will be mailed to students lacking total accumulated credits. It is the student's responsibility to be aware of the standards and to appeal for reinstatement of federal aid.

### Method of appealing loss of aid

Appeals for reinstatement of aid due to unusual circumstances, or questions relating to these regulations, may be addressed to the Financial Aid Office at 315-255-1743 x 2470.

### Return of Title IV funds

Federal policy assumes that a student earns aid based on the period of time enrolled. Unearned funds must be returned to the Federal Government. During the first 60% of the semester, a student "earns" Title IV funds in direct proportion to the length of time enrolled. Federal regulations govern the return of Title IV funds (Ford Federal Direct Student Loans, Pell, FSEOG) for students who completely withdraw from Cayuga prior to completing 60% of the semester:

The percentage of the period that the student remains enrolled is determined by dividing the number of days the student attended by the number of days in the semester. Calendar days are used, but breaks of at least five days are excluded from both the numerator and denominator.

### Withdrawal date

For financial aid purposes, the date of withdrawal from the College is

- The date you began the College's withdrawal process or officially notified the College of intent to withdraw, or
- The midpoint of the period if you leave without notifying the institution, or
- Your last date of attendance at a documented academically-related activity, in lieu of any other withdrawal date.

If you leave without notification because of circumstances beyond your control, the College may determine a withdrawal date related to those circumstances.

In the case of "unearned" portions of federally funded grants or scholarships, you will be expected to repay the "unearned" portion to the school, or to make satisfactory arrangements with the U.S. Department of Education to repay that amount within 45 days. Failure to do so will result in your becoming ineligible to receive further federal financial aid. (This policy is based on 34 CFR, Section 668.22 of Title IV of the Higher Education Act of 1965, as amended.)

### New York State Tuition Assistance Program (TAP)

This state program is available if you are a New York State resident attending college full-time (12 credits or more) in New York State. Part-time students who meet additional requirements may also be eligible.

You must be in Good Academic Standing to continue eligibility. Awards are based on family income. Maximum awards may be reduced based on the New York State budget.

To apply, complete and submit the Free Application for Federal Student Aid (FAFSA) online. You will be directed to the electronic TAP application at the end of the FAFSA process. You will need to list at least one school in New York State and complete the TAP application form provided. Cayuga's TAP code is 2005.

If you did not complete a TAP application as part of your online FAFSA, apply for TAP at [www.tapweb.org.totw](http://www.tapweb.org.totw) after receiving a FAFSA acknowledgment. Cayuga's TAP code is 2005.

Your award notification will be e-mailed to you. You will be paid through the College Business Office once your attendance is certified. A TAP award may only be used to defer tuition costs. No repayment is required.

### TAP standards to achieve

The following standards are to be achieved by the end of each semester based on current award: Credits "completed" may be actual credits or equivalent credits, passed or failed. "Actual credits accumulated" must be actual credits passed.

If you repeat a course in which you already received a passing grade, that course will not count for TAP eligibility. Grades of W, I, and Audit are not considered course completion. Students may receive six semesters of TAP at a community college.

After Award 1 (6 TAP points)	First Semester
Completed	6 credit hours
GPA	0.50 or better
Actual credits accumulated	3 credit hours

After Award 2 (12 TAP points) Completed GPA Actual credits accumulated	Second Semester 6 credit hours 0.75 or better 9 credit hours
After Award 3 (18 TAP points) Completed GPA Actual credits accumulated	Third Semester 9 credit hours 1.30 or better 18 credit hours
After Award 4 (24 TAP points) Completed GPA Actual credits accumulated	Fourth Semester 9 credit hours 1.50 or better 30 credit hours
After Award 5 (30 TAP points) Completed GPA Actual credits accumulated	Fifth Semester 12 credit hours 2.0 or better 45 credit hours
After Award 6 (36 TAP points) Completed GPA Actual credits accumulated	Sixth Semester 12 credit hours 2.0 or better 60 credit hours

### Aid for Part-Time Study (APTS)

This state program is specifically for New York State residents enrolled in an approved program for at least 3 but fewer than 12 credits. You must have completed 6 credits at Cayuga in addition to maintaining Good Academic Standing according to Cayuga regulations for state aid. Eligibility is based on income.

You can apply directly to Cayuga using an APTS application available in the Financial Aid Office. Deadline dates are July 1 for fall semester enrollment and November 15 for spring semester enrollment. If you apply late, your application will be considered only if funds are available.

Awards are based on tuition costs, availability of funds and financial need and may not exceed tuition. APTS awards may be used to defer tuition costs only. No repayment is necessary.

## Scholarship assistance through the Foundation

The Cayuga County Community College Foundation is an incorporated not-for-profit organization established to enhance and provide assistance for Cayuga's educational programs. The Foundation receives gifts from corporations and foundations, charitable organizations, alumni and other individual donors. These funds are used for scholarships and awards to students and to support college programs.

### Scholarships, grants, and awards

The Foundation administers special forms of financial aid and scholarships that are made possible through support from endowment funds and gifts received. Detailed information regarding eligibility, application procedures, and award amounts are available from the Financial Aid Office, the College Foundation office, and through the Scholarships and Grants-in-Aid booklet published annually. Programs and awards include but are not limited to those listed below.

Scholarships and grants requiring a separate formal application are marked with an asterisk (\*). Contact the Financial Aid Office for details on these.

#### ACC/CCC Alumni Association Scholarships\*

Six scholarships available each year: two awarded to graduating high school seniors planning to attend Cayuga on a full-time basis who are children or grandchildren of an ACC/CCC graduate; two awarded to returning sophomores attending Cayuga on a full-time basis for a second year; one awarded to a "new start" student who has previously earned a minimum of 29 credit hours from ACC/CCC and is returning to the College for retraining due to job loss based on economic conditions; and one awarded to a nontraditional student who is enrolled full-time to upgrade skills or start a new career. Applicants must meet eligibility criteria. Application deadline for each academic year is March 31.

#### Administrative/Professional Group Scholarship

Awarded to a full- or part-time student who demonstrates financial need. Primary consideration is given to an independent student with an adjusted gross income between \$8,000-\$15,000 and no dependents. Student must have completed 12 credit hours and have a minimum 2.8 GPA.

#### David F. Alexander Memorial Scholarship

Awarded to a returning sophomore who has distinguished himself/herself in the field of English and is studying full-time toward an Associate of Arts degree with an emphasis in English and literature.

#### Auburn Players Community Theatre Scholarship\*

Awarded annually to an incoming freshman or a currently enrolled freshman who intends to return to Cayuga for his or her sophomore year. Given to a student studying theatre arts and who meets the eligibility criteria including being a resident of Cayuga County or one of the five adjacent counties. Application deadline for each academic year is May 1.

**Auburn Police Union Local 195 Scholarship**  
Awarded to a returning sophomore residing full-time in Cayuga County and majoring in the Criminal Justice/Police curriculum with the intention of a career in law enforcement.

**Auburn Steel / Nucor Steel Auburn, Inc. Scholarship\***  
Applicants must attend Cayuga on a full-time basis, be graduating high school seniors with an average of 75 or better, and show evidence of participation in extra-curricular activities, community service, or part-time work. Preference is given to the sons and daughters of Nucor (formerly Auburn Steel Company) employees; however, all Cayuga County high school graduates who demonstrate financial need above and beyond that met by traditional sources of aid are eligible. Application deadline for each academic year is May 1.

**Josephine Aversa-Lynch Memorial Scholarship**  
Awarded to a female who is a full-time returning sophomore majoring in one of the business disciplines offered by the College. Recipient must be a Cayuga County resident who demonstrates scholarship skills, has a minimum 2.5 GPA, and shows financial need. FAFSA must be on file.

**Claudine B. Babiarz Memorial Scholarship**  
Awarded to a returning student enrolled in the nursing program who demonstrates high ethics and service to others, and who has financial need. FAFSA must be on file.

**Antonino and Matteo Bartolotta Scholarships of Merit**  
Awarded to six first-year students who have graduated from Cayuga County high schools, have demonstrated academic excellence and personal integrity, and have been accepted for admission by March 15.

**Antonino and Matteo Bartolotta Technical Scholarship**  
Applicant must attend Cayuga full-time beginning in the fall after graduating from a Cayuga County high school. Applicant should have demonstrated a strong interest and aptitude in construction and building trades while in high school.

**James A. and Katie S. Bentley Memorial Scholarship**  
Awarded in the first instance to a returning full-time sophomore who graduated from Skaneateles High School and demonstrated academic excellence in the first year of study at the College. Awarded in the second instance to an incoming freshman who graduated from Skaneateles High School with at least a 75 average.

**Donald P. Blaisdell EAP Scholarship\***  
Awarded annually to a sophomore who meets the criteria for eligibility and is a child or grandchild of a current employee or retiree of Auburn Correctional Facility; or the child or grandchild of an employee who lost their life during employment at this same facility. Application deadline for each academic year is May 1.

**Richard Bunn Memorial Scholarship**  
Awarded to an incoming student who is a resident of Cayuga County, with preference given to Dana L. West High School graduates. Must be accepted for admission by March 15.

**CCC Grants-in-Aid**  
Awarded to part-time or full-time students who demonstrate financial need. Sponsored by Columbian Foundation, D. E.

French Foundation, Stanley W. Metcalf Foundation, Allyn Foundation, and the Everett Trust Fund.

**Patricia M. Callahan Scholarship**  
Awarded first to full-time returning sophomores who demonstrate academic excellence and promise in the field of early childhood education and whose financial resources are such that he/she will not be eligible for significant federal or state financial aid. Awarded secondly to returning sophomores intending to pursue his/her studies in the field of education.

**Cayuga Bank Scholarships**  
Awarded to students who demonstrate financial need and maintain at least a 2.0 GPA.

**Cayuga Bank Employee Memorial Scholarship\***  
Awarded annually to a child or grandchild of a current employee of First Niagara Bank (formerly Cayuga Bank) or of a retiree of First Niagara Bank/Cayuga Bank whose effective date of retirement was on or after January 1, 1993, who has achieved a minimum academic high school average of 75 or a minimum cumulative GPA of 2.5 in college; shows evidence of participation in extra-curricular activities, community service, and/or part-time work; and plans to attend college full-time for at least one year. Application deadline for each academic year is May 1.

**Cayuga County Home Bureau Scholarship\***  
Awarded annually to a full-time returning sophomore matriculating in the humanities, otherwise to a student in biological science with emphasis in environmental concerns. Application deadline for each academic year is April 15.

**Cayuga County Medical Society Scholarship\***  
Awarded to a nontraditional returning sophomore enrolled in the nursing program who is in good academic standing and demonstrates financial need. First preference will be given to a resident of Auburn and then to a Cayuga County resident.

**G. Bruce and Betty Dearing Memorial Scholarship**  
Awarded to a returning sophomore enrolled for nine or more credits, majoring in humanities or English, who demonstrates a serious commitment to pursuing his/her education with the intent of completing at least a bachelor of arts degree.

**Selio and Kathryn DePasquale Science Scholarship**  
Awarded to a returning sophomore who has demonstrated academic excellence and plans to continue studies in the field of physical or engineering science.

**Educational Support Professionals Scholarship**  
Awarded to a full-time student who is a College student worker with a strong work ethic, pleasant personality, and good people skills.

**Empire State Diversity Honors Scholarship**  
Awarded to a New York State resident who demonstrates high academic achievement, has financial need, and who enhances the diversity of the student body. FAFSA must be on file.

**Claire E. and Frank A. Fama Sophomore Scholarships**  
Awarded to returning sophomores who have demonstrated academic excellence during their freshman year with a preference given in the following order: the field of

engineering, mathematics, computer science, computer information science, computer hardware/software design, mechanical technology and electrical technology.

#### Joseph S. Fleszar Memorial Scholarship\*

Awarded to a returning full-time sophomore with significant academic achievement during freshman year in the field of electric or electronic technology or engineering. Application deadline for each academic year is May 1.

#### Foresman Family Scholarship

Awarded to an incoming freshman who is an Auburn High School graduate with a minimum 85 high school average and who can demonstrate financial need. FAFSA must be on file.

#### Leo and Elizabeth Curtin Fox Memorial Scholarship\*

Awarded first to an employee of any Fox dealership, second to their children or grandchildren, and third to a student with financial need residing in Cayuga or Oswego Counties. Application deadline for each academic year is May 1.

#### Freshman Scholarships of Merit

Awarded annually to first-year, full-time students who have demonstrated academic excellence through four years of high school studies. Must be accepted for admission by March 15.

#### Fulton Savings Bank Scholarship\*

Awarded annually to a nontraditional student attending classes at the Fulton campus. Application deadline for each academic year is July 15.

#### Fulton Savings Bank High School Scholarships

Awarded to the highest ranking graduate who will attend Cayuga full-time from each of the 10 participating high schools: Fulton, Phoenix, Central Square, C. W. Baker, Hannibal, Mexico, Pulaski, Sandy Creek, Altmar-Parish-Williamstown, and Oswego.

#### Anne Drancsak Gallagher Memorial Scholarship

Awarded to a returning sophomore nursing student who demonstrates good academic achievement and a serious commitment to the nursing profession.

#### Mr. and Mrs. Joseph P. Ganey Business Scholarship\*

Awarded to a full- or part-time student majoring in Business Administration who has completed at least six credit hours in this major, has a minimum GPA of 2.5 and shows evidence of participation in community service and/or work. Application deadline for each academic year is May 1.

#### Harry W. and Dorothy J. George Scholarships

Awarded to one incoming freshman and two returning sophomores who have a minimum 2.5 GPA (or minimum 75 high school average), can demonstrate financial need, and are Cayuga County residents. FAFSA must be on file.

#### Virginia E. (Dent) Greenfield Memorial Scholarships\*

Awarded to students enrolled in their first year of the nursing program, based on a 150+ word essay describing who or what influenced the choice of nursing as their field of endeavor. Application deadline is May 1 of the year in which the applicant is planning to enroll.

#### Harrington Business Scholarship

Awarded annually to a continuing sophomore who has demonstrated excellence in his/her first year at Cayuga in one of the business majors.

#### Ryan L. Hart Memorial Scholarship

Awarded to a full-time student enrolled at the Fulton campus who demonstrates financial need. First preference is given to a resident of Oswego, preferably a graduate of Oswego Academy. Second preference is given to a resident of Fulton, then other Oswego County residents. If possible, the award should assist a student who has overcome academic challenges to attend college. Application deadline for each academic year is May 1.

#### Jack M. Hayden Jr. Memorial Scholarships

Awarded to two returning full-time sophomores who are majoring in the technologies and have demonstrated sound academic progress and financial need.

#### Holy Family High School Alumni Scholarship\*

Awarded to a returning student who demonstrates academic excellence and financial need, with preference given to relatives of Holy Family High School alumni. Otherwise, recipient must be a Cayuga County resident. Application deadline for each academic year is May 1.

#### Honors Scholarships - Full Tuition\*

Full-tuition scholarships, including academic and technology fees for two years at Cayuga, for two entering Honors students. Application deadline for each academic year is March 15. Must also be accepted for admission by March 15.

#### Honors Scholarships - Sophomore\*

Awarded to sophomore Honors students on the basis of need and academic merit. Application deadline for each academic year is May 10.

#### Walter W. and Mabel C. Hornburg Scholarships

Five scholarships awarded to students who demonstrate financial need. Primary consideration given to residents of Cayuga County; special consideration to students who have financial need but may not qualify for state and federal aid.

#### William J. Humes Jr. Memorial Scholarships

Awarded to two returning sophomores enrolled in a degree program in Accounting, Business Administration, Computer Science, or Computer Information Systems. Successful candidates will have demonstrated excellence in their first year at Cayuga with a minimum GPA of 3.25.

#### Kenneth and Margaret Lesch Jahn Memorial Scholarship

Awarded to an entering freshman who is an Auburn High School graduate and has demonstrated outstanding academic success. Must be accepted for admission by March 15.

#### Honey and Dr. Joseph F. Karpinski Sr.

#### Memorial Scholarship

Awarded to a nontraditional-age student entering the nursing program who demonstrates financial need and is ineligible for other significant sources of aid.

#### Knight Foundation Scholarships\*

Awarded annually to students who demonstrate financial need not met by other aid sources. Applicants must have completed

15 credits at Cayuga with a minimum 2.5 GPA and intend to enroll for at least 9 credit hours per semester of the academic year. Application deadline for each academic year is June 1.

#### Sabina Kulakowski Memorial Scholarship

Awarded to a full-time returning sophomore majoring in Early Childhood.

#### Daniel C. Labeille Grant\*

Awarded to a student who displays aptitude for a career in the arts. This grant will fund an externship in the arts experience to further the student's development in the discipline. Deadline for letters of application by the faculty sponsor is November 15.

#### Walter K. Long Memorial Scholarship

Awarded annually to a returning sophomore who demonstrates excellence in and commitment to the study of visual arts.

#### Verna Bench MacKay Memorial Scholarship

Awarded annually to a nontraditional female student who is a full-time returning sophomore interested in being a teacher, preferably inclined to teach English. Must be a Cayuga County resident who demonstrates career determination and has a minimum 3.0 GPA. Application deadline is April 1 of the year in which the applicant plans to attend.

#### Maureen Mahany Memorial Scholarship

Awarded annually to a returning sophomore enrolled in the nursing program who is a strong patient advocate, is quietly supportive of classmates, and balances a family with school.

#### Helen C. Mahon / Zonta Club of Auburn Scholarship\*

Awarded to a female Cayuga County resident 25 years of age or older who has had to leave or postpone formal education to deal with adult responsibility, is enrolled for at least 9 credit hours each semester, and demonstrates financial need. Application deadline for each academic year is May 1.

#### Rocco Malvaso Memorial Scholarship

Awarded to a full-time, registered incoming freshman who demonstrates financial need and is a graduate of Auburn High School. FAFSA must be on file.

#### Elizabeth Payne McQueeney Memorial Scholarships

Awarded annually to two full- or part-time sophomores enrolled in the nursing program with a 3.0 GPA who demonstrate sensitivity, compassion, and affinity to the needs of the elderly.

#### Dr. Avanelle P. Morgan Memorial Scholarship

Awarded to a full-time returning sophomore, preferably a Cayuga County resident, who is a very active volunteer in community and civic organizations, is not necessarily in the top 10 percent of the class but is an achieving student who wishes to pursue further education in science or engineering.

#### William and Esther Norris Scholarships

Awarded annually to two full-time enrolled students based on scholastic achievement. Must be accepted for admission by March 15.

#### Nursing Scholarships

Awarded to students enrolled in the nursing program who demonstrate financial need. Can be awarded to part-time students. Sponsored by the Allyn Foundation, Columbian Foundation, the D. E. French Foundation, and the Stanley W. Metcalf Foundation.

#### Jessica L. Onderdonk Memorial Scholarship

Awarded to an incoming freshman who has applied to the Studio Art program for full-time study and who demonstrates financial need. Recipient must be a Cayuga County resident with a high school average of at least 80 or minimum 3.0 GPA.

#### Ruth Penchoen Memorial Scholarship\*

Awarded first to a student attending the London Theatre Program, then to a student attending any of the other international study/travel courses. Deadline for application by essay is September 30 for each academic year.

#### Mike Petrosino/Bill Eisenschmidt Memorial Scholarship

Awarded annually to an incoming freshman who demonstrates financial need and has a minimum 2.5 GPA.

#### Patricia K. Rizzo Memorial Scholarship

Awarded annually to a returning sophomore matriculating in Business Administration or Computer Information Systems who exhibits professional excellence, diligence, and a warm interest in people.

#### St. Alphonsus School Scholarship\*

Awarded to a returning sophomore who demonstrates academic achievement with a GPA of 2.5 or better and proves evidence of financial need. Preference will be given to relatives of alumni of St. Alphonsus School or its successor schools; otherwise recipient must be a resident of Cayuga County. Application deadline for each academic year is May 1.

#### Scholarship Incentive Awards

Awarded annually to full-time students who have completed 12 credits, achieved a 2.5 GPA, and demonstrated financial need. Sponsored by ACC/CCC Alumni Association, Fred L. Emerson Foundation, Fred M. and Ora H. Everett Trust, Faculty/Student Association/Bookstore, Fleet Bank of New York, D. E. French Foundation, Stanley W. Metcalf Foundation, Herman and Margaret Schwartz, and Jennie Chapin Youngs.

Herman and Margaret Schwartz Scholarships Awarded primarily to part-time students who demonstrate financial need and, in the second instance, to full-time students who demonstrate financial need.

#### James Sayre Seymour Memorial Scholarship

Awarded annually to a returning sophomore with a good academic record who demonstrates a serious commitment to the continued study of natural resources and preservation of the environment.

#### Nataline Dulles Seymour Memorial Scholarship

Awarded annually to a returning sophomore who is continuing studies in nursing.

**Society of Broadcast Engineers Scholarships**

Awarded to two graduating telecommunications majors continuing their education in broadcast engineering at a four-year school. If there are no eligible candidates, the awards may be granted to returning sophomores who have demonstrated excellence in the telecommunications degree program in their first year. Otherwise, awarded to incoming freshmen in the telecommunications degree program.

**Sophomore Scholarships**

Awarded to full-time sophomores who attended Cayuga as freshmen, demonstrate financial need, and have at least a 3.2 GPA and maintain it for the year.

**Ralph W. Standbrook Scholarship\***

Awarded to a full- or part-time student in the Geographic Information Systems A.S. program who has completed at least 6 credits of GIS courses with a GPA of 3.0 or higher. Application deadline for each academic year is May 1.

**Anne I. Stapleton Scholarship**

Awarded to an incoming or current student who is a Cayuga County resident, demonstrates financial need, and plans to pursue a career in the health care field or science. Preference will be given to a minority.

**John E. Stapleton Scholarship**

Awarded to an incoming or current student who is a Cayuga County resident, demonstrates financial need, and plans to pursue a career in accounting or business. Preference will be given to a minority candidate.

**Dr. Thomas D. and Wilhelmina Meagher Stapleton Scholarship**

Awarded to a returning sophomore who has demonstrated exceptional service to fellow students under the direction of the College's Academic Support Center. Must have a minimum 3.2 GPA, take the majority of courses at the Auburn campus, and serve the ASC/Auburn campus in a beneficial capacity. Preference will be given to a Cayuga County resident.

**Josephine A. Stephen Memorial Nursing Scholarship**

Awarded to a nontraditional student continuing as a sophomore in good standing in the nursing program and demonstrating need. First preference to a resident of Auburn, NY; then to a Cayuga County resident. FAFSA must be on file.

**Sylvania-GTE-Philips Employee Association Scholarship\***

Awarded to a former employee, or child of former employee, of Sylvania, GTE, or Philips Display Components (Seneca Falls plant) or to a returning sophomore with financial need and a GPA of at least 2.0.

**TRW-Auburn Electronics Division Scholarship**

Awarded to a returning Cayuga Community College sophomore who has excelled in his or her first year in Electrical Technology.

**Preston H. Thomas Memorial Scholarships**

Awarded to two outstanding returning sophomores enrolled in Mechanical Technology – Computer-Aided Design.

**Trustee Scholarships**

Awarded to one graduate from each public school district in Cayuga County, plus a graduate from main feeder public school districts including Jordan-Elbridge, Red Creek, Skaneateles, Fulton, Hannibal, Mexico, Oswego, and Phoenix. Candidates must have at least an 85 average and maintain at least a 2.75 GPA at Cayuga.

**Ward Family Scholarship\***

Awarded annually to a full-time returning sophomore who has demonstrated significant academic achievement as a full-time freshman with a minimum 3.0 GPA, and who intends to complete a four-year degree. Candidate must also give evidence of participation in extracurricular activities, community service, or work. Application deadline for each academic year is May 1.

**John M. and Marjorie D. Wetherby Scholarship**

Awarded to an incoming freshman enrolled in the nursing program who demonstrates financial need, and will continue through his/her sophomore year if the student is in good standing upon completion of the first year. Preference will be given to a resident of Cayuga County who demonstrates a commitment to the health care field through volunteerism.

**Dellaphene Winters Memorial Scholarships**

Awarded to incoming or returning students enrolled full- or part-time who evidence a strong desire to learn and who show financial need. Must be Cayuga County residents, with preference given to those from the southern end of the county.

**Jacqueline Kellogg Wise Memorial Scholarships\***

Awarded annually to three children or grandchildren of employees or retirees of Welch Allyn and affiliated companies who will attend Cayuga on a full-time basis for two years and maintain a minimum 2.5 GPA. Application deadline for each academic year is May 1.

**Rose M. Zambito Scholarship**

Awarded annually to an outstanding returning sophomore majoring in the humanities.

\* Specific application required; contact the Financial Aid Office.

**Commencement awards**

The Foundation also administers scholarships and awards which are distributed to graduates at Commencement. These are made possible through memorial funds and annual gifts received from individuals, local corporations, foundations, and charitable organizations. Detailed descriptions are published annually in the Commencement program.

## Study options

Cayuga offers courses and programs of study that enable you to earn an associate degree or certificate, or enjoy the satisfaction of lifelong learning. Classes are offered weekdays, evenings, and Sundays in Auburn and Fulton. Besides fall and spring semesters, Cayuga holds classes during intersession (January) and in summer (four-, six-, and ten-week sessions). Distance-learning courses (taught elsewhere) are offered in specially equipped classrooms in Auburn, in Fulton, at area high schools, and through the high school-based Cayuga Advantage program.

### Full-time study

Full-time study means enrollment for 12–19 credit hours per semester, in classes offered primarily during the day. Students who wish to take more than 19 credits during a semester must have permission from a division chair.

### Part-time study

Students who register for up to 11 credit hours during a semester are classified as part-time.

### Study on Sunday

Cayuga's Sunday courses offer a convenient option for adult students with busy weekday schedules. Most Sunday courses feature an accelerated format with eight-week sessions combining classroom and independent study. Accelerated classes are best suited for students with good time management and independent study skills. For more information contact Janet Nelson, director of adult learning, at 315-255-1743 x 2835 or [nelsonj@cayuga-cc.edu](mailto:nelsonj@cayuga-cc.edu).

### Online study, full-time or part-time

With more than 350 sections offered each year, Cayuga has a wide selection of online courses to choose from. Students can combine online and classroom courses within any semester.

Cayuga offers several degree programs entirely online:

- Business Administration A.A.S.
- Business Administration A.S.
- Liberal Arts & Sciences: Humanities & Social Science A.A.S.  
Concentrations available in Criminal Justice, Literature, Psychology, and Writing
- Liberal Arts and Sciences: Mathematics & Science A.S.  
Concentration available in Biology
- Criminal Justice: Corrections A.A.S.
- Criminal Justice: Police A.A.S.

Certificate programs in Criminal Justice and General Business are also available online.

For more information visit [www.cayuga-cc.edu](http://www.cayuga-cc.edu) or contact Ed Kowalski, director of distance learning, at 315-255-1743 or [kowalskie@cayuga-cc.edu](mailto:kowalskie@cayuga-cc.edu).

## Travel-study courses

Each January during intersession, the College offers several intensive travel-study courses in London; other locations may also be available. Offerings may include courses in art, business, health care, media, philosophy, theatre, criminal justice, and other disciplines.

In addition, art and media courses may be offered during spring break, with a travel component in New York City.

Financial aid, in the form of loans, may be available for this program to those who qualify. Travel-study courses may be taken for credit or on an audit basis.

For more information about any of these programs, call the Community Education Office at 315-255-1743 x 2229.

### Credit-free study

Each semester, Cayuga Community College offers a variety of credit-free courses for personal enrichment. Credit-free course offerings are posted on the College website at [www.cayuga-cc.edu](http://www.cayuga-cc.edu); click on Leisure Learning. Information is available from the Community Education Office at 315-255-1743 x 2229.

### Credit-free study online

Cayuga also offers hundreds of credit-free courses on the Web. Most start the second Wednesday of each month. For information visit [www.ed2go.com/cayuga](http://www.ed2go.com/cayuga).

## Business and Industry Center

Cayuga's Business and Industry Center designs training programs that help employers and employees thrive in an evolving and competitive marketplace. Standard and customized contract training courses, seminars, and other programs are offered at both the Auburn and Fulton campuses, as well as on-site at the workplace. Information about the Business and Industry Center is available at the College website, [www.cayuga-cc.edu](http://www.cayuga-cc.edu), or by calling 315-255-1743 x 2228.

## Cornell Air Force ROTC courses

Based on an agreement between Cornell University, Cayuga Community College, and the United States Air Force, Cayuga will grant appropriate academic credit for the successful completion of courses offered by the Department of Aerospace Studies at Cornell. Information on these courses is available from the Registrar's Office at Cayuga.

## For high school students: Cayuga Advantage

Cayuga Advantage lets qualified high school juniors and seniors jump-start their college careers by taking credit-bearing college courses while still in high school. Cayuga Advantage has offered courses in a wide range of liberal arts, business, and technical disciplines, as well as SAT and other test preparation courses. For information, call the Community Education Office at 315-255-1743 x 2229.

## Honors study

For dedicated students who show superior academic ability, Honors study at Cayuga complements transfer-oriented degree programs with a rigorous two-year sequence of enriched learning. Across the curricula, a well-rounded selection of courses enables Honors students to fulfill General Education requirements while exploring academic and career interests in depth. Classes are small, with lively participation encouraged.

Certain scholarships at Cayuga are reserved specifically for Honors students. Honors students may also apply for other merit-based or specialized scholarships.

Honors students enjoy an extra advantage when transferring, having demonstrated their academic capability and initiative in a demanding course sequence. Cayuga Honors graduates have transferred to Stanford University, Cornell, University of Virginia, several SUNY campuses, and many other institutions.

At least six Honors-designated courses are needed to complete the requirements of the sequence. Course selection is flexible, and students work with advisers to tailor their choices to their academic goals. Enhanced learning opportunities include Honors Seminars and a course in a non-traditional format (travel-study, independent study, or internship).

### Honors sequence requirements

#### Core studies

A selection of five courses must be completed from:

- General education courses carrying an Honors designation
- Honors courses that do not fulfill General Education requirements but provide depth in a specific discipline
- Honors Seminars (up to two)

#### Non-traditional study

One non-traditional course, defined as a course that takes learning beyond the classroom, must be completed. Students may select from the following (additional fees are required for travel-study courses):

- Travel-study during January intersession or spring break (e.g., London, New York City, Navajo Nation in Arizona)
- Independent study approved by the Honors coordinator and the appropriate dean
- Internship approved by the Honors coordinator and the appropriate dean

### Honors study and program completion

Honors study is suitable both for first-time college students and for many students who transfer to Cayuga after earning credits elsewhere. Some Honors courses are open to qualified non-Honors students as a way to focus on topics of interest.

In many programs of study, Honors courses will fill General Education requirements and entail no additional coursework. However, for some programs of study with tightly-structured requirements, additional coursework may be necessary. See your degree program page for details.

### Acceptance into Honors study

Acceptance is based on your high school average and your submission of the Honors study application. Decisions are based on consultation between the Admissions Office and the Honors study coordinators. Once accepted, you must maintain a 3.0 grade point average to continue in the program. If you are interested in Honors study, talk to a Cayuga admissions counselor or contact an Honors study coordinator:

- Kathy Gross or Shannon Reohr (Auburn) 315-255-1743
- Joel Humphrey or Kelley Rowley (Fulton) 315-592-4143

### Honors Scholarships

Full-Tuition Honors Scholarships are awarded each year on a competitive basis to two entering Honors Study freshmen. Awards are based on high school average, SAT or other standardized test scores, references, application letter, and demonstrated high school academic excellence. The application deadline is March 15. If the student maintains a 3.2 GPA during first year of study, the scholarship may be continued during the second year.

Sophomore Honors Scholarships are awarded on a competitive basis to returning Honors Study sophomores with a minimum 3.2 GPA. The awards provide \$500 for each semester of sophomore Honors Study (\$1,000 for the year). The application deadline is May 10.

Honors Scholarships are funded through the Cayuga County Community College Foundation.



## Transfer planning

Any student planning to transfer to a four-year college upon completion of associate degree requirements should be aware of the procedures necessary for a smooth transition. Transfer is a relatively easy process. However, students seeking specialized programs should choose their course of study at Cayuga carefully to minimize future difficulties. It is advisable to begin transfer planning during the first or second semester in order to apply for transfer during the third semester.

Consultation is available from the College transfer counselor, the student's academic adviser and/or other faculty members. Students planning to transfer into a teacher education program should consult with the Student Development Center on their plans as soon as possible after registering for classes at Cayuga.

The likelihood of gaining admission to a particular program of study at another institution depends on

- Choice of appropriate course of study at Cayuga
- Number of applications for a particular major at the senior college
- Grade point average at Cayuga (institutions and/or majors in high demand are more competitive and require a higher grade point average for admission)

SUNY applications are available in the Student Development Center. A student may apply to four SUNY units with one application. A New York State resident who is in the process of obtaining a Cayuga associate's degree and who is transferring directly to a SUNY baccalaureate campus may apply to up to four SUNY units with a waiver of the \$40 per-unit application fee. Transcripts of grades must be sent from the Registrar's Office at Cayuga directly to the undergraduate admissions office at the college(s) to which the student is applying. Students who have attended colleges in addition to Cayuga must request that those colleges also send transcripts.

For private or out-of-state colleges, write to the director of admission at the educational institution, requesting a catalog and application forms for transfer students. Two files of college catalogs are available on campus for student use, one in the Library and the other in the Student Development Center.

Admissions counselors from four-year colleges throughout the state visit the campus periodically to recruit students and assist in the transfer process.

## Advanced study on campus

Students interested in pursuing studies beyond the associate's degree may do so through a variety of opportunities offered on the Cayuga campus.

**Bachelor's and master's degrees:**  
SUNY Empire State College (Auburn unit)

Successful completion of a Cayuga associate's degree entitles the holder to junior standing in Empire State College. Students can go on to earn a State University of New York bachelor's degree through Empire State College through independent study coordinated at the Cayuga campus, or through distance learning.

Empire State College is a fully accredited college of the State University of New York, offering bachelor's degrees in most academic areas as well as master's programs in business, labor, social policy, and liberal arts. Students design their own programs, working individually with Empire State College faculty in Auburn. Credit may also be awarded for non-classroom experience. Year-round admissions are available. Information is available from the Empire State College office in room M314 on Cayuga's Auburn campus or at 315-255-2794.

**Bachelor's degree: Excelsior College**  
Excelsior College offers self-paced bachelor's degree programs in liberal arts, business, nursing and technology. Students may take up to 80% of the required coursework at Cayuga, and can earn additional credits through area colleges and universities, distance learning, examinations, credit evaluated by ACE or PONS I for military or business/industry training, and special assessment. Excelsior College does not have a residency requirement. All programs are self-paced. For additional information contact Cayuga's Student Development Center.

**Bachelor's and master's degrees: Keuka College Accelerated Studies for Adults Program (ASAP)**  
For working adults, Keuka College offers its evening Accelerated Studies for Adults Program (ASAP) at Cayuga's Auburn campus. Attending classes one night each week, taking one course at a time, students can complete a bachelor of science degree in criminal justice, organizational management, or social work, or a master of science degree in management. Candidates for ASAP must be at least 25 years of age, or demonstrate appropriate readiness, and must have an associate's degree or adequate transferable credits.

Keuka College, located in Keuka Park, New York, is accredited by the Middle States Association of Colleges and Secondary Schools. Further information on Keuka's ASAP sequence is available through Cayuga Community College from the director of adult learning at 315-255-1743 x 2835, or from Keuka College's Center for Professional Studies and International Programs toll-free at 866-255-3852.

## Academic divisions and chairs

Academic divisions and their respective chairs and academic programs follow. Division chairs may be contacted regarding

- Permission to enter a course after the Drop/Add period
- Permission to register for more than 19 credits
- Course substitutions or waivers for degree requirements

### Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health

Division Chair: George Smrtic  
315-255-1743 x 2372  
smrtic@cayuga-cc.edu

#### Degree programs

- A.A.S. Accounting
- A.S. Business Administration
- A.A.S. Business Administration
- A.A.S. Criminal Justice: Corrections
- A.A.S. Criminal Justice: Police
- A.A. Early Childhood
- A.A.S. Early Childhood
- A.A. Liberal Arts: Adolescent Education  
Concentrations in Biology, Chemistry, Earth Science, English, History/Social Studies, Mathematics
- A.A. Liberal Arts: Childhood Education  
Concentrations in English, General Science, History/Social Studies

#### Certificate programs

Accounting  
Correction Administration  
Criminal Justice  
Early Childhood  
General Business

### Computer Science, Mechanical Technology, Electrical Technology, GIS, Math, Nursing, Science

Division Chair: Christie Waters  
315-255-1743 x 2421  
waters@cayuga-cc.edu

#### Degree programs

- A.A.S. Computer Hardware/Software Design
- A.A.S. Computer Information Systems  
Internet Technology Option
- A.S. Computer Science
- A.A.S. Electrical Technology: Electronics
- A.S. Geographic Information Systems
- A.S. Liberal Arts and Science: Mathematics
- A.S. Liberal Arts and Science: Mathematics and Science  
Concentrations in Biology, Chemistry, Geographic Information Systems, Geology
- A.A.S. Mechanical Technology: Computer-Aided Design
- A.A.S. Nursing

#### Certificate programs

Computer Hardware/Software Design  
Computer Information Systems  
Drafting  
Electronics

### Division of College Studies, Fulton

Division Chair: William Lovell  
315-592-4143 x 3016  
lovell@cayuga-cc.edu

#### Degree programs

- A.S. Business Administration
- A.A.S. Business Administration
- A.A.S. Computer Information Systems  
Internet Technology Option
- A.S. Computer Science
- A.A.S. Criminal Justice: Corrections
- A.A.S. Criminal Justice: Police
- A.A. Early Childhood
- A.A. Liberal Arts: Adolescent Education  
Concentrations in English, History/Social Studies, Mathematics
- A.A. Liberal Arts: Childhood Education  
Concentrations in English, General Science, History/Social Studies
- A.A. Liberal Arts and Science: Humanities and Social Science  
Concentrations in Criminal Justice, Early Childhood, Education, Literature, Psychology, Writing
- A.S. Liberal Arts: Mathematics and Science

#### Certificate program

Computer Information Systems

All academic areas at Fulton Campus

### Humanities, English, and Telecommunications

Division Chair: Steven Keeler  
315-255-1743 x 2282  
keeler@cayuga-cc.edu

#### Degree programs

- A.A. Liberal Arts and Science: Humanities and Social Science  
Concentrations in Criminal Justice, Early Childhood, Education, Literature, Psychology, Theatre, Writing
- A.S. Studio Art and Design
- A.A.S. Telecommunications: Audio-Radio Production  
Music Production Option
- A.A.S. Telecommunications: Radio and Television  
Broadcasting
- A.A.S. Telecommunications Technology  
Concentrations in Broadcast Journalism, Digital and Interactive Media, Electronic Publishing, Video Production

## Advisory committees

Cayuga's program advisory committees assist in evaluating curricula and advise the College on technological changes and employment patterns.

### ACCOUNTING

Gordon Barkley, Novelis Corporation  
 Daryl Bowker, CPA, ITT  
 Barbara Hunt, Roman Catholic Diocese of Syracuse  
 Michael Kinney, CPA/CFE, BMC, LLP  
 Robert W. Klinetop, CPA, Averson and Klinetop, LLP, CPAs  
 Jeff Mastin, CPA, Welch Allyn, Inc.  
 Joseph McConnell, Huhtamaki Packaging  
 Katherine A. Sarenski, Dermody, Burke & Brown, CPAs, LLC  
 Mireille L. Watts, CPA, Own Account  
 William Lovell, Dawn Matijas, Thomas Paczkowski,  
 William Prosser, Paul Shinal, Cayuga Faculty

### TELECOMMUNICATIONS

Hugh Cleland, SUNY Health Science Center  
 John Coon, Stockholm Records  
 Michael Hollingworth, British Broadcasting Corp.  
 John James, Time Warner Cable  
 Vincent Lopez, National Board, Society of Broadcast Engineers  
 Michael Marano, Video Memories  
 James Marco, WSTM-TV  
 Mary Merritt, MGM Word Studio  
 David H. North, Time Warner Cable  
 Andy Robinson, WIXT-TV  
 John Soergel, TV and Radio Engineering Consultant  
 Jeffrey Delbel, Steven Keeler, Cayuga Faculty

### COMPUTER INFORMATION SYSTEMS

Larry Clark, Emerald Payroll  
 Gary Cuthbert, Community Computer Services  
 Michael Glancy, Strategic Information Systems  
 Jeff Hartwell, McQuay International  
 Joe McConnell, Huhtamaki Packaging  
 Michele McLaughlin, Nucor Steel  
 Rich Savage, McQuay International  
 Richard Thomas, Welch Allyn  
 Nick Young, Auburn Memorial Hospital  
 William Barth, Dia Carabajal, Donald Fama, Barry Fitzgerald,  
 David Harbaugh, Elizabeth McCormick, Loraine Miller,  
 Thomas Paczkowski, Gregory Szczepanski, Christie Waters,  
 Martin Wisniewski, Cayuga Faculty and Staff

### CRIMINAL JUSTICE

Gary J. Giannotta, Chief, Auburn Police Department  
 Michael F. McKeon, City Court Judge  
 James B. Vargason, former District Attorney, Cayuga County  
 John E. Lamphere, Cayuga County Sheriff's Department (ret.),  
 Cayuga Faculty

### EARLY CHILDHOOD

Elizabeth DeFurio, CCC Child Care Center  
 Terry Denman, Auburn Enlarged School District  
 Penny Lupo, Neighborhood House Child Care Center  
 Nancy Tehan, Success by 6  
 Teresa Hoercher, Eric Zizza, Cayuga Staff

### ELECTRICAL TECHNOLOGY AND COMPUTER HARDWARE / SOFTWARE DESIGN

Tim Clark, TRW  
 Donna Danylec, TRW  
 Jon Salvati, Welch Allyn  
 Kurt Stanton, Micro Net Works ICS  
 Theodore Stark, Lockheed Martin  
 Steve Struba, Stroehman Bakeries  
 Dennis Sullivan, Carrier Corporation  
 Matt Wilson, Anaren  
 Donald Fama, Thomas Karle, Raymond Ludwig,  
 Christie Waters, Cayuga Faculty

### ENTREPRENEURIAL INITIATIVE

Guy Thomas Cosentino, Stardust Foundation of Central New York  
 Sue Edinger, Aurora Inn  
 Lee Herman, Empire State College, Auburn Unit  
 Jeffrey Hoffman, CCC Foundation  
 Donna Lamb, Schweinfurth Memorial Art Center  
 Daniel Larson, Cayuga Community College President  
 Thomas Paczkowski, Business and Industry Center,  
 Cayuga Community College  
 Christina Selvek, Cornell Cooperative Extension  
 Judith Shellenberger, Christopher Columbus Fellowship  
 Foundation  
 William Speck, Cayuga-Onondaga BOCES  
 Nancy Thomas, First Niagara Bank  
 Elizabeth McCormick, William Prosser, Cayuga Faculty

### MECHANICAL TECHNOLOGY

Michael Burnham, Cayuga/Onondaga BOCES  
 Mark Coretti, Beardsley Design Associates  
 David Eno, Auburn Vacuum Forming  
 James Hubbard, Goulds Pumps  
 John Mulcahey, Dana L. West High School  
 James Nervina, New Venture Gear  
 Tim Walawender, Currier Plastics  
 Kim Wojnowicz, Welch Allyn  
 Rich Wride, Hammond & Irving  
 John Campbell, Christie Waters, Cayuga Faculty

### NURSING

Andrea Anderson, Cayuga County Health Department  
 Dr. Susan Bastable, Le Moyne College  
 Anne Bishop, Cayuga-Onondaga BOCES  
 Nancy Deavers, A. L. Lee Memorial Hospital  
 Carrie Fellows, Oswego Hospital  
 Linda Glow, SUNY Upstate Medical University Hospital  
 Leslie Hall, Community-General Hospital  
 Pang Lay Kooi, MD, Community Representative  
 K. C. McCormick, Finger Lakes Center for Living  
 Roz McCormick, Auburn Memorial Hospital  
 Lorie Millini, Auburn Nursing Home  
 Mary Alice O'Mara, Oswego Hospital  
 Dr. Linda Rossi, Keuka College  
 Kathleen Smith, Oswego County Health Department  
 Mega Wells, Upstate Medical University SUNY  
 College of Nursing  
 George Smrtic, Christie Waters, Cayuga Division Chairs

## General education requirements

### For all A.A., A.S., and Nursing A.A.S. degrees

SUNY General Education requirements promote broad intellectual, cultural, and social development, integrated with the specific goals of individual degree programs.

Your curriculum at Cayuga Community College will address SUNY requirements for competencies in critical thinking and information management.

To fulfill SUNY General Education requirements for an A.A. or A.S. degree at Cayuga, you must complete courses in 7 out of the 10 categories as listed below.

To find the specific categories needed to meet the requirements of a particular degree program, refer to the program description in this catalog.

The SUNY General Education requirements do not apply to A.A.S. degree programs other than Nursing. However, if you are in any A.A.S. program and plan to transfer to a SUNY school, we strongly recommend that you fulfill as much of the SUNY General Education requirements as possible. Please be sure to discuss this with your adviser.

To discuss a waiver of General Education requirements, contact the Office of Academic Programs at 315-255-1743, extension 2347.

Required by all:

#### Basic Communications (Gen Ed Req 10)

Engl 101 Freshman English I

Required by all (choose one):

#### Mathematics (Gen Ed Req 1)

Math 102 Intermediate Algebra

Math 104 College Algebra and Trigonometry

Math 106 Precalculus

Math 108 Calculus I

Math 112 Contemporary Math

Math 115-116 Concepts of Elementary Math I and II  
(two-course unit)

Math 201 Calculus II

Math 202 Calculus III

Math 203 Linear Algebra

Math 204 Differential Equations

Math 210 Math/Data Structures

Math 214 Statistics

Required by all:

#### Humanities (Gen Ed Req 7)

Engl 102 Freshman English II

Required by all - choose American History or Western Civilization:

#### American History (Gen Ed Req 4)

Hist 201 History of the United States I

Hist 202 History of the United States II

#### Western Civilization (Gen Ed Req 5)

Engl 205 English Literature to the 19<sup>th</sup> Century

Engl 206 English Literature 19<sup>th</sup> Century to Present

Hist 101 Western Civilization I

Hist 102 Western Civilization II

Required by all (choose one):

#### Natural Science (Gen Ed Req 2)

Biol 100 Human Biology

Biol 101 Essentials of Biology

Biol 103 Biological Principles I

Biol 104 Biological Principles II

Biol 105 Botany

Biol 106 Zoology

Biol 203 Anatomy and Physiology I

Biol 204 Anatomy and Physiology II

Biol 206 Microbiology

Biol 208 Conservation of Natural Resources

Biol 214 Cell Biology

Biol 223 General Ecology

Biol 224 Marine Biology

Chem 101 Elements of General Chemistry I

Chem 102 Elements of General Chemistry II

Chem 103 General Chemistry I

Chem 104 General Chemistry II

Chem 207 Organic Chemistry I

Chem 208 Organic Chemistry II

Geol 101 Earth Science

Geol 110 Physical Geology

Geol 111 Historical Geology

Phys 101 Technical Physics I

Phys 102 Technical Physics II

Phys 103 General Physics I

Phys 104 General Physics II

Phys 200 Physics I Mechanics

Phys 201 Physics II Electricity and Magnetism

Phys 202 Physics III Modern Physics

Required by all (choose one):

#### Social Science (Gen Ed Req 3)

Anth 101 Introduction to Anthropology

Econ 201 Introduction to Economics I

Econ 202 Introduction to Economics II

Psy 101 Introduction to Psychology

Soc 101 Introduction to Sociology

Required by all - choose one course, either from Other World Civilizations or from The Arts:

### Other World Civilizations

(Gen Ed Req 6)

Art 139 Art of Diverse Cultures

Engl 201 World Literature I

Engl 202 World Literature II

Engl 240 Mythology

Hist 111 World Civ I

Hist 112 World Civ II

Phil 203 World Religions

Psci 214 Comp Legal Sys

### The Arts (Gen Ed Req 8)

Art 103 Essentials of Art

Art 104 Painting Studio I

Art 106 Expressive Drawing I

Art 112 Two-Dimensional Design

Art 113 Three-Dimensional Design

Art 131 Introduction to Ceramics

Art 160 Life Drawing

Art 215 Computer Graphics

Art 221 Textile Design: Resist and Print Techniques

Art 231 Ceramic Sculpture

Art 250 Intro Photography and Darkroom Techniques

Art 251 Advanced Photography and Darkroom Tech

Art 252 Photoshop

Art 255 Silkscreen Print

Art 260 Printmaking Workshop

Engl 211 Creative Writing

Musi 104 Music Essentials

Musi 112 Music in Performance

Musi 154 Piano I

Musi 158 Guitar

Telc 103 Moving Image

Telc 150 Photography: Digital Imaging, Visual Communication

Telc 207 TV Production I

Telc 208 TV Production II

Tha 101 Introduction to Theatre

Tha 113 Introduction to Technical Theatre (Stagecraft)

Tha 152 Basic Acting

Optional (choose one):

### Foreign Language (Gen Ed Req 9)

Fren 101 Elementary French I

Fren 102 Elementary French II

Fren 103 Intermediate French I

Fren 104 Intermediate French II

Span 101 Elementary Spanish I

Span 102 Elementary Spanish II

Span 103 Intermediate Spanish I

Span 104 Intermediate Spanish II

Span 111 Conversational Spanish I

Span 112 Conversational Spanish II

## Elective course disciplines

Certain programs of study include elective courses in various academic categories. Course disciplines within these categories are as follows, along with their corresponding prefixes:

Behavioral Science

- Anthropology (ANTH)
- Behavioral Science (BEH)
- Psychology (PSY)
- Sociology (SOC)

Social Science

- Economics (ECON)
- Geography (GEOG)
- History (HIST)
- Political Science (PSCI)
- Geographic Information Systems (GIS) 105 and 110 may be applied as Social Science electives

Science and Mathematics

- Biology (BIOL)
- Chemistry (CHEM)
- Electronics (ELEC)
- Geology (GEOL)
- Mathematics (MATH)
- Physics (PHYS)
- Engineering (ENGR) 201, 202, and 210 may be applied as Mathematics electives
- Geographic Information Systems (GIS) 101 may be applied as a Science elective

English

- English (ENGL)

Humanities

- Art (ART)
- Foreign Languages - French, Italian, Spanish (FRE, ITAL, SPAN)
- Music (MUSI)
- Philosophy (PHIL)
- Theatre Arts (THA)

Liberal Arts

- Includes all disciplines above and Honors (HON) seminar.

### Other Elective Disciplines

Certain courses in other disciplines may apply as electives in specific degree programs. Prefixes for these may include BUS, CJ, CS, DRFT, ECH, EDU, ENGR, ENTR, GIS, HLTH, INT, LIB, NURS, PE, SD, TELC. See degree program pages for details.

These disciplines and all Liberal Arts elective categories may also be used to fulfill non-specific electives in any degree program.

## Degree programs: overview

Cayuga Community College has been authorized by the Board of Regents of the University of the State of New York to grant the Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Applied Science (A.A.S.) degrees.

Cayuga's degree programs are registered with the New York State Department of Education (the number in parentheses following the program title represents the New York State Education Department HEGIS code). You may need to attend evening classes if you wish to complete a degree program as outlined in this catalog. To complete a degree program within two years, plan to enroll beginning with fall semester and to carry at least 17 credit hours per semester for four semesters.

Each degree program listed in this catalog is in compliance with state-mandated General Education requirements. These are applicable to all students who have matriculated in these programs as of fall 2001 or later. Students who entered before fall 2001 should contact their division chair to ascertain how these changes will affect their chosen program of study.

If you wish to transfer after completing your degree at Cayuga, be advised that certain programs at upper-division colleges and universities may require basic preparation in the liberal arts and sciences, mathematics, science, and business. According to the Board of Regents for the State of New York, at least three-quarters of the credits for an A.A. degree, one-half of the credits for an A.S. degree, and one-third of the credits for an A.A.S. degree must be in liberal arts and sciences.

Information on careers is available in publications such as the Occupational Outlook Handbook and other sources located in the Student Development Center and the College Library. You should also contact the Student Development Center's transfer adviser for assistance with planning.

### Associate in Arts (A.A.)

The Associate in Arts (A.A.) degree may be appropriate if you plan to transfer to a four-year college or university to pursue a bachelor of arts (B.A.) or bachelor of science (B.S.) degree, and you desire basic liberal arts and science courses rather than specific career preparation. You should select elective courses in the A.A. program according to the requirements of your intended transfer institution and major field of study. If you show strong academic ability, you may want to apply for Honors study (page 28).

Cayuga offers A.A. degree programs in

- Early Childhood (5503)  
Note: This A.A. program is no longer accepting students; information is provided for current students only.  
See A.A.S. degree program information, next column.
- Liberal Arts and Science/Humanities and Social Science (5649)
- Liberal Arts and Sciences/Adolescent Education (5649)
- Liberal Arts and Sciences/Childhood Education (5649)

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

The Associate in Science (A.S.) degree may be appropriate if you plan to transfer to a four-year college or university to pursue a bachelor of arts (B.A.) or bachelor of science (B.S.) degree and desire a focus on science, mathematics, engineering science, computer science, or business administration. You should select elective courses in the A.S. program according to the requirements of your intended transfer institution and major field of study. If you show strong academic ability, you may want to apply for Honors study (page 28).

Cayuga offers A.S. degree programs in

- Business – Business Administration (5004)
- Computer Science (5101)
- Geographic Information Systems (5399)
- Liberal Arts and Science/Mathematics (5617)
- Liberal Arts and Science/Mathematics and Science (5649)
- Studio Art and Design (5610)

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

The Associate in Applied Science (A.A.S.) degree may be appropriate if you are looking for preparation for immediate entry into a particular career field.

Cayuga offers A.A.S. degree programs in

- Business – Accounting (5002)
- Business – Business Administration (5004)
- Computer Hardware/Software Design
- Computer Information Systems (5101)
- Criminal Justice – Corrections (5505)
- Criminal Justice – Police (5505)
- Early Childhood (5503)
- Electrical Technology – Electronics (5310)
- Mechanical Technology – Computer-Aided Design (5303)
- Telecommunications – Audio-Radio Production (5310)
- Telecommunications – Radio and Television Broadcasting (5008)
- Telecommunications Technology (5310)
- Undergraduate – Nursing (5208.10)

### Qualifications for a degree

To qualify for a degree from Cayuga, you must:

- Matriculate and complete the degree requirements (including General Education, pages 32–33) with a minimum grade point average (GPA) of 2.0. You are matriculated if you have been formally accepted as a candidate for a degree program.
- Earn at least 30 credit hours at Cayuga. Of these, 18 must be among the last 30 credit hours applied to the degree. Exceptions to this policy may be made in keeping with intercollegiate articulations or other interorganizational agreements.
- Be recommended by the faculty for the degree.
- Submit a Degree Candidate Survey Form to the Registrar's Office at least one semester before graduation.
- Satisfy all financial obligations at the time of graduation.

For help with questions about transferring credit from other colleges, or for information about a student's academic record, contact the Registrar's Office at 315-255-1743 x 2260.

## Business: Accounting A.A.S.

This program is intended for those planning to enter the accounting profession upon completion of the degree.

### Degree Requirements

Students receive instruction in the field's core subject areas. Those who enroll at a time other than the fall semester may need more than four semesters to complete the required sequence of courses. Some third- and fourth-semester business courses are only offered during the day.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Business: Accounting. Any exception must have the written consent of the chair of the Division of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

### Career Possibilities

Junior staff accountant, general account manager, account clerk and others

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours	
<b>First Semester</b>			
(all courses available in Auburn and Fulton)			
ENGL 101	Freshman English I	3	
BUS 101	Principles of Accounting I*	4	
BUS 103	Principles of Business	3	
BUS 225	Microcomputer Application Software	3	
	Math**	3-4	
	Health	1	
	Physical Education	<u>1</u>	
		18-19	
<b>Second Semester</b>			
(all courses available in Auburn and Fulton)			
ENGL 102	Freshman English II		
	or ENGL 103	Technical Writing	3
BUS 102	Principles of Accounting II*	4	
BUS 205	Business Law I	3	
	Math/Science**	3-4	
	Elective	3	
	Physical Education	<u>1</u>	
		17-18	
<b>Third Semester</b>			
(some courses available only in Auburn)			
ENGL 221	Effective Speech: Public Address		
	or ENGL 222	Effective Speech: Group Discussion	3
BUS 090	Small Business Accounting*	1	
BUS 201	Intermediate Accounting I*	4	
BUS 222	Federal Income Tax*	3	
BUS 227	Corporate Finance	3	
ECON 201	Intro to Economics I	<u>3</u>	
		17	
<b>Fourth Semester</b>			
(some courses available only in Auburn)			
BUS 202	Intermediate Accounting II*	4	
BUS 209	Cost Accounting*	3	
BUS 220	Business Statistics	3	
BUS 221	Accounting Systems with		
	Microcomputer Applications*	3	
ECON 202	Intro to Economics II	<u>3</u>	
		16	

\* To be eligible for this degree, a student must earn a C or higher in this course.

\*\* MATH 102 or higher

## Business: Business Administration A.A.S.

A program designed for students wishing to obtain a General Education in business and who intend to enter the business community upon completion of degree requirements.

### Degree Requirements

Students who plan to transfer into upper-level programs at other institutions should pursue the A.S. Business: Business Administration degree.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. Business: Business Administration degree. Any exception must be with the written consent of the chair of the Division of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

### Career Possibilities

Career opportunities will depend on elective concentration.

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
BUS 101	Principles of Accounting I	4
BUS 103	Principles of Business	3
C.S. 100	Keyboarding*	1
BUS 225	Microcomputer Application Software	3
	Math**	3-4
	Physical Education	1
		<b>18-19</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
BUS 102	Principles of Accounting II	4
BUS 205	Business Law I	3
BUS 150	Business Communications	3
	Math/Science	3-4
	Physical Education	1
		<b>17-18</b>
<b>Third Semester</b>		
BUS 200	Principles of Management	3
BUS 204	Marketing	3
ECON 201	Intro to Economics I	3
	Behavioral/Social Science	3
	Business†	3-4
	Health	1
		<b>16-17</b>
<b>Fourth Semester</b>		
ENGL 221	Speech: Public Address	3
ECON 202	Intro to Economics II	3
	Behavioral/Social Science	3
	Business	3-4
	Elective	3
		<b>15-16</b>

\* Suggested for students who are not keyboard proficient.

\*\* Students may elect to take BUS 105 and 106 to fulfill the 3-credit-hour math elective. If this sequence is elected, the business math courses will not fulfill any other degree requirement.

† Business electives include any BUS or ECON course.

## Business: Business Administration A.S.

A program for students who are interested in transferring to a baccalaureate program in accounting, business administration, secondary business education, marketing, or related fields.

### Degree Requirements

General Education requirements must be met before the A.S. degree will be granted. For details on General Education requirements, see page 32.

The curriculum listed on this page represent the minimum course requirements for the A.S. degree in Business: Business Administration. Any exceptions must have the written consent of the chair of the Division of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

### Career Possibilities

Upon completion of a baccalaureate or higher degree, a student is typically prepared to enter the fields of accounting, business administration, secondary business education and marketing.

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for transfer information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
BUS 101	Principles of Accounting I	4
BUS 103	Principles of Business	3
	Math*	3-4
	Science**	4
	Physical Education	1
		18-19
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
BUS 102	Principles of Accounting II	4
BUS 225	Microcomputer App. Software	3
	Math*	3-4
	Science**	4
	Physical Education	1
		18-19
<b>Third Semester</b>		
ENGL 221	Effective Speech: Public Address	3
BUS 205	Business Law I	3
ECON 201	Intro to Economics I	3
	Humanities Elective†	3
	Math/Science	3-4
	Health	1
		16-17
<b>Fourth Semester</b>		
BUS 204	Marketing	3
ECON 202	Intro to Economics II	3
MATH 214	Statistics	3
	Behavioral/Social Science	3
HIST 101, 102, 201 or 202		3
		15

\* Completion of this degree requires mathematics competency of at least MATH 106. Completion of MATH 108 is recommended.

\*\* It is recommended that the student, with academic advisement, take an 8-credit hour sequence in one of the following disciplines: biology, chemistry, geology or physics.

† ART 139, 103, 104, 106, 112, 113, 131, 160, 215, 221, 231, 250, 251, 252, 255, 260; MUSI 104, 112, 154, 158; THA 101, 113, 152; PHIL 203

## Computer Hardware / Software Design A.A.S.

This program offers exciting and rewarding opportunities in the rapidly developing computer hardware/software industry.

### Degree Requirements

This curriculum provides the knowledge and skill in both hardware and software needed to enter a professional career in computer design.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Computer Hardware/Software Design. Any exception must have the written consent of the chair of the Division of Natural and Health Sciences, Mathematics, and Technology.

A background in algebra and trigonometry is recommended.

### Career Possibilities

Entry-level positions for technicians in various fields of computers, and in programming, computer operations, communications, computer science, and automation.

### Transfer Information

Students planning to transfer should contact their advisers and/or a transfer counselor in the Student Development Office for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English 1	3
ELEC 101	Electrical Circuits	4
ELEC 105	Introduction to Digital Computers	4
C.S. 120	Foundations of Computer Science	3
MATH 104	College Algebra and Trigonometry	<u>3</u>
		17
<b>Second Semester</b>		
ENGL 102	Freshman English II	
or ENGL 103	Technical Writing	3
ELEC 102	Basic Electronics	4
ELEC 107	Fund. of Microcomputers	4
C.S. 200	Programming in Visual Basic	3
MATH 106	Pre-Calculus	3
	Physical Education	<u>1</u>
		18
<b>Third Semester</b>		
BUS 225	Application Software	3
C.S. 080	Microcomputer Maintenance	1
C.S. 222	Programming in C/C++	3
	Behavioral/Social Science	3
	Elective*	3-4
	Health	1
	Physical Education	<u>1</u>
		15-16
<b>Fourth Semester</b>		
BUS 226	Advanced Application Software	3
C.S. 225	Intro to Local Area Networks	3
C.S. 238	Java	3
	Behavioral/Social Science	3
	Technical Elective **	<u>3</u>
		15

\* Recommended electives:

C.S. 219 Database Management Systems  
 C.S. 228 Introduction to Unix/Linux  
 C.S. 235 Web Page Design  
 C.S. 236 Advanced Visual Basic  
 C.S. 237 Internet Security  
 ELEC 209 Programmable Logic Controllers

\*\* ELEC 209 or CS 228 or CS 236

## Computer Information Systems A.A.S.

This program is intended to provide a foundation in the concepts and principles of computer information systems. It includes methods of analyzing and designing business information systems for computer use.

### Degree Requirements

The curriculum is structured for students entering in the fall semester. Full-time students entering at another time should consult with a computer science instructor regarding the sequence of courses. Students may be required to take certain courses in the evening.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Computer Information Systems. Any exception must have the written consent of the chair of the Division of Natural and Health Sciences, Mathematics, and Technology.

### Career Possibilities

Entry-level positions in programming, computer operations, sales, systems analysis, and management.

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
BUS 101	Principles of Accounting I	4
BUS 225	Microcomputer Application Software	3
C.S. 120	Foundations of Computer Science	3
MATH 104	College Algebra and Trigonometry (or higher)*	3
	Physical Education	1
		17
<b>Second Semester</b>		
C.S. 200	Programming in Visual Basic Behavioral/Social Science	3
C.S. 225	Intro Local Area Networks	3
BUS 226	Advanced Microcomputer Application Software	3
ENGL 102 or ENGL 103	Freshman English II Technical Writing	3
	Physical Education	1
		16
<b>Third Semester</b>		
ENGL 221	Effective Speech: Public Address	3
BUS 103	Principles of Business	3
C.S. 080	Microcomputer Maintenance	1
C.S. 215	Systems Analysis and Design	3
C.S. 222	Programming in C/C++ Math/Science	3 3-4
		16-17
<b>Fourth Semester</b>		
C.S. 219	Database Management Systems	3
C.S. 237	Internet Security	3
C.S. 238	Java Behavioral/Social Science	3 3
	Elective **	3
	Health	1
		16

\* MATH 112, 115, or 116 will not fulfill Math requirement.

\*\*Recommended elective: C.S. 236

## Computer Information Systems A.A.S. INTERNET TECHNOLOGY OPTION

This option offers a variation of the current Computer Information Systems degree program, enabling students to specialize in designing applications specifically for the internet. The emphasis is on applied learning through laboratory practice, using the latest hardware and software.

### Degree Requirements

The Internet Technology option provides training for developing programming applications and information systems for the Internet. It will feature in-depth analysis in working and designing software in support of the Internet. The emphasis is on applied learning through laboratory practice using the latest hardware and software.

Graduates of this degree program option will have acquired skills in Internet programming, problem-solving, communications, web-based application software, computer systems, and networks.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Computer Information Systems: Internet Technology Option. Any exception must have the written consent of the chair of the Division of Natural and Health Sciences, Mathematics, and Technology.

### Career Possibilities

Entry level positions as web designer/developer, webmaster, software engineer, network administrator, and network support specialist.

### Transfer Information

Students planning to transfer should contact their advisers and/or a transfer counselor in the Student Development Office for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
C.S. 080	Microcomputer Maintenance	1
C.S. 120	Foundations of Computer Science	3
BUS 225	Microcomputer Application Software	3
BUS 103	Principles of Business	3
MATH 104	College Algebra and Trigonometry (or higher)*	3
	Health	<u>1</u>
		17
<b>Second Semester</b>		
ENGL 102	Freshman English II	
or ENGL 103	Technical Writing	3
C.S. 200	Programming in Visual Basic	3
BUS 226	Advanced Application Software	3
	Behavioral/Social Science Elective	3
	Math/Science	3
	Physical Education	<u>1</u>
		16
<b>Third Semester</b>		
C.S. 082	Help Desk	1
C.S. 215	Systems Analysis and Design	3
ENGL 221	Effective Speech: Public Address	3
C.S. 228	Intro to Unix/Linux	3
C.S. 236	Advanced Visual Basic	3
	Behavioral/Social Science Elective	3
	Physical Education	<u>1</u>
		17
<b>Fourth Semester</b>		
C.S. 219	Database Management System	3
C.S. 225	Intro to Local Area Networks	3
C.S. 235	Web Page Design	3
C.S. 237	Internet Security	3
C.S. 238	Java	3
	Liberal Arts Elective	<u>3</u>
		18

\* Depending on the student's math placement. MATH 112, 115, or 116 will not fulfill Math requirement.

## Computer Science A.S.

A mathematics and computer programming based program designed to prepare students for transfer to a bachelor of science degree program.

### Degree Requirements

General Education requirements must be met before the A.S. degree will be granted. For details on General Education requirements, see page 32.

The curriculum listed on this page is required for an A.S. degree in Computer Science. Students may be required to complete certain degree requirements in the evening. Any exception must have the written consent of the chair of the Division of Natural and Health Sciences, Mathematics, and Technology.

### Academic Preparation

Three years of high school mathematics required; four years of mathematics recommended.

### Career Possibilities

Transfer to a four-year school for training as a software programmer, applications programmer, or systems analyst.

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses	Credit Hours
<b>First Semester</b>	
ENGL 101	Freshman English I 3
C.S. 120	Foundations of Computer Science 3
BUS 225	Microcomputer Application Software 3
	Behavioral/Social Science* 3
	Math** 3-4
	Health 1
	<u>16-17</u>
<b>Second Semester</b>	
ENGL 102	Freshman English II 3
C.S. 200	Programming in Visual Basic 3
	Behavioral/Social Science* 3
	Math** 3-4
	Humanities† 3
	Physical Education 1
	<u>16-17</u>
<b>Third Semester</b>	
ENGL 201-206	
or ENGL 221	Effective Speech:Public Address 3
or ENGL 222	Effective Speech: Group Discussion 3
C.S. 222	Programming in C/C++ 3
C.S. 215	Systems Analysis and Design 3
	Liberal Arts 3
	Science†† 4
	Physical Education 1
	<u>17</u>
<b>Fourth Semester</b>	
MATH 210	Math/Data Structures 3
MATH 212	Discrete Math 3
C.S. 238	Java 3
HIST 101, 102, 201 or 202	3
	Science†† 4
	<u>16</u>

\* Choose one: PSY 101, SOC 101, ECON 201 or 202, ANTH 101.

\*\* Minimum mathematics requirements: MATH 108, 201, and one of the following: MATH 202, 203, 204 or 214.

† ART 103, 104, 106, 112, 113, 131, 160, 215, 221, 231, 250, 251, 252, 255, 260; MUSI 104, 112, 154, 158; THA 101, 113, 152; PHIL 203

†† Must be a sequence of one of the following:  
 BIOL 103-104 or BIOL 105-106  
 CHEM 103-104  
 PHYS 103-104 or PHYS 200-201  
 GEOL 110-111

## Criminal Justice: Corrections A.A.S.

This program is structured to meet the needs of professional corrections personnel.

### Degree Requirements

The program provides a broad insight into the total correctional process with emphasis on the areas of probation and parole.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Criminal Justice: Corrections. Any exception in major courses must have the written consent of the chair of the Division of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

The student should be aware that entrance into the corrections field demands certain physical requirements, plus a rigorous background investigation.

### Career Possibilities

Corrections officer in the New York State Correctional System; careers as a probation or parole officer require transfer and completion of a four-year or graduate degree.

Courses	Credit Hours
<b>First Semester</b>	
ENGL 101 Freshman English I	3
C.J. 111 Intro to Justice Systems	3
C.J. 115 Criminal Law	3
PSY 101 Intro Psychology	3
	Math/Science 3
	Health 1
	Physical Education <u>1</u>
	<b>17-18</b>
<b>Second Semester</b>	
ENGL 102 Freshman English II	3
C.J. 112 Org/Admin of Justice Systems	3
C.J. 113 Criminology	3
SOC 101 Intro Sociology	3
	Math/Science* 3
	Physical Education <u>1</u>
	<b>16</b>
<b>Third Semester</b>	
ENGL 221 Effective Speech: Public Address	
or ENGL 222 Effective Speech: Group Discussion	3
C.J. 117 Juvenile Delinquency	3
C.J. 121 Institutional Treatment of Crim.	3
	Behavioral/Social Science 3
	Elective** <u>3</u>
	<b>15</b>
<b>Fourth Semester</b>	
C.J. 211 Case Studies in Criminal Behavior	3
C.J. 213 Probation and Parole	3
	Behavioral Science 3
	Electives <u>6</u>
	<b>15</b>

\* CHEM 108 (Forensic Sciences) may be used as a science requirement.

\*\* Spanish Conversation II recommended.

## Criminal Justice: Police A.A.S.

This program prepares the student for employment and advancement in the field of law enforcement. It is also designed to prepare students for transfer to a four-year institution offering a criminal justice major.

### Degree Requirements

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Criminal Justice: Police. Any exception in major courses must have the written consent of the chair of the Division of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

Students should be aware that entrance into the police science field demands certain physical requirements, plus a rigorous background investigation.

### Career Possibilities

Appointment as sworn officer in police or sheriff's department, peace officer, conservation officer or state police officer.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
C.J. 111	Intro to Justice Systems	3
C.J. 115	Criminal Law	3
PSY 101	Intro Psychology	3
	Math/Science	3
	Health	1
	Physical Education	<u>1</u>
		17
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
C.J. 112	Org/Admin of Justice Systems	3
C.J. 116	Constitutional Law	3
CHEM 108	Forensic Science	3
	Behavioral Science	3
	Physical Education	<u>1</u>
		16
<b>Third Semester</b>		
ENGL 221	Effective Speech: Public Address	
or ENGL 222	Effective Speech: Group Discussion	3
C.J. 117	Juvenile Delinquency	3
C.J. 123	Laws of Evidence	3
	Social Science	3
	Elective*	<u>3</u>
		15
<b>Fourth Semester</b>		
C.J. 113	Criminology	3
C.J. 119	Criminal Investigations	3
	Behavioral/Social Science	3
	Electives	<u>6</u>
		15

\* Spanish Conversation II recommended.

## Early Childhood A.A.

Note: The College is no longer accepting new students into this program. Students currently matriculated in the program must complete degree requirements by May 2009. Information provided here is for advisement purposes only.

The College now offers an A.A.S. degree in Early Childhood (see next page) and an A.A. in Liberal Arts with an Early Childhood concentration (see page 53).

### Degree Requirements

The curriculum listed on this page is required for an A.A. degree in Early Childhood. General Education requirements must be met before the A.A. degree will be granted. For details on General Education requirements, see page 32.

### General Information

Cayuga offers several programs for individuals interested in working with children in a variety of settings. Options available include: Teacher Assistant coursework, CDA (Child Development Associate) coursework, Early Childhood Certificate, and the A.A.S. degree. In addition, the College offers a Liberal Arts and Sciences/Humanities and Social Sciences A.A. degree with a concentration in Early Childhood. Specific information about each program is available through the Student Development Center.

### Transfer Information

Students planning to transfer into four-year degree programs should contact their adviser, the College's transfer counselor, or the Early Childhood coordinator to plan the most appropriate course sequence for optimum transferability.

### Additional Information

Students are required to have police and child abuse clearances and physical examinations prior to beginning their field experience classes (ECH 103 and 104).

Note: Students with certain criminal histories will not be able to satisfy field experience requirements necessary for the completion of the degree.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
ART 103	Essentials of Art	3
MUSI 104	Music Essentials	3
PSY 101	Intro Psychology	3
ECH 110	Methods and Materials in Early Childhood Education	3
	Science*	<u>3-4</u>
		<b>18-19</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
ECH 111	Infants and Toddlers	3
PSY 215	Child Psychology	3
	Health	1
	Physical Education**	2
	Computer Literacy Requirement†	
	Math (102 or higher)††	3
		<b>15</b>
<b>Third Semester</b>		
ENGL 209	Children's Literature	3
ECH 101	Intro Early Childhood Education	3
ECH 103	Early Childhood Field Exp. I	3
SOC 101	Intro Sociology	3
HIST 101, 102, 201 or 202		<u>3</u>
		<b>15</b>
<b>Fourth Semester</b>		
ENGL 221	Speech: Public Address	3
ECH 102	Curriculum and Assessment	3
ECH 104	Early Childhood Field Exp. II	3
ENGL 201-206		3
	Behavioral/Soc. Science	3
	Math or Science††	<u>3-4</u>
		<b>18-19</b>

\* Must select one of the approved General Education science courses.

\*\* Two credit hours of PE are required for the degree. PE 199 (PE for Children) is recommended, but two 1-credit-hour courses may be substituted.

† Computer literacy requirement is satisfied by MATH 101, 112, or 116, BUS 225, CS 035, 070, 080, 095, 103, 112, or 114 (or higher), or written waiver by the chair of Math, Science, and Technology; or the chair of Behavioral/Social Science, Business, Criminal Justice, Teacher Education, Physical Education/Health.

†† Math 115 and 116 are recommended for this degree.

## Early Childhood A.A.S.

This program is designed for persons interested in child care, preschool, and early childhood education.

### Degree Requirements

The curriculum listed on this page is required for the A.A.S. degree in Early Childhood.

**Graduation Requirements:** In order to graduate with the AAS degree in Early Childhood, students must demonstrate competency (a grade of 70 or higher) in five Key Assessments. The Key Assessments are completed in each of the core early childhood courses (ECH 101, 102, 103, 104, 110, and 111). This requirement also applies to students who have transferred credits to Cayuga Community College from another college. Please contact the Early Childhood coordinator if you have any questions.

### General Information

For individuals interested in working with children, Cayuga also offers a Liberal Arts A.A. degree with an Early Childhood concentration, as well as an Early Childhood Certificate and Teacher Assistant and Child Development Associate (CDA) coursework. In addition, specific information about each program is available through the Student Development office.

### Transfer Information

Students planning to transfer into a four-year degree program in Early Childhood should contact their adviser, the College's transfer counselor, or the Early Childhood coordinator to plan the most appropriate course sequence for optimum transferability. It is suggested that students who wish to transfer into four-year degree programs complete the A.A. degree in Liberal Arts with an Early Childhood concentration.

### Additional Information

Students must be physically able to satisfactorily and safely perform duties associated with the care and education of children from birth to eight years of age.

Students are required to have police and child abuse clearances and physical examinations prior to beginning their field experience classes (ECH 103 and 104).

**Note:** Students with certain criminal histories will not be able to satisfy field experience requirements for the completion of the degree. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the degree. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
ART 103	Essentials of Art	3
MATH 115	Concepts of Elementary Math I	3
PSY 101	Intro Psychology	3
ECH 110	Methods and Materials in Early Childhood Education*	3
EDU 120	Technology for Teachers	1
		<u>16</u>
<b>Second Semester</b>		
ENGL 209	Children's Literature	3
ECH 111	Infants and Toddlers*	3
PSY 215	Child Psychology	3
BIOL 209	Basic Nutrition	3
P.E. 146	CPR Basic Support	1
	Elective**	<u>2-3</u>
		15-16
<b>Third Semester</b>		
ECH 101	Intro Early Childhood Education*	3
ECH 103	Early Childhood Field Experience I*	3
HIST 201	US History I	3
PSY 217	Intro Children with Exceptionalities	3
P.E. 199	Physical Education for Children	2
HLTH 103	Health	1
		<u>15</u>
<b>Fourth Semester</b>		
ENGL 221	Effective Speech: Public Address	3
BEH 101	Language and Literacy Development*3	3
ECH 102	Curriculum and Assessment*	3
ECH 104	Early Childhood Field Exp. II*	3
P.E. 145	First Aid	1
	Elective**	<u>3</u>
		16

\* A minimum grade of C (70) is required to complete graduation requirements.

\*\* Math 116 is a recommended elective for this degree.

## Electrical Technology: Electronics A.A.S.

This program prepares the student for employment and advancement in the field of electronics.

### Degree Requirements

Cayuga’s “hands-on” learning environment focuses on experimentation with the use of various pieces of test equipment and helps students develop troubleshooting skills for sophisticated electronic systems.

The curriculum provides the graduate with fundamental knowledge in DC and AC circuitry, digital circuits, microprocessor systems, programmable logic controllers, and high-frequency systems. Our experimental and simulation laboratory environments help students gain necessary application experience in the proper use of multimeters, oscilloscopes, logic pulsers and probes, logic analyzers, spectrum analyzers, and network analyzers.

### Academic Preparation

A background in algebra and trigonometry is recommended.

### Career Possibilities

Positions in the fields of computers, robotics, medical instrumentation, audio/radio frequency communication, and manufacturing include

- Engineering Technical Assistant
- Electronic Test and Repair Technician
- Industrial Control Technician
- Calibration and Test Technician
- Field Service Technician
- Electronic Assembler

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses	Credit Hours
<b>First Semester</b>	
ENGL 101	Freshman English I 3
ELEC 101	Electrical Circuits 4
ELEC 105	Intro to Digital Computers 4
	Elective 3-4
	Behavioral/Social Science <u>3</u>
	<b>17-18</b>
<b>Second Semester</b>	
ENGL 102	Freshman English II
or ENGL 103	Technical Writing 3
ELEC 102	Basic Electronics 4
ELEC 107	Fund. of Microcomputers 4
MATH 114	Applied Mathematics
or MATH 104	College Algebra and Trigonometry (or higher)* 3
C.S. 200	Programming in Visual Basic
or C.S. 222	Programming in C/C++ 3
	Physical Education <u>1</u>
	<b>18</b>
<b>Third Semester</b>	
ELEC 201	Intermediate Electronics 4
ELEC 209	Programmable Logic Controllers 3
ENGR 207	Quality Assurance 3
PHYS 103	General Physics I 4
	Technical Elective** <u>3-4</u>
	<b>17-18</b>
<b>Fourth Semester</b>	
ELEC 204	Industrial Electronics 4
ELEC 208	Radio Frequency Communications 4
PHYS 104	General Physics II 4
	Behavioral/Social Science 3
	Health 1
	Physical Education <u>1</u>
	<b>17</b>

\* Math 112, 115, or 116 will not fulfill Math requirement.

\*\* The following will fulfill this requirement:

- BUS 225 or BUS 226.
- C.S. 200 or higher
- Drafting
- Electronics
- Engineering
- Geographic Information Systems
- Math (except Math 112, 115, or 116)
- Physics

## Geographic Information Systems (GIS) A.S.

The associate in science degree program in GIS prepares graduates to continue their studies toward a baccalaureate degree in Geographic Information Systems, or in related majors such as geographic information technology, resources management, geography, urban planning, and environmental science. Although it is a transfer program, students acquire skills that qualify them to pursue career opportunities after completion of the degree. The GIS program is closely associated with the Institute for the Application of Geospatial Technologies located at the College.

### Degree Requirements

General Education requirements must be met before the A.S. degree will be granted. For details on General Education requirements, see page 32.

The courses listed on this page represent the minimum requirements for the A.S. degree in Geographic Information Systems.

### Career Possibilities

Upon successful completion of the A.S. program, students will have the skills required to pursue career opportunities at companies using GIS, GPS, and remote sensing technologies, or they could qualify to transfer directly to a four-year program at a participating university for a bachelor's degree.

### Transfer Information

Cayuga has an articulation agreement in GIS with SUNY College at Cortland, as well as an articulation agreement with SUNY College of Environmental Science and Forestry in Syracuse for transfer into either Environmental Science or Natural Resources Management. For these and other transfer institutions, students should contact their advisers and/or a transfer counselor in the Student Development Office for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
C.S. 120	Foundations of Computer Science	3
MATH 102	Intermediate Algebra (or higher)*	3
BUS 225	Microcomputer Application Software	3
GIS 111	Introduction to GIS	3
	Physical Education	<u>1</u>
		16
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
GIS 121	Remote Sensing and Aerial Photogrammetry	3
GIS 122	Spatial Modeling with Raster GIS	3
C.S. 200	Programming in Visual Basic	3
	Math/Science Elective	3-4
	Physical Education	<u>1</u>
		16-17
<b>Third Semester</b>		
GIS 205	Introduction to Vector GIS	3
GEOL 110	Physical Geology	4
BIOL 103	Biological Principles I	
or		
BIOL 105	Botany	4
HIST 101	Western Civilization	3
	Other Civilization/Arts Elective	3
	Health	<u>1</u>
		18
<b>Fourth Semester</b>		
GIS 220	Advanced GIS	3
GIS 222	GIS Programming	3
HIST 201 or 202	History of the United States I/II	3
ECON 201 or 202	Introduction to Economics I/II	3
	Elective	<u>3-4</u>
		15-16

\* Math 112, 115, or 116 will not fulfill Math requirement.

## Liberal Arts and Sciences: Adolescent Education A.A.

This program is designed for students interested in transferring to a bachelor's degree program in Adolescent Education at a SUNY institution.

### Degree Requirements

Please note that students in this program must complete one of the following concentrations to satisfy degree requirements: Biology, Chemistry, Earth Science, English, History/Social Studies, or Mathematics (see next page). Students must complete a minimum of 12 credit hours in one of the designated concentrations. In some cases liberal arts electives may need to be used to fulfill concentration requirements.

General Education requirements must be met before the degree will be granted. For information on General Education requirements see page 32.

A computer literacy requirement applies and may be satisfied either by completing designated courses or by passing a computer literacy test. Apply to your division chair to have the requirement waived based on your test results.

### Transfer Information

Students planning to transfer to a SUNY four-year degree program in Adolescent Education should contact their adviser, the transfer counselor, or the Education coordinator. Please note: This program may not be appropriate for students interested in transferring to private colleges or universities; students should consult with their chosen institution to plan the most appropriate course sequence.

### Additional Information

Note: Students may be required to have police and child abuse clearances and physicals before beginning field experience classes. Individuals with certain criminal histories will not be able to satisfy field experience requirements for the completion of the degree. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the degree. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

### Other Cayuga Programs

Cayuga offers several additional programs for individuals interested in working with children in a variety of settings. Options available include Teacher Assistant coursework, CDA (Child Development Associate) coursework, Early Childhood Certificate, Early Childhood A.A.S., A.A. in Liberal Arts and Sciences / Childhood Education, and A.A. in Liberal Arts and Sciences / Humanities and Social Sciences with concentrations in Early Childhood or Education. For details consult the College catalog or contact the Education program coordinator.

Courses	Credit Hours
<b>First Semester</b>	
ENGL 101	Freshman English I 3
	Concentration Elective 3
	Foreign Language* 3-4
PSY 101	Introduction to Psychology 3
	Mathematics 3
	Physical Education 1
	<b>16-17</b>
<b>Second Semester</b>	
ENGL 102	Freshman English II 3
	Foreign Language* 3-4
PSY 216	Adolescent Psychology 3
HIST 101 or 102	Western Civilization I or II 3
	Concentration Elective 3-4
	<b>15-17</b>
<b>Third Semester</b>	
ENGL 201 or 202	World Literature I or II 3
	Mathematics or Science Elective** 3-4
	Health 1
	Physical Education 1
	Liberal Arts Elective 3
	The Arts Elective† 3
	Elective (recommended: EDU 120 Technology for Teachers) 1
	<b>15-16</b>
<b>Fourth Semester</b>	
HIST 201 or HIST 202	US History I 3
	US History II 3
SOC 110	Race and Ethnicity 3
	Liberal Arts Elective 3
	Science Elective** 3-4
EDU 201	Foundations of American Education†† 3
EDU 203	Field Experience: Adolescence†† 1
	<b>16-17</b>

\* Although Spanish 111 and 112 will fulfill degree requirements and SUNY General Education requirements at Cayuga Community College, they may not satisfy requirements at the transfer institution. Students are advised to contact their prospective transfer institution before enrolling in these courses.

\*\* A combination of two science disciplines is recommended, for example Biology/Geology or Chemistry/Physics. At least one must be a lab science.

† See General Education requirements for The Arts, page 33.

†† EDU 201 and 203 must be taken concurrently. Credit for EDU 201 is contingent upon successful completion of EDU 203.

## Adolescent Education A.A. CONCENTRATIONS

Students in the Liberal Arts and Sciences: Adolescent Education A.A. program (see previous page) must select one of the following concentrations to complete degree requirements: Biology, Chemistry, Earth Science, English, History/Social Studies, or Mathematics. Curriculum requirements for each are listed below.

### Note:

- You must complete a minimum of 12 credit hours in one of the designated concentrations.
- When planning your schedule, carefully note prerequisites, course sequencing, and availability of courses.
- To plan the most appropriate course selection, you should consult with your intended four-year transfer institution.

### Biology Concentration

The following courses must be completed:  
BIOL 103, 104, and 206  
CHEM 103 and 104

### Chemistry Concentration

The following courses must be completed:  
CHEM 103, 104, 207, and 208  
MATH 108 and 201

### Earth Science Concentration

The following courses must be completed:  
CHEM 103 and 104  
GEOL 110 and 111

### English Concentration

The following courses must be completed:  
ENGL 101, 102, and 209  
Choose one: ENGL 203, 204, 205, 206, 235, 245, or 247

### History/Social Studies Concentration

The following courses must be completed:  
HIST 201 and 202  
Choose two: ECON 201, ECON 202, PSCI 102

### Mathematics Concentration

The following courses must be completed:  
MATH 108, 201, 202, and 203



## Liberal Arts and Sciences: Childhood Education A.A.

This program is designed for students interested in transferring to a bachelor's degree program in Childhood Education at a SUNY institution.

### Degree Requirements

Please note that students in this program must complete one of the following concentrations to satisfy degree requirements: English, General Science, or History/Social Studies (for required courses, see next page). Students must complete a minimum of 12 credit hours in one of these concentrations. In some cases liberal arts electives must be used to fulfill concentration requirements.

General Education requirements must be met before the degree will be granted. For specific information on General Education requirements see page 32.

A computer literacy requirement applies and may be satisfied either by completing designated courses or by passing a computer literacy test. Apply to your division chair to have the requirement waived based on your test results.

### Transfer Information

Students planning to transfer to a SUNY four-year degree program in Childhood Education should consult with their adviser, the transfer counselor, or the Education coordinator. Please note: This program may not be appropriate for students interested in transferring to private colleges or universities; students should consult with their chosen institution to plan the most appropriate course sequence.

### Additional Information

Note: Students may be required to have police and child abuse clearances and physicals before beginning field experience classes. Individuals with certain criminal histories will not be able to satisfy field experience requirements for the completion of the degree. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the degree. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

### Other Cayuga Programs

Cayuga offers several additional programs for individuals interested in working with children in a variety of settings. Options available include Teacher Assistant coursework, CDA (Child Development Associate) coursework, Early Childhood Certificate, Early Childhood A.A.S., A.A. in Liberal Arts and Sciences / Childhood Education, and A.A. in Liberal Arts and Sciences / Humanities and Social Sciences with concentrations in Early Childhood or Education. For details consult the College catalog or contact the Education program coordinator.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
HIST 101	Western Civilization I	
or HIST 102	Western Civilization II	3
	Foreign Language*	3-4
PSY 101	Introduction to Psychology	3
MATH 115	Elementary Mathematics I	3
	Health	1
		<b>16-17</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
	Foreign Language*	3-4
PSY 215	Child Psychology	3
MATH 116	Elementary Mathematics II	3
SOC 110	Race and Ethnicity	3
		<b>15-16</b>
<b>Third Semester</b>		
ENGL 201	World Literature I	
or ENGL 202	World Literature II	3
HIST 201	US History I	
or HIST 202	US History II	3
	Science Elective**	3-4
	Liberal Arts or	
	Concentration Elective	3
	The Arts Elective**	3
	Elective (recommended: EDU 120	
	Technology for Teachers)	1
		<b>16-17</b>
<b>Fourth Semester</b>		
ENGL 209	Children's Literature	3
	Liberal Arts or Concentration Elective	3
	Science Elective*	3-4
P.E. 199	Physical Education for Children	2
EDU 201	Foundations of American Education††	3
EDU 203	Field Experience: Childhood††	1
		<b>16-17</b>

\* Although Spanish 111 and 112 will fulfill degree requirements and SUNY General Education requirements at Cayuga Community College, they may not satisfy requirements at the transfer institution. Students are advised to contact their prospective transfer institution before enrolling in these courses.

\*\* A combination of two science disciplines is recommended, for example Biology/Geology or Chemistry/Physics. At least one must be a lab science.

† See General Education requirements for The Arts, page 33.

†† EDU 201 and 203 must be taken concurrently. Transfer credit for EDU 201 is contingent upon successful completion of EDU 203.

## Childhood Education A.A. CONCENTRATIONS

Students in the Liberal Arts and Sciences: Childhood Education A.A. program (see previous page) must select one of the following concentrations to complete degree requirements: English, General Science, or History/Social Studies. Curriculum requirements for each are listed below.

Note:

- You must complete a minimum of 12 credit hours in one of the designated concentrations.
- When planning your schedule, pay close attention to pre-requisites, course sequencing, and availability of courses.
- To plan the most appropriate course selection, you should consult with your intended transfer institution.

### English Concentration

The following courses must be completed:

ENGL 101, 102, and 209

Choose one: ENGL 203, 204, 205, 206, 235, 245, or 247

### General Science Concentration

Four of the following courses must be completed:

BIOL 103, 104, 105, 206

CHEM 103, 104

GEOL 110, 111

PHYS 103, 104

### History/Social Studies Concentration

The following courses must be completed

HIST 201 and 202

Choose two: HIST 101, 102, 155, 199



## Liberal Arts and Science: Humanities and Social Science A.A.

This program is designed for students who plan to transfer and continue their studies in the humanities or social sciences, leading to a bachelor's degree.

### Degree Requirements

General Education requirements must be met before the A.A. degree will be granted. For details on General Education requirements, see page 32.

### Credit Requirements

A minimum of 62 credits but fewer than 120 credits with an average grade of C (2.000).

### Curriculum Requirements

The course of study leading to this degree should be an organized curriculum comprised primarily of courses in the Liberal Arts and Sciences.

#### English and Humanities

18 credit hours

ENGL 101-102 (6 credits)

ENGL 201-206 (3 credits)

Humanities (3 credits)

Electives (6 credits)

Humanities: Art, Foreign Languages, Music, Philosophy, Theatre Arts. ENGL 101 or higher will fulfill English and Humanities requirement.

#### Behavioral and Social Sciences

12 credit hours

At least 3 credit hours in ANTH 101, ECON 201, ECON 202, PSY 101, or SOC 101

3 credit hours in HIST 101, 102, 201, or 202

Behavioral and Social Sciences: Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology.

#### Natural Sciences and Mathematics

9-12 credit hours

To fulfill the mathematics/ science requirement for the A.A. Liberal Arts degree, select one of the following:

OPTION 1: 3-4 credit hours in math and two 4-credit hour science courses.

OPTION 2: 3-4 credit hours in math and three 3-credit hour science courses

OPTION 3: 6-8 credit hours in math and one 3-4 credit hour science course.

Natural Sciences: biology, chemistry, geology, and physics.

For Options 1, 2, and 3, MATH 115 and 116 will fulfill math, General Education, and computer literacy requirements for education majors only. Written waivers from the chair of college studies in Fulton, or the chair of Math, Science and Technology in Auburn, may be granted on a case-by-case basis.

For Options 1 and 2, MATH 102 or higher (except 115 or 116) will fulfill math requirement. For Option 3, MATH 101 or higher (except 115 or 116) will fulfill math requirement.

MATH 101, BIO 209, BIO 213, and CHEM 108 will not satisfy General Education requirements.

#### Computer Literacy

(required for all students)

Any of the following courses will satisfy the computer literacy requirement, or students may apply to their division chair to waive the requirement by passing a computer literacy test: ART 215 or 252; BUS 150, 225, or 226; CS 035, 070, 103, 112, 114, or higher; EDU 120; ENGL 049; LIB 102; MATH 112 or 116; SD 102; TELC 104, 105, 170, 171, 175, or 199; or any online course.

#### Liberal Arts Electives

9 credit hours

See page 33 for definition of Liberal Arts electives.

#### Other World Civilizations / The Arts

3 credits from either Other World Civilizations or The Arts.

See page 33 for a listing of acceptable course choices. If any listed course has been taken to meet another requirement, then the "Other World Civilizations or The Arts" requirement has been met.

#### Electives

8-11 credit hours

Adequate to meet a total of 62 credit hours

No more than 6 credit hours total in MUSI 100 and Physical Education courses carrying fewer than 3 credits may be applied toward the A.A. degree. Students planning to seek a B.A. degree should complete a foreign language through the intermediate level.

#### Health and Physical Education

1 credit hour in Health

2 credit hours in Physical Education

## Liberal Arts and Science: Humanities and Social Science A.A.

### CONCENTRATIONS

Concentrations offer focused electives in Criminal Justice, Early Childhood, Education, Literature, Psychology, and Writing for enhanced career and transfer opportunities. Concentrations are not majors and are not required to earn the Liberal Arts / Humanities and Social Science degree. Consult with an academic adviser before scheduling courses for a concentration.

#### Criminal Justice Concentration

Designed for students who plan to transfer to four-year programs and continue their studies in Criminal Justice, Law, Pre-Law, Criminology or Forensic Psychology. By utilizing your free electives, you can build a concentration in criminal justice while completing required General Education and liberal arts requirements. If you plan to transfer to a four-year program you should consult with your chosen school to determine the best course selection for transfer of credits.

The following courses can be selected for concentration and meet various Liberal Arts/Humanities and Social Science degree elective requirements:

C.J. 111	Introduction to Justice Systems*
C.J. 113	Criminology*
	or PSY 206 Abnormal Psychology**
C.J. 117	Juvenile Delinquency*
CHEM 108	Forensic Chemistry†

\* Meets free elective requirements (8-11 credit hours allowed).

\*\* Behavioral/Social Science or Liberal Arts elective

† Can be used for one of the required Science electives or as a Liberal Arts elective.

#### Early Childhood Concentration

This program is designed for students interested in the flexibility of a Liberal Arts A.A. degree with specific coursework in Early Childhood Education. To complete the concentration, the following courses are required: ECH 101, 102, 105, and 110. These will meet the requirements for 8–11 general electives needed to complete the Liberal Arts degree, and will fulfill the concentration. MATH 115 and 116 are recommended; MATH 116 may be used to fulfill the computer literacy requirement.

In order to graduate with an A.A degree in Liberal Arts with an Early Childhood concentration, the student must demonstrate competency (a grade of 70 or higher) in four Key Assessments. The Key Assessments are completed in the core early childhood courses (ECH 101, 102, 105, and 110). This requirement also applies to students who have transferred credits to Cayuga from another college. Note: A minimum grade of C (70) is required in ECH 101, 102, 105, and 110 to fulfill degree requirements. For students who take BEH 101 as an elective, a minimum C (70) grade is required.

Students must be physically able to satisfactorily and safely perform duties associated with the care and education of children from birth to eight years of age.

Cayuga has an articulation agreement for transfer to Keuka College. In addition, transfer arrangements have been made with SUNY Cortland, SUNY Oswego, SUNY Fredonia, and the College of St. Rose. Contact Cayuga's Early Childhood coordinator or the transfer counselor in the Student Development Center for additional information.

Note: Students may be required to have police and child abuse clearances and physicals before beginning field experience classes. Individuals with certain criminal histories will not be able to satisfy field experience requirements for the completion of the degree. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the degree. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

Please contact the Early Childhood coordinator if you have questions.

#### Education Concentration

This program is designed for students who plan to transfer to a four-year program at a non-SUNY school to continue studies in a childhood or adolescence education program. (For information on Cayuga's Early Childhood concentration, see the preceding section.) To complete the Education concentration, the following courses are required: EDU 201, EDU 203, and at least 6 additional credit hours from the following courses: EDU 120, PSY 215 or 216, PSY 217, BEH 101, SOC 110.

Because of varying requirements among four-year programs, students should contact Cayuga's transfer counselor or Education coordinator to maximize transferability of coursework to the desired institution.

Note: Students may be required to have police and child abuse clearances and physicals before beginning field experience classes. Individuals with certain criminal histories will not be able to satisfy field experience requirements for the completion of the degree. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the degree. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

### Literature Concentration

The concentration in Literature is designed for transfer preparation towards a four-year degree in English Studies or English Education. Graduates prepare for work as teachers, enter the field of publishing, write for journals, magazines, and online publications, earn graduate research degrees, enter law school, start their own businesses, and find their calling in the political sphere, or working for non-profits, foundations, and government agencies.

Within an A.A. degree this concentration requires a minimum of four literature courses. Students planning to transfer to a four-year program should contact their future school as early as possible to determine the best course selection from those listed. Under current catalog guidelines, all courses listed below may be used as English, Liberal Arts, or free electives.

Choose 2-4 courses from English 201-207:

World Literature I\*, II\*; American Literature to the Late 19<sup>th</sup> Century; American Literature Late 19<sup>th</sup> Century to Present; English Literature to the 19<sup>th</sup> Century; English Literature 19<sup>th</sup> Century to Present; Shakespeare

Choose 0-2 courses from the following specialized courses:

ENGL 209	Children's Literature
ENGL 226	Contemporary American Novels
ENGL 227	Poetry: Poems and Poets
ENGL 230	The Bible as Literature
ENGL 235	Women and Writing
ENGL 237	Film and Literature
ENGL 239	Special Topics
ENGL 240	Mythology*
ENGL 245	African-American Literary Traditions
ENGL 247	Native American Myth, Legend, and Literature
ENGL 250	Folklore
ENGL 255	Science Fiction and Fantasy

† Meets General Education requirement for Other World Civilizations/The Arts.

### Psychology Concentration

This concentration is designed for students interested in studying psychology, human services, social work, or education upon transfer to a four-year program. As a concentration within the Liberal Arts / Humanities and Social Sciences degree, the psychology concentration gives students the opportunity to choose from a variety of psychology courses offered at Cayuga by selecting courses in the behavioral sciences, liberal arts, or free elective categories.

All students within this concentration must take the prerequisite Psychology 101 (Introduction to Psychology), which fulfills a General Education requirement. In addition to Psychology 101, students must take three additional psychology courses from the following list of offerings. Note: For all courses except PSY 207, PSY 101 is a prerequisite.

Some courses listed may not be offered each semester.

PSY 205	Psychology of Personality
PSY 206	Abnormal Psychology
PSY 207	Organizational Behavior
PSY 212	Developmental Psychology – Life Span

PSY 214	Selected Topics in Psychology
PSY 215	Child Psychology
PSY 216	Adolescent Psychology
PSY 217	Introduction to Children with Exceptionalities

Due to the nature of the liberal arts components of the degree program, students should expect ease of transfer to similar programs elsewhere. Cayuga's transfer counselor can assist in planning for transfer to four-year colleges and universities.

### Theatre Concentration

This concentration is designed for students who plan to transfer into Theater programs at four-year colleges and universities, students who wish to transfer as English majors or other liberal arts majors, and students who are interested in obtaining practice in working in theater as actors, directors, and technicians.

Elect the following courses to fulfill 3 hours of Humanities requirements and 6 hours of English or Humanities elective requirements:

THA 101	Introduction to Theatre*
THA 113	Introduction to Technical Theatre*
THA 152	Basic Acting*

Choose one of the following for Liberal Arts elective credit:

ENGL 207	Shakespeare
THA 165	Selected Topics in International Theater: The London Theater
THA 210	Creating a Character

\* Meets General Education requirement for The Arts

### Writing Concentration

This concentration is designed for Liberal Arts A.A. students who are interested in graduating with an emphasis in written communication for future employment needs or transfer. Students in this concentration experience varied writing classes in order to understand fundamental differences between writing disciplines and/or to help select writing programs upon transfer.

Within an A.A. degree, this concentration requires a minimum of three writing courses beyond English 101 and 102, totaling 9–13 credits. To complete the writing concentration, students should choose three writing courses from the following list. This selection will fulfill the 9 credits of English and Humanities elective requirements.

ENGL 103	Technical Writing*	3 credits
ENGL 104	Advanced Expository Writing*	3 credits
ENGL 110	Writing Research in the Discipline*	1 credit
ENGL 211	Creative Writing*†	3 credits
ENGL 217	Writing for the Media*	3 credits
or TELC 204:	Journalism Practicum	3 elective credits
ENGL 239	Special Topics* (if language/writing topic)	

\* Under current catalog guidelines, may be used as an English or Liberal Arts elective.

† Meets General Education requirement for Other World Civilizations/The Arts.

## Liberal Arts and Science: Mathematics A.S.

This program is designed for students who plan to transfer and continue their studies in mathematics leading to a bachelor's degree.

### Degree Requirements

General Education requirements must be met before the A.S. degree will be granted. For details on General Education requirements, see page 32.

The curriculum listed on this page is required for an A.S. degree in Mathematics. Any exception must be with written consent of the chair of the Division of Natural and Health Science, Mathematics, and Technology.

### Academic Preparation

A minimum of four years of high school mathematics required.

### Career Possibilities

A broad-based background in mathematics is excellent preparation for continued study in computer science, statistics, chemistry, physics, engineering, and many newly developing fields where the utilization of modern technology is pervasive.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
MATH 108	Calculus I	4
MATH 214	Statistics	3
	Science*	4
	Physical Education	<u>1</u>
		15
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
MATH 201	Calculus II	4
MATH 203	Linear Algebra	3
	Science*	4
	Health	1
	Physical Education	<u>1</u>
		16
<b>Third Semester</b>		
ENGL 221	Effective Speech: Public Address	
or ENGL 222	Effective Speech: Group Discussion	3
MATH 202	Calculus III	4
C.S. 222	Programming in C/C++	3
HIST 101, 102, 201 or 202	Western Civilization I or II	
	or United States History I or II	3
	Elective	<u>3-4</u>
		16-17
<b>Fourth Semester</b>		
ENGL 201	World Literature I	
or ENGL 202	World Literature II	3
MATH 204	Differential Equations	4
	Behavioral/Social Science**	6
MATH 212	Discrete Mathematics	<u>3</u>
		16

\* Must be a sequence of one of the following:  
 BIOL 103-104 or BIOL 105-106  
 CHEM 103-104  
 PHYS 103-104 or PHYS 200-201  
 GEOL 110-111

\*\* At least 3 credit hours in one of the following: ANTH 101, ECON 201, ECON 202, PSY 101, or SOC 101

## Liberal Arts and Science: Mathematics and Science A.S.

This program is designed for students who plan to transfer and continue their studies in science and mathematics leading to a bachelor's degree.

### Degree Requirements

General Education requirements must be met prior to granting of the A.S. degree. For details on General Education requirements, see page 32.

### Credit Requirements

A minimum of 62 credits, but fewer than 120, with an average grade of C (2.0).

### Curriculum Requirements

The course of study leading to this degree should be an organized curriculum composed of courses in the Liberal Arts and Sciences.

#### English and Humanities

12 credit hours, to include

- ENGL 101-102 (6 credits)
- ENGL 201-206, 103, 221, 222 (3 credits)
- Humanities: 3 credits from art, foreign languages, music, philosophy, or theatre arts

#### Behavioral and Social Sciences

9 credit hours, to include

- At least 3 credit hours in ANTH 101, ECON 201, ECON 202, PSY 101 or SOC 101
- 3 credit hours in HIST 101, HIST 102, HIST 201 or HIST 202
- Behavioral and Social Sciences: anthropology, economics, geography, history, political science, psychology, sociology

#### Natural Sciences and Mathematics

20 credit hours (minimum), to include

- Biology, chemistry, electronics, geology, mathematics, physics
- 8 credit hours natural science sequence: biology, chemistry, geology, or physics
- 6-8 credit hours mathematics
  - 3-4 credits MATH 104, 106, 108, 201-204, 210, 212 or 214
  - 3-4 credits MATH 106, 108, 201-204
- 4-8 credit hours science/mathematics electives

Note: Students who complete a mathematics sequence course with a C or better cannot take a lower sequence course for credit.

#### Liberal Arts Electives

9 credit hours

See page 33 for definition of Liberal Arts electives.

#### Electives

9 credit hours

No more than six credit hours total in MUSI 100 and physical education courses carrying fewer than 3 credits may be applied towards the A.S. degree.

#### Other World Civilizations / The Arts

Three credits from either Other World Civilizations or The Arts. See page 33 for a listing of acceptable course choices. If any of the listed courses have been taken to meet another requirement, then the "Other World Civilizations or The Arts" requirement has been met.

#### Health and Physical Education Electives

1 credit hour in Health

2 credit hours in Physical education

## Liberal Arts and Science: Mathematics and Science A.S. CONCENTRATIONS

Within the Liberal Arts: Mathematics and Science degree program, concentrations are available in Biology, Chemistry, Geographic Information Systems (GIS), and Geology to emphasize experience in a particular field for career preparation or transfer. The information below lists the courses required to fulfill specific concentrations. To complete a concentration, meet with your academic adviser and select the specified courses as part of Natural Sciences and Mathematics requirements.

These concentrations are not majors, nor are they required to complete the Liberal Arts A.S. degree. The courses required for these concentrations will meet some of the Natural Science and Mathematics, Liberal Arts, or General Education electives that must be completed in order to earn a degree in Liberal Arts: Mathematics and Science (see pages 32–33).

Note: Course requirements vary among four-year science programs. It is imperative that students planning to transfer to a four-year college seek assistance from that college as early as possible when planning courses at Cayuga.

### Biology Concentration

Designed for students who wish to study Biochemistry, Pharmacy, Pre-Medicine, or other health profession areas.

#### Required Courses—Year 1

BIOL 103-104	Principles of Biology I–II	8 cr
	or	
BIOL 105-106	Botany and Zoology	8 cr
CHEM 103-104	General Chemistry I–II	8 cr

#### Required Courses—Year 2

6-8 credits selected from the following:

BIOL 203/204	Human Anatomy and Physiology I–II	8 cr
BIOL 206	Microbiology	3 cr
BIOL 208	Conservation and Natural Resources	3 cr
BIOL 213	Current Issues in Biology	3 cr
BIOL 214	Cell Biology	3 cr
BIOL 216	General Microbiology	4 cr

#### Recommended Courses

PHYS 103-104, MATH 108, MATH 201

### Chemistry Concentration

Designed for students who plan to transfer to four-year programs and continue their studies in Chemistry or related areas such as Biochemistry, Pharmacy, Pre-Medicine, or Medical Technology programs.

#### Required Courses—Year 1

CHEM 103-104	General Chemistry I–II	8 cr
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#### Required Courses—Year 2

CHEM 207-208	Organic Chemistry I–II	8 cr
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#### Recommended Courses

PHYS 103-104, MATH 108, 201

### Geographic Information Systems (GIS) Concentration

Designed for students who plan to transfer to a four-year program and continue their studies in Geographic Information Systems or related areas such as Resources Management, Geography, Urban Planning, or Environmental Science. It is strongly recommended that students consult with their chosen school as early as possible to determine the appropriate course selection for optimum transferability.

#### Required Courses

CHEM 103-104	General Chemistry I–II	8 cr
BIOL 103-106		8 cr

Select two of the following Biology courses:

BIOL 103	Principles of Biology I	
BIOL 104	Principles of Biology II	
BIOL 105	Botany	
BIOL 106	Zoology	
GIS 111	Introduction to GIS	3 cr
GIS 121	Remote Sensing	3 cr
GIS 122	Spatial Modeling with Raster GIS	3 cr

#### Recommended Courses

GEOL 110	Physical Geology	4 cr
MATH 108	Calculus I	4 cr
MATH 214	Statistics	3 cr

### Geology Concentration

Designed for students who plan to transfer and continue studies in Geology or related areas such as Agronomy, Cartography, Land Use Management, Teaching or Environmental Sciences and Engineering.

#### Required Courses

GEOL 101	Earth Science*	3 cr
GEOL 110	Physical Geology	4 cr
GEOL 111	Historical Geology	4 cr
CHEM 103-104	General Chemistry I–II	8 cr

\* GEOL 101 is a prerequisite for students who have not taken high school earth science, and is strongly recommended for any student planning to enter the teaching profession.

#### Recommended Courses

BIOL 105-106, PHYS 103-104

## Mechanical Technology: Computer-Aided Design A.A.S.

This program is designed to prepare students for employment in the field of mechanical design and drafting, with an in-depth course of study in the technological aspects of the design profession.

### Degree Requirements

Computer-aided design and mechanical design concepts are integrated throughout the curriculum and used for second-year design projects. The curriculum incorporates generally-accepted design/drafting standards as well as subjects related to the construction and manufacturing industries, allowing graduates flexibility in seeking entry-level employment. The program is also appropriate for students who wish to transfer to a four-year institution in mechanical technology. Students wishing to continue studies toward a Mechanical Technology Engineering degree are encouraged to take a higher mathematics sequence (MATH 108-201) and PHYS 103-104.

### Academic Preparation

MATH 102 competency or equivalent strongly recommended.

### Career Possibilities

Architectural/mechanical drafter, engineering technician, mechanical designer, tool design, quality assurance, CNC machining, CAD designer.

### Transfer Information

Students should consult their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
ENGR 126	Computer-Aided Drafting & Design	4
MATH 102	Intermediate Algebra (or higher)*	3
ENGR 103	Manufacturing Materials/Processes	3
	Behavioral/Social Science or Humanities**	3
	Health	1
	Physical Education	1
		<b>18</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	
or ENGL 103	Technical Writing	3
DRFT 122	Mechanical/Industrial Drafting/Design	4
DRFT 125	Architectural Drafting	4
MATH 104	College Algebra and Trigonometry	
or MATH 114	Technical Math (or higher)*	3
	Behavioral/Social Science†	3
	Physical Education	1
		<b>18</b>
<b>Third Semester</b>		
DRFT 221	Tool and Die Drafting and Design	4
DRFT 230	Process Piping Drafting and Design	3
PHYS 103	General Physics I	4
ENGR 228	CAD III Solid Modeling	3
	Technology Elective††	3-4
		<b>17-18</b>
<b>Fourth Semester</b>		
DRFT 220	Machine Design and Drafting	4
ENGR 203	Applied Statics/Strength of Materials	4
ENGR 208	Computer Numerical Control	4
ENGR 207	Quality Assurance	3
ART 103	Essentials of Art	
or ART 112	Two-Dimensional Design	
or ART 113	Three-Dimensional Design	3
		<b>18</b>

\* Math 112, 115, or 116 will not fulfill the Math requirement.

\*\* Electives in Humanities or Behavioral or Social Sciences will fulfill requirement.

† Electives in Behavioral or Social Sciences will fulfill requirement.

†† The following will fulfill this requirement: BUS 225, BUS 226, C.S. 200 or higher, Drafting, Electronics, Engineering, GIS, Math, Physics.

## Nursing A.A.S.

### The Program

The Nursing program at Cayuga Community College prepares the student for entry into the profession of Nursing. Upon graduation, students receive the Associate in Applied Science degree in Nursing and are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The overall passing rate for Cayuga nursing students has remained above state and national averages.

The curriculum offers a balance of courses in general education and nursing. Students are provided with the theoretical knowledge and clinical practice needed to provide nursing care for individuals throughout the life span. Learning experiences are provided in the classroom, nursing laboratory, and a variety of clinical settings.

Employment opportunities for entry-level graduates include hospitals, ambulatory care, skilled nursing facilities, and community agencies.

### Program Accreditation

Cayuga's Nursing program is fully accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway, New York, NY 10006, 212-363-5555, [www.nlnac.org](http://www.nlnac.org)

### Program Requirements

The following prerequisites must be completed before applying to the Nursing program:

- High school or equivalency diploma
- Algebra math proficiency:
  - Testing into MATH 102 or higher on the Cayuga placement test, or
  - Completion of MATH 099 or higher with a grade of C (or equivalent) or higher, or
  - Have taken Math 099 or higher at another institution, or
  - Completion of calculus or higher in high school with a grade of C (or equivalent) or higher
- Satisfactory completion (C or 70% or higher) of high school or college biology
- Satisfactory completion (C or 70% or higher) of high school or college chemistry
- Minimum cumulative GPA or overall high school average of C (2.0)
- Pre-admission Nursing Entrance Exam (for information and dates of tests, visit [www.cayuga-cc.edu/Admissions](http://www.cayuga-cc.edu/Admissions) and follow the links to Nursing Admissions Process).

### Admission to the Program

Applicants are encouraged to schedule an interview with the College's Admissions Office for evaluation and advisement. Admission to the Nursing program is a two-application process. Applicants must fill out both the College admissions application and a Nursing admission application. Completion of these two applications does not guarantee admission to the program. Note:

- January 15 is the postmark deadline to apply for fall admission.
- October 31 is the postmark deadline to apply for spring admission.
- Attendance at a Nursing Open House, scheduled in the fall, is strongly recommended.
- The Pre-admission Nursing Entrance Exam must be completed by the application postmark deadline.
- All applications will be considered competitively.
- Applicants will be notified of acceptance decision in March for fall admission and December for spring admission.
- Applicants not accepted must reapply to be considered for admission the following year.

### LPN Advanced Placement

Advanced placement in Cayuga's Nursing program is based on available space in Nursing 102. A Licensed Practical Nurse applicant has the option of enrolling in Nursing 100 and 101 or challenging Nursing 100 and 101 and entering the program into Nursing 102.

Licensed Practical Nurses must meet the following admission requirements to challenge Nursing 100 and 101:

- Satisfy the admission criteria stated in Program Requirements.
- Complete BIOL 203 with a C+ or higher (ENGL 101 and BIOL 204 are strongly suggested).
- Graduate from a state-certified LPN program within 2 years with a GPA of 3.0 (80%) or
- Complete the Excelsior College Fundamentals of Nursing Exam with a score of B (80%) or higher.
- Complete the Nursing department Skill Competency Evaluation with a grade of Satisfactory prior to the application deadline.
- Complete the non-credit "Nursing Bridge Course" offered during Intersession.
- Submit current LPN license.

### Transfer into the Program

Students requesting transfer from another Nursing program must:

- Satisfy the admission criteria stated in Program Requirements (above).
- Submit a written request for consideration of transfer on the Nursing Transfer Request form to the Director of Nursing. The only nursing course that may be accepted for transfer is Nursing 101 pending review of course syllabus. A minimum grade of C+ (76) is required for Nursing 101 credit transfer.
- Apply for admission through the Admissions Department by October 31.
- Complete the Nursing department Skill Competency Evaluation with a grade of Satisfactory prior to the application deadline.
- Complete the non-credit "Nursing Bridge Course" offered during Intersession.

### Program Progression

- A minimum passing grade of 76 (C+) must be achieved in each Nursing course.
- A "Satisfactory" clinical grade must be achieved in each clinical Nursing course.
- A minimum passing grade of 76 (C+) is required in BIOL 203, 204, and 216 courses taken after September 1, 2008. This requirement does not apply to biology courses completed before September 2008.
- A student is limited to one W or F in any clinical Nursing course (NURS 101, 102, 214, 215, 216, 217). A second W or F in any clinical Nursing course will result in dismissal from the program.
- All required Nursing courses (with the exception of NURS 101) must be taken at Cayuga Community College.
- The following grading system is used by the Nursing faculty:
 

A	90–100
B+	86–89
B	80–85
C+	76–79
F	less than 76
- A student receiving a W or F in NURS 101 must reapply for admission to the Nursing program through the College Admissions Office in accordance with specified application deadlines.
- A student receiving a W or F in NURS 102, 214, 215, 216, or 217 must apply for re-entry to the Nursing program through the director of Nursing. The student must schedule a meeting with the director of Nursing within two weeks of withdrawing from or failing the course. Academic counseling will be initiated to develop a success plan. Re-entry is granted on a space-available basis and upon compliance with the re-entry procedure.
- A student seeking re-entry to the Nursing program must meet program policies in effect at the date of re-entry.
- Program requirements must be completed within four years of the initial admission.

### Legal Limitations for RN Licensure

There is a requirement that the applicant for the licensure exam be of "good moral character." Applicants should be aware that eligibility for licensure as a registered nurse in New York State by persons who have been convicted of a crime (felony or misdemeanor) or have charges pending in any state or country will be determined through an investigation by the New York State Education Office of Professional Discipline.

On the Application for Licensure the applicant is required to truthfully answer the following questions:

- Have you ever been found guilty after trial, or pleaded guilty, no contest, or nolo contendere to a crime (felony or misdemeanor) in any court?
- Are criminal charges pending against you in any court?
- Has any licensing or disciplinary authority refused to issue you a license, or ever revoked, annulled, cancelled, accepted surrender of, suspended, placed on probation, refused to renew a professional license or certificate held by you now or previously, or ever fined, censured, reprimanded or otherwise disciplined you?

- Are charges pending against you in any jurisdiction for any sort of professional misconduct?
- Has any hospital or licensed facility restricted or terminated your professional training, employment, or privileges, or have you ever voluntarily or involuntarily resigned or withdrawn from such association to avoid imposition of such measures?

### Degree Requirements

The Nursing Program must be completed in the proper sequence. The following curriculum represents the Nursing course sequence and minimum requirements for the A.A.S. degree in Nursing (total of 69 credit hours).

Note: Additional fees for Nursing students are listed on page 18.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
NURS 100	Nursing Success Strategies	1
NURS 101	Fundamentals of Patient Care	8
BIOL 203	Anatomy and Physiology I	4
	Physical Education	<u>1</u>
		17
<b>Second Semester</b>		
NURS 102	Nursing in Physical/Mental Health I	8
NURS 212	Health Assessment I	1.5
SOC 101	Introduction to Sociology	3
BIOL 204	Anatomy and Physiology II	<u>4</u>
		16.5
<b>Third Semester</b>		
NURS 214	Family/Community Nursing I	4
NURS 215	Nursing in Physical/Mental Health II	4
NURS 213	Health Assessment II	1.5
BIOL 216	Microbiology	4
PSY 101	Introduction to Psychology	3
	Physical Education	<u>1</u>
		17.5
<b>Fourth Semester</b>		
ENGL 221	Effective Speech: Public Address	3
NURS 216	Family/Community Nursing II	4
NURS 217	Nursing in Physical/Mental Health III	4
NURS 203	Trends in Nursing	1
NURS 207	Pharmacology	3
PSY 212	Developmental Psychology	<u>3</u>
		18

### Clinical Experiences

Clinical learning experiences are provided in a variety of area health facilities. Clinical schedules include days, evenings and occasional weekends. Students must provide their own transportation to clinical facilities. Clinical agencies include but are not limited to Auburn Nursing Home, Finger Lakes Center for Living, Auburn Memorial Hospital, Community General Hospital, University Hospital, Veterans Medical Center, Oswego Hospital, Hutchings Psychiatric Center, Oswego County Health Department, and Cayuga County Health Department.

### Student Disability Information

Nursing students must be able to meet all established academic and clinical requirements to successfully complete the program. Applicants with disabilities are encouraged to contact the Office of Disability Services, located within the Academic Support Center. To be eligible for a reasonable accommodation, applicants must provide clear documentation of disability. The Office of Disability Services is responsible for determining if reasonable accommodations can be identified and for ensuring that accommodations are provided for students. Early contact with the Office of Disability Services will ensure that accommodations can be made available when students begin the Nursing program.

### Health Requirements

After being accepted into the Nursing program, the student must show evidence of the following prior to the first day of class:

- Completed physical exam and updated annually. The health record must show no physical condition which would limit safe performance of technical standards (specified on Nursing website)
- Completed Mantoux test and immunization records
- Compliance with NYS health requirements

### CPR Requirements

The student must hold CPR certification throughout the program. American Heart Association certification (BLS for Adults, Infant and Child) is valid for two years. Red Cross certification (Professional Rescuer Course) is valid for one year. Online certification or re-certification are not accepted. Note: "Heart Saver" and "Community CPR" do not meet the CPR requirement.

### Graduation Requirements

The candidate for the Associate in Applied Science degree in Nursing must meet the following requirements:

- Completion of 69 credits (68 credits for LPN Advanced Placement)
- Completion of General Education distribution requirements as well as the Nursing curriculum
- Cumulative average of no less than 2.0 and a minimum grade of "C+" in each Nursing and Biology course

### Transfer Information

Cayuga Community College has articulation agreements with a number of baccalaureate nursing programs. For information on these, contact the director of nursing.



## Studio Art and Design A.S.

This is a transfer program for students planning a career in the visual arts.

### Degree Requirements

Students will complete traditional art foundation courses (drawing, painting, design, and art history) and explore studio disciplines in which they may concentrate upon transfer to a four-year institution. Emphasis is placed on the student's creative and aesthetic development and the professional application of formal design skills.

General Education requirements must be met prior to granting of the A.S. degree. For details on General Education requirements, see page 32.

### Concentrations Available

Six concentrations are offered for Studio Art and Design students who wish to focus on specific media in their degree program. These concentrations are listed on the following page, along with courses required for completion. Students may select any studio course to fulfill studio elective requirements. Note: To earn the Studio Art and Design degree, it is not necessary to complete a concentration.

### Career Possibilities

Advertisements, packaging, textiles, book covers, posters, furniture, architectural forms, and more are designed by professionals trained in studio art. Students will be encouraged to consider how to apply their skills to industry, freelance opportunities, or the creation of an artist-operated business.

### Transfer Information

Students planning to transfer should consult their advisers and/or a transfer counselor in the Student Development Office for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ART 101	Art History: Ancient to Gothic	3
ART 112	Two-Dimensional Design	3
ART 106	Expressive Drawing	3
ENGL 101	Freshman English I	3
MATH 102 or higher		3-4
	Physical Education	1
		<b>16-17</b>
<b>Second Semester</b>		
ART 102	Art History: Renaissance to Modern	3
ART 104	Painting	3
ART 160	Life Drawing	3
ENGL 102	Freshman English II	3
	Behavioral/Social Science*	3
	Physical Education	1
		<b>16</b>
<b>Third Semester</b>		
ART 113	Three-Dimensional Design	3
ART	Electives**	6
HIST 101	Western Civilization I	
or HIST 102	Western Civilization II	
or HIST 201	History of the United States I	
or HIST 202	History of the United States II	3
	Science Elective†	3-4
	Health	1
		<b>16-17</b>
<b>Fourth Semester</b>		
ART	Electives**	6
	Math or Science Elective	3-4
	Behavioral/Social Science	3
ENGL 201-206		3
		<b>15-16</b>

\* Choose one: ANTH 101, SOC 101, PSY 101, ECON 201, ECON 202.

\*\* ART 131, 140, 212, 215, 221, 222, 231, 250, 251, 252, 255, 260

† Science must be from General Education list (see page 32).

## Studio Art and Design A.S. CONCENTRATIONS

### Fine Arts Concentration

ART 131	Intro Ceramics
ART 212	Advanced Two-Dimensional Design
ART 250	Intro Photography
ART 255	Silk Screen Printing

### Graphic Design Concentration

ART 212	Advanced Two-Dimensional Design
ART 215	Computer Graphics
ART 250	Intro Photography
ART 252	Photoshop

### Textile Design Concentration

ART 212	Advanced Two-Dimensional Design
ART 221	Textile Design: Resist and Print Techniques
ART 222	Textile Design: Direct Applications
ART 255	Silk Screen Printing

### Photography Concentration

ART 212	Advanced Two-Dimensional Design
ART 250	Intro Photography
ART 252	Photoshop

One studio course of student's choice

### Printmaking Concentration

ART 212	Advanced Two-Dimensional Design
ART 255	Silk Screen Printing
ART 250	Intro Photography
ART 260	Printmaking Workshop

### Ceramics Concentration

ART 131	Intro Ceramics
ART 231	Ceramic Sculpture

Two studio courses of student's choice



## Telecommunications: Audio-Radio Production A.A.S.

This program is designed to prepare students for entry-level positions in audio and radio production.

### Degree Requirements

Upon completion of the program, students will be able to perform audio functions including music and sound recording and audio programming, mixing, re-recording, splicing, dubbing and over-dubbing, setting up and connecting sound reinforcement equipment on location, determining site characteristics, and mixing live audio.

For more information about Cayuga’s Telecommunications programs, visit the Telcom website at [www.telcomcayuga.com](http://www.telcomcayuga.com).

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Telecommunications: Audio-Radio Production. Some required courses are offered only in the evening.

### Academic Preparation

Readiness for ENGL 101

### Career Possibilities

Graduates may work in the music recording industry, for radio stations, and in television, motion picture, and video production as recording engineers, audio engineers, audio operators, board operators, sound technicians, or mixers.

### Transfer Information

Cayuga has articulation agreements for related programs offered by Roy H. Park School of Communications at Ithaca College and by SUNY College at Fredonia. For these and other transfer institutions, students should contact their advisers and/or a transfer counselor in the Student Development Center for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
TELC 101	Intro to Mass Media	3
TELC 104	Broadcasting Techniques I	3
C.S. 103	Windows Operating System*	1
	Math/Science	3
	Health	1
	Physical Education	<u>1</u>
		<b>15</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
TELC 105	Broadcast Techniques II	3
	Liberal Arts	3
	Behavioral/Social Science	3
	Telecommunications	3
	Physical Education	<u>1</u>
		<b>16</b>
<b>Third Semester</b>		
TELC 207	TV Production I	4
TELC 230	Music/Multi-Track Recording	3
TELC 205	Practicum in Radio Operations	3
TELC 220	Advanced Audio Production	3
	Math/Science	<u>3</u>
		<b>16</b>
<b>Fourth Semester</b>		
TELC 231	Advanced Recording Techniques	3
TELC 208	Television Production II	4
TELC 275	Internship in Radio and TV	3
TELC 240	Audio for Media	3
	Behavioral/Social Science	<u>3</u>
		<b>16</b>

\* Students may apply to the Humanities division chair to waive the requirement by taking a computer literacy test.

## Telecommunications: Audio-Radio Production A.A.S. MUSIC PRODUCTION OPTION

The Music Production Option is designed for recording students who have an interest or skills in music and wish to apply audio production techniques specifically to that field.

### Degree Requirements

Students who receive a degree in Audio-Radio Production with this option may wish to pursue a career in music recording or transfer to a four-year program in music production. Students who wish to transfer should consult with the four-year school for planning and preparation.

For more information about Cayuga's Telecommunications programs, visit the Telcom website at [www.telcomcayuga.com](http://www.telcomcayuga.com).

### Academic Preparation

Readiness for ENGL 101

### Career Possibilities

Graduates may work in the music recording industry, for radio stations, and in television, motion picture, and video production as recording engineers, audio engineers, audio operators, board operators, sound technicians, or mixers.

### Transfer Information

Cayuga has articulation agreements for related programs offered by Roy H. Park School of Communications at Ithaca College and by SUNY College at Fredonia. For these and other transfer institutions, students should contact their advisers and/or a transfer counselor in the Student Development Center for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
TELC 101	Intro to Mass Media	3
TELC 104	Broadcasting Techniques I	3
C.S. 103	Windows Operating System*	1
MUSI 101	Music Appreciation	3
	Health	1
	Physical Education	<u>1</u>
		15
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
TELC 105	Broadcast Techniques II	3
	Math/Science Elec	3
	Behavioral/Social Science	3
MUSI 154	Piano	3
	Physical Education	<u>1</u>
		16
<b>Third Semester</b>		
TELC 207	TV Production I	4
TELC 230	Music/Multi-Track Recording	3
MUSI 102	Jazz/Rock History	3
TELC 220	Advanced Audio Production	3
	Math/Science	<u>3</u>
		16
<b>Fourth Semester</b>		
TELC 231	Advanced Recording Techniques	3
TELC	Elective	3
TELC 275	Internship in Radio and TV	3
MUSI 158	Guitar	3
	Behavioral/Social Science	<u>3</u>
		15

\* Students may apply to the Humanities division chair to waive the requirement by taking a computer literacy test.

## Telecommunications: Radio and Television Broadcasting A.A.S.

This program is designed to prepare students for employment in the communications/media industry.

### Degree Requirements

Upon completion, students will be able to perform typical management, production, operations, and announcing functions. The program includes work in the College's FM stereo radio station and broadcast-quality color television studio. Internships are required in area industry facilities.

For more information about Cayuga's Telecommunications programs, visit the Telcom website at [www.telcomcayuga.com](http://www.telcomcayuga.com).

The courses below represent the minimum requirements for the A.A.S. degree in Telecommunications: Radio and Television Broadcasting. Some required courses are offered only in the evening.

### Academic Preparation

Readiness for ENGL 101

### Career Possibilities

Graduates work as directors, producers, camera operators, technical directors, video editors, industrial video specialists, electronic news gathering specialists, reporters and newscasters, discjockeys, managers, advertising salespersons, audio engineers, and sound reinforcement technicians.

### Transfer Information

Cayuga has articulation agreements for related programs offered by Roy H. Park School of Communications at Ithaca College and by SUNY College at Fredonia. For these and other transfer institutions, students should contact their advisers and/or a transfer counselor in the Student Development Center for more information. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
ENGL 101	Freshman English I	3
TELC 101	Intro to Mass Media	3
TELC 104	Broadcast Techniques I	3
C.S. 103	Windows Operating System*	1
	Math/Science Elective	3-4
	Health	1
	Physical Education	1
		<b>15-16</b>
<b>Second Semester</b>		
ENGL 102	Freshman English II	3
TELC 105	Broadcast Techniques II	3
TELC 114	Lighting	3
	Telecommunications Elective	3
	Elective	3
	Physical Education	1
		<b>16</b>
<b>Third Semester</b>		
TELC 207	TV Production I	4
	Telecommunications Elective	3
	Behavioral/Social Science	3
	Math/Science Elective	3-4
	Special Interest Elective**	3
		<b>16-17</b>
<b>Fourth Semester</b>		
TELC 208	TV Production II	4
TELC 275	Internship in Radio and TV	3
	Behavioral/Social Science Elective	3
	Liberal Arts Elective	3
	Special Interest Elective**	3
		<b>16</b>

\* Students may apply to the Humanities division chair to waive the requirement by taking a computer literacy test.

\*\* Course related to student's career objective; selection must be approved by faculty adviser.

## Telecommunications: Radio/TV Broadcasting A.A.S. CONCENTRATIONS

The Humanities Division has suggested the concentrations below for students wishing to emphasize experience in a particular field of telecommunications or electronic media. Concentrations are not majors, and are not required to complete a degree.

### Requirements

Students must consult with an academic adviser before scheduling these courses. These concentrations are designed to fulfill elective requirements within the Telecommunications: Radio/Television Broadcasting degree. They are only open to students enrolled in the Telecommunications: Radio/Television Broadcasting degree program.

### Additional Information

For more about Cayuga's Telecommunications programs, visit the department's website at [www.telcomcayuga.com](http://www.telcomcayuga.com).

### Video Production Concentration

This concentration is designed for students wishing to enhance their skills in the design and production of video and audio content.

Courses		Credit Hours
TELC 103	Introduction to the Moving Image	3
TELC 140	Analysis of Broadcast Systems	3
TELC 240	Audio for Media	3

### Broadcast Journalism Concentration

This concentration is designed for students with an interest in broadcast announcing, sportscasting, broadcast journalism, or journalism.

Courses		Credit Hours
TELC 106	Radio and Television Announcing	3
TELC 204	Journalism Practicum	3
TELC 205	Radio Practicum	3
ENGL 217	Media Writing	3

### Digital and Interactive Media Concentration

This concentration focuses on the techniques and processes used for content creation in interactive and digital media formats by broadcasters and filmmakers.

Courses		Credit Hours
TELC 170	Interactive Media Techniques	3
TELC 171	Interactive Media Techniques 11	3
TELC 175	Interactive Media Production	3
Imaging elective: choose from		3
TELC 103	Intro to the Moving Image or	
TELC 150	Digital Imaging or	
ART 252	Photoshop	

### Electronic Publishing Concentration

This concentration focuses on the basic skills required for the creation and design of content used in the production of materials in electronic publishing.

Courses		Credit Hours
TELC 150	Digital Imaging	3
TELC 170	Interactive Media Techniques	3
TELC 204	Journalism Practicum	3
ART 252	Photoshop	3
ENGL 217	Media Writing	3

## Telecommunications Technology A.A.S.

This program prepares students for employment in telecommunications and related industries.

### Degree Requirements

Students learn to operate, install, maintain, and repair audio, video, RF, and specialized communications equipment used in the media and telecommunications industries.

Students work on engineering, operations, and production projects in a professional environment. Cayuga's facilities include video studio diagnostic stations, electronics labs, and a fully operational radio lab used for technical instruction. Internships are required in area industry facilities. Program graduates are eligible to receive certification as broadcast technologists from the Society of Broadcast Engineers.

The curriculum listed on this page represents the minimum coursework required for the A.A.S. degree in Telecommunications Technology. Some required courses are offered only in the evening.

### Academic Preparation

Required: algebra; readiness for ENGL 101.

### Career Possibilities

Graduates are employed as telecommunications specialists in a variety of fields and as radio, television, audio, and cable TV engineers and technicians.

### Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

Courses		Credit Hours
<b>First Semester</b>		
(Available in Auburn and/or Fulton)		
ENGL 101	Freshman English I	3
MATH 102	Intermediate Algebra	3
ELEC 101	Electrical Circuits	4
ELEC 105	Intro to Digital Computers	4
TELC 104	Broadcast Techniques I	<u>3</u>
		17
<b>Second Semester</b>		
(Available in Auburn and/or Fulton)		
ENGL 102	Freshman English II	3
ELEC 102	Basic Electronics	4
TELC 102	Intro to Telecommunications	3
C.S. 114	Intro to Computer Science	3
	Health	1
	Physical Education	<u>1</u>
		15
<b>Third Semester</b>		
(Available in Auburn)		
TELC 140	Analysis of Broadcast Equipment Systems	3
TELC 220	Advanced Audio Production	3
TELC 207	Television Production I	4
ELEC 201	Intermediate Electronics	4
	Telecommunications Elective	<u>3</u>
		17
<b>Fourth Semester</b>		
(Available in Auburn)		
TELC 260	Broadcast Systems Maintenance	3
TELC 275	Internship Radio/TV	3
TELC 270	RF Transmission Systems	3
C.S. 180	Principles of Data Communications	3
C.S. 225	Intro to Local Area Networks	3
	Physical Education	<u>1</u>
		16

## Certificate programs: overview

Cayuga's certificate programs are registered with the New York State Department of Education (the number in parentheses after the program title represents the New York State Education Department HEGIS code). You may need to attend evening classes if you wish to complete a certificate program as outlined in this catalog.

These programs (pages 69–71) may be appropriate if you are seeking specific skills but not immediately planning to pursue a two-year degree. Certificate programs

- vary in length of time
- may be pursued either full- or part-time
- should be started in the fall or summer to take advantage of sequential course offerings
- require a cumulative average of 2.0 (C) with completion of all courses listed in the program (Some certificates require completion of certain courses with at least a C grade.)

Cayuga offers certificate programs in

- Accounting (5002)
- Computer-Aided Design (5303)
- Computer Hardware/Software Design (5104)
- Computer Information Systems (5101)
- Computer Information Systems / Internet Technology (5101)
- Correction Administration (5505)
- Criminal Justice (5505)
- Early Childhood (5503)
- Electronics (5310)
- General Business (5001)

### Qualifications for a certificate

To qualify for a certificate from Cayuga, you must:

- Matriculate and complete the certificate requirements with a minimum grade point average (GPA) of 2.0. You are matriculated if you have been formally accepted as a candidate for a certificate program.
- Be recommended by the faculty for the certificate.
- Submit a Certificate Application to the Registrar's Office at least one semester before graduation.
- Satisfy all financial obligations at the time of graduation.

For help with questions about transferring credit from other colleges, or for information about a student's academic record, contact the Registrar's Office at 315-255-1743 x 2260.

## Accounting Certificate

This program can be completed in one year if the student enters in the first summer session, satisfactorily completes BUS 101 and BUS 102, and then enrolls full-time days in the fall and spring semesters. Upon completion of certificate requirements, students may wish to pursue study toward an A.A.S. degree in Business Accounting.

Courses		Credit Hours
<b>Summer Session I</b>		
BUS 101	Principles of Accounting I*	4
<b>Summer Session II</b>		
BUS 102	Principles of Accounting II*	4
<b>First Semester</b>		
BUS 090	Small Business Accounting*	1
BUS 201	Intermediate Accounting I*	4
BUS 222	Federal Income Tax*	3
BUS 225	Micro Application Software	3
BUS 227	Corporate Finance	3
		<b>14</b>
<b>Second Semester</b>		
BUS 103	Principles of Business	3
BUS 202	Intermediate Accounting II*	4
BUS 209	Cost Accounting*	3
BUS 221	Accounting Systems with Microcomputer Applications*	3
		<b>13</b>

\*A grade of C or higher is required to be eligible for the certificate.

## Computer-Aided Design Certificate

Upon completion of the certificate requirements, students may wish to continue their course of study toward an A.A.S. degree in Mechanical Technology – Computer-Aided Design.

Courses		Credit Hours
ENGL 101	Freshman English I	3
ENGR 126	Computer-Aided Drafting and Design 4	
MATH 104 or MATH 114	College Algebra and Trigonometry Technical Math for Technologists (or higher)*	3
ENGR 103	Manufacturing Materials and Processes	3
ENGL 103	Technical Writing	3
DRFT 122	Mechanical/Industrial Drafting and Design	4
DRFT 125	Architectural Drafting	4
ENGR 228	CAD III Solid Modeling	3
		<b>27</b>

\* Math 112, 115, or 116 will not fulfill Math requirement.

## Computer Hardware/Software Design Certificate

Courses		Credit Hours
<b>First Semester</b>		
C.S. 080	Microcomputer Troubleshooting	1
BUS 225	Application Software	3
C.S. 120	Foundations of Computer Science	3
C.S. 222	Programming in C/C++	3
ELEC 101	Electrical Circuits	4
ELEC 105	Introduction to Digital Computer	4
		<b>18</b>
<b>Second Semester</b>		
BUS 226	Advanced Application Software	3
C.S. 200	Programming in Visual Basic	3
C.S. 238	Java	3
ELEC 102	Basic Electronics	4
ELEC 107	Fundamentals of Microcomputer	4
		<b>17</b>

## Computer Information Systems Certificate

To be eligible for this certificate, the student must receive a grade of C or higher in all computer science (C.S.) courses. More than two semesters of study may be required to complete this certificate, and the student may also be required to attend evening classes.

Courses		Credit Hours
<b>First Semester</b>		
BUS 101	Principles of Accounting	4
BUS 225	Microcomputer Application Software	3
C.S. 080	Microcomputer Troubleshooting	1
C.S. 200	Programming in Visual Basic	3
C.S. 100	Keyboarding*	1
C.S. 112	Problem-Solving Logic for Programming	3
C.S. 215	Systems Analysis and Design	3
		<b>17-18</b>
<b>Second Semester</b>		
C.S. 219	Database Management Systems	3
C.S. 222	Programming in C/C++	3
C.S. 225	Intro to Local Area Networks	3
C.S. 245	Programming in COBOL	3
or C.S. 237	Internet Security	3
C.S. 238	Java	3
BUS 103	Principles of Business	3
		<b>18</b>

\* Required for students who are not keyboard proficient.

## Correction Administration Certificate

Minimum of three semesters required for completion.

Courses		Credit Hours
C.J. 113	Criminology	3
C.J. 115	Criminal Law	3
C.J. 121	Institutional Treatment of Criminals	3
C.J. 211	Case Studies in Criminal Behavior	3
C.J. 213	Probation and Parole	3
PSY 101	Intro Psychology	3
SOC 101	Intro Sociology	3
	Behavioral/Social Science Elective	3
		<b>24</b>

## Criminal Justice Certificate

Minimum of three semesters required for completion.

Courses		Credit Hours
C.J. 111	Intro to Justice Systems	3
C.J. 112	Org/Admin. of Justice Systems	3
C.J. 115	Criminal Law	3
C.J. 117	Juvenile Delinquency	3
C.J. 123	Laws of Evidence	3
PSY 101	Intro Psychology	3
SOC 101	Intro Sociology	3
	Behavioral/Social Science Elective	3
		<b>24</b>

## Early Childhood Certificate

This program can be completed in two semesters if the student enrolls full-time. Students who earn the Early Childhood Certificate may seek employment in child care programs, as teacher assistants, as pre-school teachers, or they may pursue study towards an A.A.S. degree in Early Childhood.

Courses		Credit Hours
<b>First Semester</b>		
ECH 101*	Intro to Early Childhood Education	3
PSY 217	Intro to Children with Exceptionalities	3
ECH 110*	Methods and Materials in Early Child Education	3
ENGL 101	Freshman English I	3
EDU 120	Technology for Teachers	1
P.E. 145	First Aid	1
P.E. 146	CPR	1
		<b>15</b>
<b>Second Semester</b>		
ECH 102*	Curriculum and Assessment	3
ECH 104*	Early Childhood Field Exp. II	3
ECH 111	Infants and Toddlers	3
ENGL 209	Children's Literature	3
BEH 101*	Language/Literacy Development	3
		<b>15</b>

\* Minimum grade of C (70) is required in BEH 101 and ECH 101, 102, 104, 110, and 111 to complete certificate requirements. See Graduation Requirements below.

Students must be physically able to satisfactorily and safely perform duties associated with the care and education of children from birth to eight years of age.

Students are required to have police and child abuse clearances and physical examinations prior to beginning their field experience class (ECH 104).

Note: Students with certain criminal histories will not be able to satisfy field experience requirements for the completion of the certificate. In addition, students are required to submit to alcohol and/or drug testing upon request by either the College or any of the cooperating field placement sites. Students who test positive are subject to removal from the field placement and will therefore not be able to satisfy requirements for the completion of the certificate. Refusal to submit to the test will result in the student being asked to leave the field placement site and may result in dismissal from the course and/or the program.

Graduation Requirements: In order to graduate with the Certificate in Early Childhood, students must demonstrate competency (a grade of 70 or higher) in five Key Assessments. The Key Assessments are completed in each of the core Early Childhood courses (ECH 101, 102, 104, 110, and 111). This requirement also applies to students who have transferred credits to Cayuga from another college.

Please contact the Early Childhood coordinator if you have questions.

## Electronics Certificate

This program can be completed in a minimum of four semesters. Upon completion of the certificate requirements, students may wish to continue their study toward an A.A.S. degree in Electrical Technology.

Courses		Credit Hours
ELEC 101	Electrical Circuits	4
ELEC 102	Basic Electronics	4
ELEC 105	Introduction to Digital Computers	4
ELEC 107	Fundamentals of Microprocessors	4
ELEC 201	Intermediate Electronics	4
ELEC 204	Industrial Electronics	4
MATH 104	College Algebra and Trigonometry	
or MATH 114	Technical Math for Technologists (or higher)*	3
		<b>27</b>

\* Math 112, 115, or 116 will not fulfill Math requirement.

## General Business Certificate

The program can be completed in a minimum of two semesters.

Courses		Credit Hours
<b>First Semester</b>		
BUS 101	Principles of Accounting I	4
BUS 103	Principles of Business	3
BUS 105	Business Math	3
BUS 150	Business Communications	3
BUS 225	Microcomputer App. Software	3
		<b>16</b>
<b>Second Semester</b>		
ENGL 101	Freshman English I	3
BUS 102	Principles of Accounting II	4
BUS 204	Marketing	3
BUS 205	Business Law I	3
BUS 206	Human Resource Management	
or BUS 200	Principles of Management	3
		<b>16</b>

## Course descriptions

The College reserves the right to limit the number of students registered in any course, to cancel courses for which there is insufficient enrollment, or to make changes in prerequisites, course descriptions, credit allocations, and such schedule and section offerings in the academic year as may be necessary for the proper and efficient functioning of the College.

- "Prerequisite" denotes required coursework that must be completed before beginning a course.
- "Co-requisite" or "concurrent enrollment" denotes required coursework that may be taken concurrently with a course.
- "Recommended background" denotes suggested or supportive education/training.

## Academic Support Center

ASC 101 Foundations of Tutoring:  
Principles and Practices (1)

Introduction to principles and practices of peer tutoring, including theoretical background of learning theories and methodologies of one-on-one tutorials and small group cooperative learning. Philosophy, procedures and hands-on practice prepares students to be competent in the peer tutorial process. Every semester

## Anthropology

ANTH 101 Introductory Anthropology (3)  
Introduction to history of anthropology. Primatology reviews physical and social similarities among humans and close mammal relatives. Human evolution reviews the processes of physical evolution and paleoanthropological research, focusing on development of cultures from simple hunters to complex civilizations. Case studies emphasize multicultural approaches to human problems. Three class hours weekly. Every academic year

## Art

Courses are offered every academic year unless otherwise noted.

ART 101 Art History: Ancient to Gothic (3)  
Prerequisite or concurrent enrollment: ENGL 101. Provides a background in visual arts from the prehistoric period to the Gothic era. Studies the artistic achievements of each era in the context of important historical and philosophical developments. Emphasis on Egypt, Greece, Rome, medieval Europe, and Asia. Slides, lectures, and films. Three class hours weekly.

ART 102 Art History: Renaissance to Modern (3)  
Prerequisite or concurrent enrollment: ENGL 101. Provides background in the visual arts from the Renaissance to the Modern Era. Studies the artistic achievements of each era in the context of important historical and philosophical developments. Emphasis on Europe, England, the Americas, Asia, and Africa. Slides, lectures, and films. Three class hours weekly

ART 103 Essentials of Art (3)  
Introduces the use of rudimentary art techniques employed by artists, and preschool and elementary school teachers. Focuses

on basic design, color theory and elements of composition as well as the application of various drawing and painting techniques. Directs students' interests and talents toward an individual form of self-expression. Two lecture-demonstration hours and two studio hours weekly.

ART 104 Painting Studio I (3)  
Prerequisite: ART 103 or ART 112. For students with basic media and composition background, covers the fundamentals of watercolor and acrylic painting, color theory and color mixing, working from models, landscape and personal experience. The art of the past is discussed, assessed, and often utilized while encouraging new approaches to expression. Two lecture-demonstration hours and two studio hours weekly.

ART 106 Expressive Drawing I (3)  
Recommended background: ART 103 or equivalent. Presents a range of perceptual, conceptual, stylistic and technical skills. Students become familiar with many different methods of observation and presentation. Still life, landscape and conceptual methods are studied. Two lecture-demonstration hours and two studio hours weekly.

ART 112 Two-Dimensional Design (3)  
Explores the fundamentals of pictorial organization through a series of visual problems. Students use the elements of art (line, shape, color, texture, value) within principles of design to communicate concepts visually. Two lecture-demonstration hours and two studio hours weekly.

ART 113 Three-Dimensional Design (3)  
Fundamentals of organizing three-dimensional space. Students learn to design space using line, plane, and mass. Traditional approaches (additive and subtractive techniques) as well as contemporary modes of expression. Two lecture-demonstration hours and two studio hours weekly.

ART 131 Introduction to Ceramics (3)  
Introduces basic ceramic concepts, hand and wheel techniques, surface decoration and glazes. Develops appreciation for ceramics past and present, and awareness of three-dimensional design. Two class hours and two studio hours weekly.

ART 139 Art of Diverse Cultures (3)  
Focuses on contemporary art by the diverse population of American artists. Emphasis on artists of African, Native American, Asian, and Hispanic origin. Explores the subject using slides, lecture, discussion, and films. Three class hours weekly.

ART 140 Issues in Art on Location in New York (3)  
An intensive on-site museum and gallery course in New York City. Students view old master works, contemporary art and new genres. Lecture visits may include major museums and galleries, as well as neighborhood art scenes, studios and open-air settings. Three class hours weekly.

ART 160 Life Drawing (3)  
Recommended background: ART 106 or equivalent. Drawings concentrate on the human form. Students develop an awareness of anatomical correctness and individual expression is encouraged. Utilizes a variety of drawing media. Two lecture-demonstration hours and two studio hours weekly.

ART 165 Issues in Art on Location - Art and Design in London (3)  
Intensive on-site museum and gallery course. Students view old master works and contemporary art. This museum study course focuses on the artist as a member of society—the artist who creates art and designs for community or individual use.

ART 212 Advanced Two-Dimensional Design (3)  
Prerequisite: ART 112. This course applies formal skills developed in ART 112 to conceptual and time-based problems. Students will analyze visual information, create a visual language, and explore advanced color theory. Four class hours weekly.

ART 215 Computer Graphics / Illustrator (3)  
Recommended background: ART 103 or 112 or equivalent. Studio course introduces the basic techniques of digital painting and digital imaging. Students will create original imagery using Adobe Illustrator, input imagery created in another medium, and manipulate photographic imagery. Students will create and manipulate images based on formal design principles and conceptual frameworks. Three class hours weekly.

ART 221 Textile Design: Resist and Print Techniques (3)  
Recommended background: ART 103 or 112 or equivalent. Introduces basic techniques of creating surface designs on textiles: batik, shibori, silk screen, block printing, and marbling. Students create original designs directly on fabric and discuss the traditional origins of the processes and the innovations introduced by contemporary textile designers. Two lecture-demonstration hours and two studio hours weekly.

ART 222 Textile Design: Direct Applications (3)  
Recommended background: ART 103 or 112 or equivalent. Introduces basic techniques to create surface designs on textiles: direct application of dyes (handpainting, screen printing) and discharge processes. Students will create repeat patterns, freeform designs, and a collection of coordinated fabrics. Two lecture-demonstration hours and two studio hours weekly.

ART 231 Ceramic Sculpture (3)  
Recommended background: ART 131 or equivalent. Introduces students to sculptural possibilities of clay. Students build large-scale pieced or modular works using hand and wheel techniques. Two lecture-demonstration hours and two studio hours weekly.

ART 250 Introduction to Photography and Darkroom Techniques (3)  
Introduces the basics of still photography. Students complete a number of assignments on the use of the 35mm camera system using a technical and aesthetic approach and learn photographic darkroom techniques producing finished prints for critique. Two lecture hours and two lab hours weekly.

ART 251 Advanced Photography and Darkroom Techniques (3)  
Prerequisite: ART 250. Builds on principles and techniques acquired in ART 250. Students complete photographic assignments for critique and refine their abilities in the darkroom to produce high quality, full tonal range photographic prints.

Assignments include portraiture, photojournalism, and product photography. Two class hours and two lab hours weekly. Offered upon indication of need

ART 252 Photoshop (3)  
Recommended background: ART 250 or equivalent. Lectures, demonstrations and hands-on activities will enable students to discover the basic theory and application of Adobe Photoshop. Students will complete a series of aesthetically inspired assignments pertaining to captured images, processing and manipulating digital images. Images created will be displayed using a computer monitor or outputted to a printer for critique. Two lecture hours and two lab hours weekly.

ART 255 Silk Screen Printing (3)  
Recommended background: ART 103 or 112 or equivalent. Introduces basic techniques of water-based silk screen printing; emphasis is on creating prints as fine art. Students learn to print multiples of their imagery and are encouraged to develop their own style and imagery using this medium. Two lecture-demonstration hours and two studio hours weekly.

ART 260 Printmaking Workshop (3)  
Recommended background: ART 103 or 112 or equivalent. Introduces the basic techniques of relief printing using linoleum, wood and experimental media. Students also learn basic book binding structures and incorporate their printed imagery in a sequential format. Two lecture-demonstration hours and two studio hours weekly.

## Behavioral Science

BEH 101 Language and Literacy Development in Young Children (3)  
Recommended concurrent enrollment: ECH 102 and 104, ECH 102 and 105, or EDU 201 and 203; child observations/interactions are required. Surveys development of language and literacy from birth to eight years. Foundations of learning theories; research and philosophies that shape current practice; and models that support emerging readers and writers. Further emphasis on integration of literacy throughout the curriculum, assessment techniques, literacy and diversity, selecting children's literature, working with families. Every academic year

## Biology

Courses are offered every academic year unless otherwise noted.

BIOL 101 Essentials of Biology (3)  
Introduces selected topics which may include cell structure and division, tissues, nutrition, digestion, internal transport, respiration, neural control and locomotion, reproduction, genetics, microorganisms and disease, and selected topics in plant biology. Two class hours and one two-hour lab weekly.

BIOL 102 Human Biology (4)  
Non-sequential course for non-science majors. Balanced introduction to human anatomy and physiology, cancer, genetics and inheritance, development and aging, evolution, ecosystems and populations, human impact on biodiversity and the environment. Three class hours and one two-hour lab weekly.

BIOL 103 Biological Principles I (4)  
Prerequisite: BIOL 101 or high school biology. Deals with the fundamental concepts and principles of biology. Topics include cell structure and function, basic biochemistry and molecular biology, and a survey of the three domains with emphasis on the eukaryotes: protista, fungi, plantae, and animalia. Three class hours and one three-hour lab weekly.

BIOL 104 Biological Principles II (4)  
Prerequisite: BIOL 103 or 105 or equivalent. Survey of kingdom animalia; animal structure and function including organization and homeostasis; circulatory, lymphatic, immunity, digestive, respiratory, excretory, nervous, musculoskeletal and endocrine systems; reproduction, development; the genetic basis of life. Three class hours and one three-hour lab weekly.

BIOL 105 Botany (4)  
Prerequisite: BIOL 101 or high school biology. Introduces the study of plants; emphasis on physiology, structure, aspects of reproduction, ecology, taxonomy, and economic importance of plants. Three class hours and one three-hour lab weekly.

BIOL 106 Zoology (4)  
Prerequisite: BIOL 101 or high school biology. Acquaintance and appreciation of animals and the nature of animal life; concerned with animal morphology, physiology, behavior, evolutionary relationships, development and evolutionary history. Three class hours and one three-hour lab weekly.

BIOL 165 Tropical Marine Biology I (3)  
Taught on Grand Cayman Island, West Indies. Includes study of coral reef zonation, marine currents, and ecology of the coral reef, rocky shore, mangrove swamp, coral reef fish, and plankton. Includes snorkeling so students can observe and collect organisms for study. Approximately 50% of course time is spent in the field and 50% in lectures and wet labs. Offered upon indication of need

BIOL 203 Anatomy and Physiology I (4)  
Prerequisite: BIOL 101 or 103 or equivalent. Human cell, tissues, skeleton system, muscle physiology, nervous system, special and somatic senses. Three class hours and one two-hour lab weekly.

BIOL 204 Anatomy and Physiology II (4)  
Prerequisite: BIOL 203. Continuation of the study of human anatomy and physiology. Topics include circulatory, respiratory, urinary, endocrine, reproductive and digestive systems and water, electrolyte and pH balance. Three class hours and one two-hour lab weekly.

BIOL 206 Microbiology (3)  
Prerequisite: BIOL 101 or 103 or equivalent. Surveys the principles of microbiology emphasizing the relationship of microorganisms to human disease. Two class hours and one two-hour lab weekly.

BIOL 208 Conservation of Natural Resources (3)  
For science majors and non-majors, course explores the human relationship with the natural environment by examining critical issues that affect the viability of natural resources, including their importance, distribution, and impacts from

human use at local, national, and global levels. Topics include concepts of ecology, air, soil, water, energy, biodiversity, and population dynamics. Field trips are an important part of the laboratory experience. Two class hours, two lab hours weekly.

BIOL 209 Basic Nutrition (3)  
Appropriate for science majors and non-majors, also students pursuing a career in healthcare professions. Examines the fundamentals of nutrition, including nutrient composition of foods; physiological factors influencing nutritional needs; behavioral considerations related to food intake; nutrient digestion, assimilation, and storage; energy requirements; life cycle requirements; weight management; diet therapy; fad diets; manufactured food; methods used in dietary assessment and nutrition research. Three class hours weekly.

BIOL 213 Current Issues in Biology (3)  
Prerequisite: BIOL 103, or equivalent. Explores contemporary biological issues that are of social and economic importance. Issues selected vary from one semester to another. Oral reports, written reports, and classroom discussions are a part of the teaching format. Appropriate for non-science majors as well as science majors. Three class hours weekly.

BIOL 214 Cell Biology (4)  
Prerequisite: BIOL 103 or 105. Covers the anatomy and physiology of the plant and animal cell at a level of detail appropriate for the 200 level of instruction. Three class hours and three lab hours weekly.  
Offered upon indication of need

BIOL 216 General Microbiology (4)  
Prerequisite: BIOL 101 or 103 or equivalent. Balanced introduction to basic microbiology (biochemistry, taxonomy, genetics, and cell biology), clinical microbiology (pathogenic bacteriology); and applied microbiology (food and industrial microbiology and ecological microbiology). Three class hours and three lab hours weekly.

BIOL 221 Grade A Potable Water (3)  
Studies potable waters, watershed protection and management, water storage, transmission, distribution, methods of treatment, disinfection, chemical and biological analysis of water. Two class hours and one two-hour lab weekly.  
Offered upon indication of need

BIOL 222 Waste Water Treatment (3)  
Covers the operation and maintenance of municipal and industrial waste water treatment plants. Includes discussion of primary, secondary and tertiary treatment; nutrient removal; biological-oxidation and activated sludge; microbiology of waste water; techniques of handling, sampling and analyzing. Two class hours and one two-hour lab weekly.  
Offered upon indication of need

## Business

Courses are offered every academic year unless otherwise noted.

**BUS 080** Fundamentals of Bookkeeping (1)  
Presents the accounting equation, emphasizing the process of analyzing and recording financial information using the double-entry bookkeeping system. Recording of basic transactions and adjustments for service and merchandising enterprises, and maintenance of accounts receivable and accounts payable records. Students currently enrolled in BUS 101 or who have received a grade in BUS 101 of C or higher may not earn credit for this course. Thirty lab hours per semester.

**BUS 090** Small Business Accounting (1)  
Prerequisite: BUS 101. For accounting majors, instruction in small business accounting procedures in conjunction with current accounting principles and tax requirements. Presents variations of the basic system in BUS 101 applicable to a small retail and service business. Topics include maintenance of cash journals and subsidiary records, year-end conversion from cash to accrual accounting, preparation of payroll and sales tax reports as required of businesses operating in New York State. Fifteen class hours per semester.

**BUS 100** Employment Strategies, Techniques and Tools (1)  
Introduces skills and resources to compare different types of careers. Covers the job search process from networking through following up leads. Focus on preparation of résumés and job applications along with effective interviewing skills. Attitude, interpersonal skills and personal presentation also covered. Three class hours weekly for five weeks.

**BUS 101** Principles of Accounting I (4)  
The first of a two-course introduction to accounting. Introduces financial accounting. Covers the accounting cycle, including worksheet and financial statement preparation; receivables and payables; merchandise inventory; fixed and intangible assets; accounting for cash and payroll; and system and control procedures, including bank reconciliations. Study is applied by means of an assigned accounting practice project. Three lecture hours and two lab hours weekly.

**BUS 102** Principles of Accounting II (4)  
Prerequisite: BUS 101. Second of a two-course introduction to accounting concluding basic elements of financial accounting and introducing managerial accounting. Includes partnership and corporate accounting, emphasizing corporate earnings, equity and investments; manufacturing inventories, job order costing; product costing and budgeting; standard costing and variances; preparation of statement of cash flows. Course study is applied by means of an assigned accounting practice project. Three lecture hours and two lab hours weekly.

**BUS 103** Principles of Business (3)  
Overview includes foundations of American business, forms of enterprise, organizing for business, fundamentals of management, the production of goods and services, human relations, union-management relations, marketing, accounting, finance, money and banking, securities and investments, government relations and business law. Three class hours weekly.

**BUS 105** Business Mathematics (3)  
Focuses on basic math combinations and shortcuts; problems in buying and selling items, including markups, markdowns, percents and discounts; preparation of banking and payroll records; and computation of simple interest and note discounts. Three class hours weekly.

**BUS 106** Consumer Mathematics (3)  
Prerequisite: BUS 101 or 105. Reviews basic operations, installment buying, real estate, taxes and insurance, investments, financial statements, basic statistics, present value, annuities and sinking funds. Three class hours weekly.

**BUS 119** Real Estate- Salesperson (3)  
Designed as preparation for the Real Estate Salesperson's examination in compliance with the New York State Division of Licenses program. The New York State examination must be passed before a salesperson's license is issued. Students must attend classes for 14 weeks to ensure meeting state requirement of 45 class hours. Course must be taken for credit for licensing test admittance; audit not sufficient.

**BUS 120** Introduction to Banking (3)  
Understanding of the basic functions of banking and working knowledge of bank operations. Emphasis is on the principles underlying bank operations rather than specific techniques or methods. Recommended by bankers as the first specialized course offered for bank employees seeking certification from the American Institute of Banking. Three class hours weekly.

**BUS 130** Bank Management I (3)  
Recommended background: BUS 120. The study and application of principles provides new and experienced bankers with a working knowledge of bank management. Focuses on case studies giving students experience in the application of the text material. Three class hours weekly.

**BUS 131** Bank Management II (3)  
Prerequisite: BUS 130. Continuation of BUS 130. Students explore current issues pertaining to the business of banking and consider what the future may hold from a managerial point of view. Three class hours weekly.

**BUS 150** Business Communications (3)  
Foundation for developing communication skills. Students apply principles of effective business and personal business correspondence. Job application and oral presentation are highlighted; also covers essentials of grammar, punctuation, spelling, use of reference materials, vocabulary enrichment. Three class hours weekly.

**BUS 160** Small Business Management (3)  
For students planning to own or manage a small business. Topics include the challenge of ownership and management, planning and organizing a new business, preparing a business plan, location and layout decisions, controlling the business, selecting and managing staff, marketing, accounting, financial and legal considerations. Preparing a comprehensive business plan is a course requirement. Three class hours weekly.

- BUS 165 International Business: The British Experience (3)**  
Study/travel course acquaints students with the scope and nature of international business. Walking tours, lectures, and discussions complement visits to prominent institutions such as the Port of London Authority, Lloyds of London, Bank of England, London Transport Museum, American Embassy, London Stock Exchange, Precious Metals Exchange, and Harrods. Contact with labor and trade (import/export) organizations as well as British and American government officials is also anticipated. Requirements include readings on relevant topics, tours, presentations by officials and a research paper. Intersession only
- BUS 200 Principles of Management (3)**  
Recommended background: BUS 103. Provides a firm foundation in the primary principles of management. Explores management theory as well as management functions and targets discussion of top and middle managers. Recognizing that the future manager must remain abreast of business trends, current issues are addressed. Three class hours weekly.
- BUS 201 Intermediate Accounting I (4)**  
Prerequisite: BUS 102. First segment of a two-course comprehensive study covers current financial accounting theories and practices promoted by the profession. Includes various financial statements, related schedules; current assets including cash, temporary investments, receivables; inventory valuation and cost procedures; plant and intangible assets; long-term investments, other assets. Students planning to transfer should contact their prospective institution regarding course transferability. BUS 201 accepted for CPA certification credit in New York State. Three lecture hours, two lab hours weekly.
- BUS 202 Intermediate Accounting II (4)**  
Prerequisite: BUS 201. Second of a two-course comprehensive study of financial accounting covers current and contingent liabilities; non-current liabilities; stockholders' equity; accounting for leases, pension costs, income taxes; earnings per share and adequate footnote disclosure; statement of cash flows. Students planning to transfer should contact their intended transfer institution regarding course transferability. BUS 202 is acceptable for CPA certification credit in New York State. Three lecture hours and two lab hours weekly.
- BUS 203 Advertising (3)**  
Recommended background: BUS 103. Planning, creation, use and place of advertising in today's society. The role of the advertising campaign includes extensive study of various media utilized. Creating copy and layout design is an integral part of this course. Three class hours weekly.
- BUS 204 Marketing (3)**  
Recommended background: BUS 103. Concept of market strategy planning includes segmentation and forecasting of consumer and organizational markets. Marketing mix variables include product life cycles, packaging, branding, pricing objectives and strategies, physical distribution, retailing, wholesaling, advertising, public relations, sales promotion, personal selling; marketing environment, marketing research, management processes. Three class hours weekly.
- BUS 205 Business Law I (3)**  
Emphasis is on the nature and function of law: civil and common law, contracts, agency and employment, bailments and personal property. Three class hours weekly.
- BUS 206 Human Resource Management (3)**  
Recommended background: BUS 103. Personnel management in business; recruitment, selection, testing, employee development; psychological impact of individual and group behavior, motivation, morale, communication; management and labor relations; remuneration and security. Three class hours weekly.
- BUS 207 Business Law II (3)**  
Prerequisite: BUS 205 or permission of instructor. Continuation of Business Law I. Topics include negotiable instruments, sales, real property, estates, bankruptcy and business organizations. Three class hours weekly.
- BUS 208 Retailing (3)**  
Recommended background: BUS 103. Familiarizes students with merchandising and operational situations. Focuses on skills required to solve problems and make sound management decisions in areas such as choosing an effective form of business organization, location and site selection, store layout, sales promotion, customer relations, merchandise handling and display, and customer service. Three class hours weekly.
- BUS 209 Cost Accounting (3)**  
Prerequisite: BUS 102. Focused on the managerial aspects of cost accounting with emphasis on planning and control. Includes contemporary cost terminology, cost-volume-profit analysis, cost behavior patterns, responsibility accounting, absorption and variable costing, activity-based costing, job and process costing, budgeting, standard costing, variance analyses, accounting for joint products, by-products, spoilage, waste, defective units, and scrap. Students planning to transfer should contact their intended transfer institution regarding course credit transferability. Course is accepted for CPA certification credit in New York State. Three lecture hours weekly.
- BUS 210 Principles of Merchandise Buying (3)**  
Recommended background: BUS 208. Focuses on the role and responsibilities of merchandise buyers in various types of retail organizations. Covers retail customer analysis, what to buy, how much, from whom, and a careful study of the merchandise assortment. Also covers the computer as an aid to the buyer, buying from foreign markets and the buyer's role in advertising, promotion and sales. Three class hours weekly.
- BUS 216 Salesmanship (3)**  
Recommended background: BUS 103. Covers the fundamentals of selling with emphasis on meeting the customer's need. Focuses on the selling process: company history and policies, product knowledge, prospecting, the preapproach, the approach, the sales presentation, the demonstration, handling objections and the close. Three class hours weekly.
- BUS 219 Real Estate Broker (3)**  
Prerequisite: BUS 119. Designed as preparation for the Real Estate Broker's examination in compliance with the New York State Division of Licenses. The state examination must be passed before a broker's license is issued. Additional prepara-

tion for opportunities in the real estate profession. Students must attend classes one night a week for 14 weeks to ensure the basic state requirement of 45 class hours. NOTE: Course must be taken for credit to be eligible for the NYS licensing test. An audit is not sufficient for admittance to the test. Offered upon indication of need

**BUS 220 Business Statistics (3)**  
Covers the application of statistical procedure to business decision making. Considers the nature and assembling of statistical data, methods of presentation, frequency distribution, measures of central tendency, dispersion, time series, sampling techniques, estimation, hypothesis testing, regression and correlation, index numbers, probability and forecasting. Recommended for business and computer information systems/data processing students only. Three class hours weekly.

**BUS 221 Accounting Systems with Microcomputer Applications (3)**  
Prerequisite: BUS 102, 225. Comprehensive course in accounting systems with practical Windows applications. Includes creating spreadsheet applications for financial and managerial purposes, use of computerized general ledger, accounts receivable, accounts payable, payroll, depreciation accounting systems. Two hours lecture, two lab hours weekly.

**BUS 222 Federal Income Tax (3)**  
Prerequisite: BUS 101. Introduces federal taxation and presents basic tenets of the federal income tax system emphasizing the preparation of returns in accordance with current tax statutes. Topics include determining gross income, itemized and business deductions, capital gains and losses, tax credits, payroll taxes, partnership and corporate returns. Study includes an assigned practice project. Three class hours weekly.

**BUS 225 Microcomputer Application Software (3)**  
Recommended background: basic microcomputer skills such as using Windows menus and mouse, creating, saving, and printing files. Briefly covers microcomputer hardware, the Windows operating system and its file management capabilities. Provides coverage of the features and functions of application programs for word processing, electronic spreadsheets, database management, and presentation graphics. Lecture and hands-on assignments emphasize application to typical business problems. Curriculum is based on the core competencies required for Microsoft Office Specialist (MOS) certification. Two hours lecture, two hours lab weekly.

**BUS 226 Advanced Microcomputer Applications Software (3)**  
Prerequisite: BUS 225. Includes the advanced features of word processing, spreadsheets, database management software, presentation graphics. Topics include workgroups, forms, master documents, list and data management, macros, one-to-many and many-to-many relationships, and applications with multilevel switchboards. Students complete hands-on projects using microcomputer lab equipment and software. Curriculum is based on the intermediate-to-advanced competencies for Microsoft Office Specialist (MOS) certification. Two hours lecture, two hours lab weekly.

**BUS 227 Corporate Finance (3)**  
Prerequisite: BUS 102. Focuses on the managerial theories and practices of corporate finance, emphasizing the making of financial decisions. Topics include the environment of finance, financial analysis and planning techniques, time value of money, capital budgeting, cost of capital, working capital management, and sources of short-term and long-term financing. Three class hours weekly.

**BUS 229 Professional Merchandising (3)**  
Recommended background: BUS 208. Training in the skills and techniques of visual merchandising; development of managerial values in the role of the professional retailer. Includes the role and types of display in retailing, design principles and elements, arrangements, props, fixtures, materials, observing and rating displays; also decision making, leadership and supervision communication, and team management. Three class hours weekly.

**BUS 245 Supervisory Management (3)**  
Recommended background: BUS 103. Focuses on issues commonly confronting first-line managers. Topics studied include the role of supervisory management, problem solving and decision making, communication, group dynamics, motivational leadership, team building and total quality management, managing human relations and building relationships with superiors and peers. Three class hours weekly.

**BUS 270 Foundations of e-Business (3)**  
Recommended background: BUS 103, CS 070. Foundation course in concepts, strategies, and techniques to build e-commerce applications for profitability and growth. Includes planning, designing, and evaluating websites, launching an e-business, technology, marketing, ethical and legal factors, security and integrity of data traffic through encryption, firewalls, and other means. Explores redefining business models, changing the corporate culture, reinventing business processes, and establishing reliable customer service, and key life cycle of e-commerce. Three class hours weekly. See also under Physical Education: P.E. 270 - Sports Promotion.

## Chemistry

Courses are offered every academic year unless otherwise noted.

**CHEM 101 Elements of General Chemistry I (4)**  
Prerequisite: MATH 099 or equivalent. Introduces basic laws and theories of chemistry: measurements, the metric system, atomic structure, bonding, periodic law, nomenclature, equations, calculations involving equations, and thermochemistry. Brief introduction to acid-base chemistry and organic chemistry. Three class hours and one three-hour lab weekly.

**CHEM 103 General Chemistry I (4)**  
Prerequisite: high school chemistry and 3 years of high school math. Includes basic calculations, periodic trends of the elements, introduction to precipitation, acid-base and oxidation reduction reactions, ionic and covalent bonding, introduction to thermodynamics, and gas laws. Three class hours, one three-hour lab weekly.

CHEM 104 General Chemistry II (4)  
Prerequisite: CHEM 103. Continuation of CHEM 103; includes the study of liquids, solids, phase changes, chemical kinetics, chemical and aqueous equilibria (acid-base, solubility), thermodynamics, electrochemistry, transition elements and coordination chemistry, and introduction to organic chemistry. Three class hours and one three-hour lab weekly.

CHEM 108 Forensic Science (3)  
Provides criminal justice students with a basic knowledge of forensic science as applied to criminal investigation and related police science fields. Focuses on applied forensic science, laboratory techniques and procedures. Two class hours and two lab hours weekly.

CHEM 123 Fuel Cell Systems (3)  
Prerequisite: CHEM 103 and MATH 104 or higher. Fuel cell technology gives rise to a range of types of systems with varying operating parameters and applications. This course describes the operating features of a fuel cell and the underlying chemical, thermodynamic, and physical factors that determine its performance, as the basis for an appreciation of the benefits of fuel cell systems and their operating characteristics compared with conventional technology.

CHEM 207 Organic Chemistry I (4)  
Prerequisite: CHEM 103-104. Study of organic compounds: nomenclature, properties, preparations; reactions, mechanisms and preparation, purification and analysis of organic materials. Laboratory work emphasizes technique and involves development of important basic skills. Preparation, purification and analysis of organic materials are also studied. Three class hours and one three-hour lab weekly.

CHEM 208 Organic Chemistry II (4)  
Prerequisite: CHEM 207. Course is a continuation of Organic Chemistry I. Three class hours and one three-hour lab weekly.

## Computer Science

Courses are offered every academic year unless otherwise noted.

C.S. 025 Electronic Spreadsheets (1)  
Introduces the capabilities of electronic spreadsheets. Students learn how to create, save, retrieve, and print spreadsheets, write formulas, use functions, format numeric data, create graphs from spreadsheet data, sort data, and modify the spreadsheet display. Three hours per week for five weeks.

C.S. 035 Computer Literacy (1)  
For students who wish to gain an understanding of computers and how they are used. Covers computer types, input/output devices, personal computer hardware and software including application software. Lab assignments are completed in the microcomputer lab. Course is closed to students who have completed C.S. 114. Five weeks/three class hours weekly.

C.S. 055 Introduction to Microsoft Word for Windows (1)  
Introductory hands-on class emphasizes practice in creating, editing and formatting a variety of documents. No previous computer experience is necessary but typing ability of at least 30 WPM is recommended. Meets for a total of 15 hours.

C.S. 056 Intermediate Microsoft Word for Windows (1)  
Topics covered include formatting (page size and orientation, headers and footers, column format, importing pictures), designing tables, merging files, templates, styles and style sheets, wizards, macros, and AutoText. Three class hours weekly for five weeks.

C.S. 070 Introduction to the Internet (1)  
For students with no internet experience, includes the nature of the internet, e-mail, chat, Telnet, FTP, Usenet, ListServers, World Wide Web, search engines, and basic HTML for a web page. Includes demonstration and hands-on experience. Three class hours for five weeks.

C.S. 080 Microcomputer Maintenance (1)  
Designed to provide familiarity with the basic hardware components of a computer system, specifically the motherboard, microprocessor, hard disk, RAM, and interface boards. Working in a laboratory setting, students complete hands-on exercises in testing, upgrading, and modifying computer components. Three class hours for five weeks.

C.S. 082 Help Desk Concepts / Software Concerns (1)  
Prerequisite: BUS 225 or MS Office applications experience. Overview of the knowledge, skills, and concepts of typical help or support desk functioning. Also introduces selected technical problems and solutions as well as discussions of technical communications.

C.S. 100 Keyboarding (1)  
For students who have had no previous typing instruction. Using the touch system, students learn the keyboard and numeric pad and apply this skill on a computer terminal. Meets for a total of 25 hours.

C.S. 103 Windows Operating Systems (1)  
An understanding of Windows capabilities and features. No prior computer experience is required. Fundamentals of using the interface, working on the desktop, working with disks, creating files with Windows programs, managing files and folders, modifying the desktop work environment, installing and uninstalling programs, performing file and Web searching, and using integrated Internet Explorer features. Class meets for a total of 15 hours.

C.S. 110 Exploring Computer Technology (3)  
Course for non-computer science majors builds computer competency and broadens perspective on the use of technology. Hands-on lab projects focus on purchasing computer systems and devices; using productivity software such as word processing, spreadsheets, presentation graphics and e-mail; file management; working in wired and wireless network environments; searching, evaluating, and citing web sources; editing digital photos; working with multimedia; and designing simple web pages.

C.S. 112 Problem-Solving Logic for Programming (3)  
Prerequisite or concurrent enrollment: MATH 102. Prepares students for business-oriented programming. Includes prob-

lem definition; data flow through a computer system; steps in flowcharting/pseudocoding a problem; programming logic techniques; coding, compiling, debugging, executing COBOL programs. Two class hours and one two-hour lab weekly. Offered upon indication of need

C.S. 114 Introduction to Computer Science (3)  
For non-computer science majors seeking a broad understanding of the field. Covers general computer capabilities of hardware, software, networks, and communications. Topics include the internet and World Wide Web, application software, the systems unit, input, output, storage devices, operating systems, networks and security, database management and information systems development. Includes lectures, demonstration, and hands-on experience. Three class hours weekly.

C.S. 120 Foundations of Computer Science (3)  
Prerequisite: Completion of, or concurrent enrollment, in MATH 102. Introduction to computer science, including data storage and manipulation, operating systems, networking, algorithm development, an overview of programming languages and concepts, and the concept of software engineering. Three class hours weekly.  
Offered upon indication of need

C.S. 180 Principles of Data Communications (3)  
Introduces the concepts and components of a data communication system. Covers an overview of data communications, hardware and software associated with data communications, common carriers versus private communications services, and network concepts. Three class hours weekly.

C.S. 200 Programming in Visual Basic (3)  
Prerequisite: C.S. 120 and MATH 104 or MATH 114 or equivalent programming experience. Focuses on programming in Visual Basic and introduces computer programming using the Microsoft Visual Basic language. In developing programming techniques, students will have an available tool for exploring many areas of problem-solving with a minimum background. Two one-hour lectures/one two-hour lab weekly.

C.S. 215 Systems Analysis and Design (3)  
Recommended background: BUS 225 or equivalent computer application experience. Covers methods involved in analyzing and designing information systems. Focuses on investigation analysis techniques; data flow diagrams; general and detail systems design; layouts for reports, outputs, and files; system development implementation and documentation. Students work on simulated case studies as a team to present solutions that reinforce the life cycle phases of systems analysis and design. Three class hours weekly.

C.S. 219 Database Management Systems (3)  
Prerequisite: BUS 225 or equivalent experience using database management software. Focuses on the organization and design of databases that satisfy MIS requirements using relational database management systems. Builds skill in entity relationship diagramming, database normalization, and structured query language. Course also discusses the administration of a database in a client/server environment. Projects are completed in microcomputer lab. Three class hours weekly.

C.S. 222 Programming in C/C++ (3)  
Prerequisite: C.S. 120 or MATH 104 or MATH 114 or equivalent programming experience. Foundation course in use of high-level language. To support assigned laboratory exercises, includes use of full-screen editor, compiler, linker, execution environment of a C compiler/interpreter, top-down programming operators, arrays, loops, pointers, control statements, data structures, file processing, disk functions, sorting/searching, and recursion. Two lecture hours, two lab hours weekly.

C.S. 224 Operating Systems for Micros (3)  
For students with little computer experience, general introduction to computer software and Windows operating system applications, documents, managing files, word processing, graphics, customizing windows, accessories, networking, and the internet. Two lecture hours and two class hours weekly.

C.S. 225 Introduction to Local Area Networks (3)  
Recommended background: C.S. 120 or related computer experience. Local networks offer such features as high availability and the ability to support multiple vendor equipment. Broad background in principle architectural forms and design approaches. Three class hours weekly.

C.S. 228 Introduction to Unix/Linux (3)  
Recommended background: C.S. 120. Basic operating system concepts, command line programs and utilities, organization of files, processes control, multitasking, shell programming, system administration, the vi editor, and introduction to the basics of awk and perl programming for system administration. Students spend a portion of the class installing, configuring, and administering their own Linux system.

C.S. 235 Web Page Design and Development (3)  
Recommended background: BUS 225 or related computer experience. Course provides experience in planning and developing a web page. Students work with HTML and DHTML programming language, web browser, and web page editor as tools to develop a web application. Also introduces CSS and JavaScript programming to add dynamic components to web pages. Two lecture hours and two lab hours weekly.

C.S. 236 Advanced Visual Basic (3)  
Prerequisite: C.S. 200 or equivalent computer experience. Defines and teaches the basic skills of Visual Basic, including skills that enable students to browse, receive, and send objects via the internet and place text, pictures, animation, audio commentary; motion video clips; and stereo sound tracks. Two lecture hours and two lab hours weekly.

C.S. 237 Internet Security (3)  
Recommended background: C.S. 120 or related experience. Introduction to network security issues including access control, communications, internet and intranet. Step-by-step explanations of design and installation of firewalls and configuring into internet services. Buffer overruns and other software development errors will also be discussed.

C.S. 238 Java (3)  
Prerequisite: C.S. 120 or MATH 104 or MATH 114 or equivalent programming experience. Programs, exercises and projects focus on principles of software design and program clar-

ity to solve real-world problems. The language uses object-oriented programming and graphical interface design. Provides graphical, animated, multimedia-based, audio-intensive, multi-threaded, network-based programs using extensive class libraries. Two lecture hours and two lab hours weekly.

C.S. 245 Programming in COBOL (3)  
Prerequisite: C.S. 112 or C.S. 120. Covers COBOL programming language concepts. Students use an online time sharing system to write, compile, debug, test and document programs of varying degrees of difficulty. Programs involve business-oriented applications including sequential files, index files, control breaks, table load and lookup, and on-line queries. Two lecture hours and two lab hours weekly. Offered upon indication of need

## Criminal Justice

Courses are offered every academic year unless otherwise noted.

C.J. 111 Introduction to Justice Systems (3)  
Comprehensive survey of justice systems including historical, organizational, social, functional and administrative aspects. Provides the background and principles to introduce students to succeeding specialized courses. Three class hours weekly. Fall semester only

C.J. 112 Organization and Administration of Justice Systems (3)  
Prerequisite: C.J. 111. Covers the techniques of organization and administration within justice areas. Also covers organizational control, leadership motivation and goals and the study of future trends. Three class hours weekly. Spring semester only

C.J. 113 Criminology (3)  
Studies the causes of crime and detection and treatment methods. Also covers the historical approach and modern methods. Three class hours weekly. Spring semester only

C.J. 115 Criminal Law (3)  
An in-depth study and historical approach to the development and understanding of legal systems. Includes an intensive analysis and comparison of New York State's criminal procedure and penal laws. Conducted from a practical point of view, drawing on the study and analysis of previous and current cases. Three class hours weekly. Fall semester only

C.J. 116 Constitutional Law (3)  
Traces the history of common law and development of case law in the United States. Development of an individual's constitutional rights is explored through Supreme Court cases. History of the Exclusionary Rule is followed through cases that changed its application. Controlling cases that apply the First, Second, Fourth, Fifth, Sixth, and Eighth Amendments of the Constitution are studied. Three class hours weekly. Spring semester only

C.J. 117 Juvenile Delinquency (3)  
Considers factors related to delinquency and crime, problems of treatment within institutions, and the organization and administration of delinquency prevention programs at the state, county and local level. Examines juvenile court procedures and control programs. Three class hours weekly. Fall semester only

C.J. 119 Criminal Investigations (3)  
Includes the theory of an investigation, report preparation, conduct at scenes, and collection and preservation of physical evidence: fingerprints, ballistics, documents, serology, photography, and related forensic sciences. Also studies recent innovations in the investigation field. Three class hours weekly. Spring semester only

C.J. 121 Institutional Treatment of Criminals (3)  
Comprehensive study of the origin and development of the philosophy of treatment, administration and structure of the correctional system; legal basis of treatment; institutional training and treatment programs, focusing on today's correctional institutions. Three class hours weekly. Fall semester only

C.J. 123 Laws of Evidence (3)  
Prerequisite: C.J. 115 or concurrent enrollment in C.J. 115. Focuses on the preparation of evidence for court procedures. Covers preparation of materials, responsibilities and conduct of the officer in court with illustrative cases. Discussion of contemporary court issues with a possibility of actual participation in a courtroom. Three class hours weekly. Fall semester only

C.J. 165 Criminal Justice in Great Britain: Historical, Contemporary, and Future Perspectives (3)  
International study course features intensive two-week series of tours, lectures, and discussions. Participants explore British public safety issues and their historical and cultural influences and compare trends in American and British systems of public safety and law. Visits include Inns of Court, Royal Courts of Justice, Parliament House, police and fire stations, and sites not open to the general public. For criminal justice majors and others in law, law enforcement, and public safety fields. Intersession only

C.J. 211 Case Studies in Criminal Behavior (3)  
Prerequisite: C.J. 115 or 117. Covers material from the crime to the institutionalization of the criminal. Intensive case analysis shows various types of crime and the methods, treatment and supervision of the individual. Three class hours weekly. Spring semester only

C.J. 213 Probation and Parole (3)  
Comprehensive survey and examination of New York State correctional structure and its relationship to probation and parole. Examines community treatment in the correctional process, focusing on presentence investigation and selection, supervision and release of probationers and parolees. Includes historical development of probation and parole, and analysis of current supervision philosophy. Three class hours weekly. Spring semester only

C.J. 265 Internship in Criminal Justice (3)  
Offered to criminal justice majors in cooperation with various criminal justice agencies in CNY including probation, parole and corrections functions. Students have on-the-job training at the selected agency in the area of major interest. Only above-average students may participate with the Behavioral/Social Science Division chair's authorization. In-service students may not perform independent study in the area of their regular employment. Students must provide their own transportation to off-campus locations.  
Offered upon indication of need

## Drafting

Courses are offered every academic year unless otherwise noted.

DRFT 122 Mechanical / Industrial Drafting (4)  
Prerequisite: ENGR 126 or equivalent. Focuses on mechanical design principles and practices in various specialized areas of mechanical/industrial drafting. Topics include bearings and shafts, gearing and cams, threads, fasteners, and springs. Introduces industrial dimensioning and tolerancing principles based on ANSI Y14.5M standards. Detailed representation is accomplished using two- and three-dimensional drawing techniques. Two class hours and four lab hours weekly.

DRFT 125 Architectural Drafting (4)  
Recommended background: ENGR 126. Introduces students to basic concepts and techniques related to wood-frame construction. Focuses on methods and materials employed in the construction industry for a residential or light commercial building. Students prepare a complete set of architectural construction documents during a semester-long project. Computer-aided drafting will be used in the lab. Two class hours and four lab hours weekly.

DRFT 220 Machine Design and Drafting (4)  
Prerequisite: DRFT 122 and ENGR 103, 228 and concurrent enrollment in MATH 104. Using case studies and industrial design problems, students learn to lay out engineered products and systems and prepare drawings and specifications necessary for developing production layouts and details. Emphasis on problem-solving, layout design practices, tolerance stacks, geometric dimensioning and tolerancing, design concepts, procedures, data and decision analysis, and techniques required for machine design drafting of component parts. Computer-aided design and standard machine design practices are used in the laboratory. Two class hours and four lab hours weekly.

DRFT 221 Tool and Die Drafting and Design (4)  
Prerequisite: DRFT 122, ENGR 103, 126, 127. Concurrent enrollment in ENGR 228 and MATH 104. Using case studies and industrial design problems, students learn to improve manufacturing processes through tool design techniques. Includes problem-solving techniques, process analysis, designing fixtures and jigs, introduction to punch and die sets, quality improvements in manufacturing, and introduction to geometric dimensioning and tolerancing. Computer-aided design will be used in the laboratory. Two class hours and four lab hours weekly.

DRFT 230 Process Piping Drafting and Design (4)  
Prerequisite: ENGR 126. Instructs students in the design principles and standards required for process piping systems for chemical process plants and industrial power plants. Topics include piping, fitting and valve specification; process equipment, pipe support and instrumentation; and the fundamental principles of fluid mechanics. Two class hours and two lab hours weekly.

## Early Childhood

Courses are offered every academic year unless otherwise noted.

ECH 101 Introduction to Early Childhood Education (3)  
Concurrent enrollment in ECH 103 required for Early Childhood majors. Recommended background: PSY 215. Course examines the history and development of early childhood education as well as current trends and issues. The needs of the young child (age 0 to 8) will be studied for the purpose of applying the principles of growth and development to the use of appropriate methods, materials and activities. The development of skills to work with children, parents and the community will be emphasized. Early Childhood Concentration students must complete 20 hours of observation in infant/toddler programs. Three class hours weekly. Students must provide their own transportation to off-campus locations.

ECH 102 Curriculum and Assessment in Early Childhood Education (3)  
Prerequisite: ECH 101 and 110. Concurrent enrollment required with ECH 10 or 105. A continuation of ECH 101, this course examines various aspects of early childhood education with an emphasis on classroom management, multiculturalism, inclusion, and parent and community involvement. Issues such as assessment, philosophy of teaching, record-keeping and curriculum will also be addressed. Students will begin to apply the principles of early childhood education to the development of lessons and thematic units. Three class hours weekly.

ECH 103 Early Childhood Field Experience I (3)  
Concurrent enrollment with ECH 101. Recommended background: ECH 110. Course provides practical experience with three- and four-year-old children in an early childhood setting. Students gain knowledge about early childhood programs, trends, and philosophies while observing and working in classrooms serving three- and four-year-olds. Students observe early childhood settings in the community on a weekly basis for the entire semester. In addition to lecture hours, students complete 7 hours of field experience weekly for a combined total of 120 hours. Students must provide their own transportation to off-campus locations.

ECH 104 Early Childhood Field Experience II (3)  
Concurrent enrollment with ECH 102. Recommended background: ECH 110 and 103. Provides additional practical experience with children from birth to eight years of age in an early childhood setting with an emphasis on increased involvement with children. Students develop lessons and materials and are expected to assume an active role in the

teaching process by presenting their lessons and materials in the classroom. In addition to lecture hours, students complete 7 hours of field experience weekly for a combined total of 120 hours. Students must provide their own transportation to off-campus locations.

ECH 105 Early Childhood Field Experience  
for Liberal Arts Majors (2)

Concurrent enrollment with ECH 102. Recommended background: ECH 110. Provides practical experience with three- and four-year-old children in an early childhood setting. Students gain knowledge about early childhood programs by working in classrooms serving three- and four-year-olds. Students observe in community settings on a weekly basis for the entire semester. In addition to lecture hours, students complete 6 hours of field experience weekly for a combined total of 80 hours. Students must provide their own transportation to off-campus locations.

ECH 110 Methods and Materials for  
Early Childhood Education (3)

Concurrent enrollment in EDU 120 recommended. This course examines the methods and materials used in early childhood classrooms. Special emphasis is placed on the selection, development, and use of a variety of teaching materials. Topics include learning centers, games, manipulatives, visuals, classroom design, computer resources, films/videos, music, bulletin boards, and professional journals/resources. Three class hours weekly.

ECH 111 Infants and Toddlers (3)

Examination of programs, methods and materials utilized in early childhood education programs serving children from six weeks to three years of age. Special emphasis will be placed on the selection, development, and use of strategies that foster the emotional, physical, social and cognitive development of infants and toddlers. Students must complete 20 hours of observation in infant/toddler programs. Students must provide their own transportation to off-campus locations.

## Economics

Courses are offered every academic year unless otherwise noted.

ECON 102 Personal Money Management (3)

For students who desire knowledge in managing their personal finances. Topics include budgeting; saving; borrowing; home purchasing; automobile purchasing; life, auto and home insurance; health, disability and retirement programs; estate planning; and investing. Three class hours weekly.

ECON 201 Introduction to Economics I (3)

Introduces macroeconomics and covers how societies choose to allocate scarce resources within the context of the whole economic system. Focuses on how markets function, various macroeconomic theories, the role of government in an economic system, the international economy, the role of money in an economic system, and the policy responses to the problems of inflation, unemployment and slow economic growth. Three class hours weekly.

ECON 202 Introduction to Economics II (3)  
Recommended background: ECON 201. Focuses on the microeconomic structure of our economy including supply and demand theory, individual firm and market theory, and factor market analysis. Topics may include international trade and finance, government regulation, labor-management relations, and the economics of energy and the environment. Three class hours weekly.

ECON 203 Introduction to  
Labor-Management Relations (3)

Recommended background: ECON 201. Introduces the history and ideology of the American labor movement, collective bargaining, contract administration, dispute resolution, labor legislation and relevant economic theory. Studies contemporary labor-management issues and problems within this topical framework. Students are involved in case studies, simulation exercises, field trips, and class discussion. Guest speakers are invited. Three class hours weekly. Offered upon indication of need

ECON 205 Money and Banking (3)

Prerequisite: ECON 201. Covers the history and functions of money and credit, commercial banking, central banking, monetary theory, other banking and credit institutions, and international banking. Three class hours weekly. Offered upon indication of need

## Education

EDU 120 Technology for Teachers (1)

Recommended background: ECH 110 or concurrent enrollment in ECH 110 for all Early Childhood programs (associate degree, certificate, or concentration). Surveys classroom applications of technology with emphasis on use by the teacher.

EDU 201 Foundations of American Education (3)

Concurrent enrollment in EDU 203 required. Examines issues of education and the social, historical, philosophical, political, and cultural foundations which influenced their development; also examines the social purposes of education through social and behavioral sciences; explores the impact of social differences on education; helps the student develop a personal philosophy of education; and examines the relationship of schooling to democratic principles. Students must successfully complete EDU 203 to receive credit for this course.

EDU 203 Field Experience:  
Childhood / Adolescence (1)

Concurrent enrollment in EDU 201 required. Practical experience with children in grades 1-12 in a school setting. Students observe in classrooms based on their chosen area of interest (childhood: grade 1-6; or adolescence: grade 7-12). Students observe on a weekly basis for the entire semester (two hours field experience weekly) for a minimum of 30 hours. Students must provide their own transportation to off-campus locations.

## Electronics

Courses are offered every academic year unless otherwise noted.

- ELEC 101      Electrical Circuits      (4)  
Prerequisite or co-requisite: MATH 102. Focuses on the general principles of DC and AC circuitry with emphasis on the use of multimeters and oscilloscopes. Introduces a computer simulation program to aid the students in validating their experimental results and developing troubleshooting skills. Required of students enrolled in Electrical Technology and recommended to all students desiring a beginning course in electronics. No prior electronics knowledge is necessary. Two class hours and two two-hour labs weekly.
- ELEC 102      Basic Electronics      (4)  
Prerequisite: ELEC 101. Introduces the diode and transistor semiconductor devices within the applications of rectification, amplification, and advanced waveform shaping. Emphasis on multimeters and oscilloscopes throughout the experimental and simulation experiments. Two class hours and two two-hour labs weekly.
- ELEC 104      Electronics Drafting with CADD      (3)  
Studies the drafting principles and practices used in electrical and electronic design. Introduces students to the fundamentals of engineering drawings including the use of standards, orthographic projection, and dimensioning. Provides students with a basic understanding of computer aided drafting and design. Focuses on using CADD systems in the preparation of schematic diagrams, logic diagrams, connection diagrams, PLC diagrams, printed circuit board design, and electronic packaging design. Two class hours and three lab hours weekly. Offered upon indication of need
- ELEC 105      Introduction to Digital Computers      (4)  
Prerequisite or co-requisite: MATH 102 or equivalent. Concentrates on digital integrated circuits including logic gates, arithmetic circuits, flip-flops, latches, registers, and memories. Focuses on schematic analysis of a simple digital computer to complement the students' troubleshooting development and understanding of the application of digital circuits. Emphasis on logic pulsers and probes test equipment for the laboratory work, and logic analyzers for the computer simulation experiments. No prior electronics knowledge is necessary. Two class hours and two two-hour labs weekly.
- ELEC 107      Fundamentals of Microcomputers      (4)  
Prerequisite: ELEC 105. Introduces the internal structure of microprocessors through assembly language programming exercises. Emphasizes roles of hardware and software within a microcomputer through interfacing experiments between the microprocessor and various peripheral devices. Compares the features between the 8-, 16- and 32-bit microprocessors on the market. Two class hours and two 2-hour labs weekly.
- ELEC 201      Intermediate Electronics      (4)  
Prerequisite: ELEC 102. Focuses on oscillators, operational amplifiers, power amplifiers, Field Effect Transistors (FETs), 555-timers. Emphasizes use of multimeters and oscilloscopes for experimental and computer simulation troubleshooting exercises. Two class hours and two two-hour labs weekly.

ELEC 204      Industrial Electronics      (4)  
Prerequisite: ELEC 201. Focus on power control and instrumentation; emphasis on applying electronic concepts from ELEC 101, 102, 105, 201. Topics include schematics, ladder diagrams, varistors, thermistors, UJTs, DIACs, TRIACs, SCRs, hall effect sensors, photo transmitters and detectors, pressure sensors, proximity detectors, optoisolators, relays, solid state relays, timers, timing relays, solenoids, temperature sensing devices, motors. Two class hours, two two-hour labs weekly.

ELEC 207      Semiconductor Manufacturing  
Process Overview      (3)  
Recommended background or concurrent enrollment: CHEM 101. Overview of the fabrication and operation of integrated circuits and MicroElectroMechanical (MEM) devices. The course covers the process, materials, and equipment used in semiconductor manufacturing. Three class hours weekly. Offered upon indication of need

ELEC 208      Radio Frequency Communication      (4)  
Prerequisite: Elec 102. Focus on comparison of time-domain equipment (oscilloscopes, time-domain reflectometers) to frequency-domain equipment (spectrum and network analyzers). Applications of AM/FM modulation and impedance matching, characterization of microwave systems (introduces reflection coefficient, voltage standing wave ratio, insertion loss, S-parameters, Smith chart). Introduces soldering techniques, schematic interpretation, and, through computer simulations, operations behind spectrum and network analyzer test equipment. Three class hours, one two-hour lab weekly.

ELEC 209      Programmable Logic Controllers      (3)  
Prerequisite: ELEC 102. Focus on sequential programmable logic controllers applied to industrial processes: ladder diagrams, input/output devices, application programming design of beginning through advanced functions. Introduces a PLC simulation program to gain experience in configuring and troubleshooting software programs. Three class hours weekly.

## Engineering

Courses are offered every academic year unless otherwise noted.

- ENGR 103      Manufacturing Materials  
and Processes      (3)  
Introduces the materials and manufacturing processes with which designers, technicians and engineers must be familiar. Includes introduction to safety, measurement, materials, metal cutting technology, and metallurgy, and introduction to standard material removal processes including drilling, milling, lathe work, surface finishing operations, and some advanced technologies. Three class hours weekly.
- ENGR 126      CAD I - Basic CAD      (4)  
Develops basic drafting skills using microcomputer CAD systems. Provides the skills to develop detail drawings, including orthographic projection and application of standard dimensioning practices. Drawing assignments use CAD system operators to draw, modify, dimension and plot two-dimensional part drawings. Two class hours and four lab hours weekly.



may be used as an English or Liberal Arts elective, but cannot be taken in lieu of required English courses.  
Offered upon indication of need

ENGL 110 Writing Research in the Discipline (1)  
Prerequisite: ENGL 101. Provides intensive instruction in the writing of research in specific disciplines: behavioral and social sciences, natural sciences, business, humanities, etc. Three class hours per week for five weeks. NOTE: Course cannot be taken in lieu of any required English course.

ENGL 150 College Reading and Study Skills (3)  
Improves understanding of the learning process for more effective reading and studying. Presents theories, techniques and practice in reading comprehension, organization, vocabulary development, textbook analysis, library and research skills, study and listening habits. Three class hours weekly. NOTE: May not be taken in lieu of a required English course.

#### ENGL 201-206

Depending upon curriculum, one or more of these courses must be taken to satisfy the English requirement in literature.

ENGL 201 World Literature I (3)  
Prerequisite: ENGL 101-102. Surveys significant writings in world literature with focus on values, techniques and major movements in literature from ancient to early modern. Analyzes literary, cultural, historical and philosophical impact of the works on diverse images of human identity. Includes works and writers such as ancient Egyptian poetry, Hebrew Bible, Bhagavad-Gita, Qu'ran, Plato, Confucius, Ferdowsi, Shikibu and the No Theater. Three class hours weekly.

ENGL 202 World Literature II (3)  
Prerequisite: ENGL 101-102. Continues from ENGL 201 to focus on poetry, short stories, plays and short novels of major writers from modern to contemporary works. Analysis and evaluation of historical, literary and cultural values includes such writers as Tagore, Joyce, Tuquan, Basho, Senghor, Mahfouz, Neruda, Achebe and Soyinka. Three class hours weekly.

ENGL 203 American Literature to the Late 19th Century (3)  
Prerequisite: ENGL 101-102. Surveys significant writing from the 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> centuries in American literature. Analysis includes the general movements of thought, literary techniques and themes revealed in the works of representative writers. Also may consider selected works of late 19<sup>th</sup> and turn-of-the-century writers. Three class hours weekly.

ENGL 204 American Literature Late 19th Century to Present (3)  
Prerequisite: ENGL 101-102. Continuation of ENGL 203. Surveys American prose, poetry, and drama in the late 19<sup>th</sup> and 20<sup>th</sup> centuries. Analysis includes the general movements of thought, literary techniques and themes revealed in the works of representative writers. Three class hours weekly.

ENGL 205 English Literature to the 19<sup>th</sup> Century (3)  
Prerequisite: ENGL 101-102. Surveys literature of England from Beowulf, tracing major contributions and movements. Historical, philosophical and aesthetic influences of signifi-

cant writers, and development of poetry and drama as genres through Beowulf, Chaucer, Spenser, Shakespeare, Milton, Dryden, Pope, Swift and Johnson. Three class hours weekly.

ENGL 206 English Literature 19<sup>th</sup> Century to Present (3)  
Prerequisite: ENGL 101-102. Survey of English literature analyzes development of poetry, drama and novel as genres. Presents significant philosophical, historical and aesthetic influences; emphasis on such figures as Wordsworth, Coleridge, Shelley, Byron, Keats, Browning, Tennyson, Arnold, Carlyle, Shaw, Conrad, Yeats and Eliot. Three class hours weekly.

ENGL 207 Shakespeare (3)  
Prerequisite: ENGL 101-102. Studies Shakespeare's dramatic art through his treatment of character, theme, form, and structure. Readings include early and later tragedies, comedies, histories, and non-dramatic works. Includes focus on Shakespeare as a representative of Elizabethan England. Papers required on topics such as biographical materials, dramatic companies, theatres, sources, criticism. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses. Alternate academic years

ENGL 209 Children's Literature (3)  
Prerequisite: ENGL 101. Survey course covers traditional and contemporary children's literature. Fairy tales and other works emerging from oral tradition, picture books, poetry, juvenile novels, and non-fiction and informational books are all considered, for both general literary qualities and what they offer to children. Course develops critical perceptiveness. Three class hours weekly. NOTE: Required for Early Childhood students and for those planning a career in elementary education. May also be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses.

ENGL 211 Creative Writing (3)  
Prerequisite: ENGL 101 and ENGL 102, or concurrent enrollment in ENGL 102, required. Develops the abilities of students interested in creative writing with an emphasis on the techniques used in writing modern short stories and poems. Practice is provided in preparing manuscripts for possible publication. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of any required English course.

ENGL 217 Media Writing (3)  
Prerequisite: ENGL 101. A basic course focusing on writing and preparing information for the mass media. Covers techniques for writing for print (newspaper and magazine), broadcast (radio and television), advertising, public relations and online media. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of a required English course.

ENGL 221 Effective Speech: Public Address (3)  
Prerequisite: ENGL 101. Designed to develop an ability to meet, with some ease and competence, demands for speaking by the educated person: concepts, physical behavior, vocal quality, preparation, organization; development and delivery

of basic types of public speeches. Three class hours weekly. NOTE: Course is required in certain curricula and may be used as an English or Liberal Arts elective, but cannot be taken in lieu of a required literature course.

ENGL 222      Effective Speech: Group Discussion      (3)  
Prerequisite: ENGL 101. The theories and principles of group communication. Designed to enable students to develop problem-solving, decision-making, conflict management, and leadership skills in group situations. Students participate in group projects to set goals, plan strategies, and present results. Three class hours weekly. NOTE: Course is required in certain curricula and may be used as an English or Liberal Arts elective, but cannot be taken in lieu of a required literature course.

ENGL 226      Contemporary American Novels      (3)  
Prerequisite: ENGL 101-102. Representative writers of post-World War II America, focusing on the ways that novels reflect contemporary society. Selected writers include Norman Mailer, Saul Bellow, Flannery O'Connor, Robert Penn Warren, John Updike, Eudora Welty, John O'Hara, Truman Capote, Philip Roth and others. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses. Offered upon indication of need

ENGL 227      Poetry: Poems and Poets      (3)  
Prerequisite: ENGL 101-102. Detailed introduction to the poetry genre through reading, listening to, discussing, and writing about poems and poets. Not confined to any period or nationality; rather, considers a wide range of possibilities, styles and concerns of poetry. Special attention to the work of selected poets, both old and new, for a sense of individuality and variety of vision and language. Three class hours weekly. NOTE: May be taken as an English or Liberal Arts elective, but cannot be taken in lieu of any required English course.

ENGL 230      The Bible as Literature      (3)  
Prerequisite: ENGL 101. Literary survey of the Bible including epic literature, lyric poetry, epistolary literature, wisdom literature and prophetic literature. The course's intent is to present a non-theological approach to Bible study with emphasis on its literary merit as evidenced through the various types of literature previously listed. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses. Alternate academic years

ENG 231      Comics as Literature      (3)  
Prerequisite: ENGL 101-102. Analysis of the comic book in terms of its unique poetics (interplay of word and image); themes suggested in various works; history and development of the form and its subgenres, expectations of readers. Also explores the influence of history, culture, and economics on comic book artists and writers, definitions of "literature," how these apply to comic books, and the resulting tensions.

ENG 234      Captivity, Punishment, and Torture      (3)  
Prerequisite: English 101-102. Issues of captivity, punishment, and torture are addressed through the discipline of the Humanities. Exploring human constructs and concerns

through memoir, biography, and fiction, includes experiences of captives; forms of punishment from corporal to incarceration to capital punishment; definitions of torture; impact on survivors, effectiveness in obtaining information, and making torture acceptable to the torturer and civil society.

ENGL 235      Women and Writing      (3)  
Recommended background: ENGL 101-102. Explores the relationship between women and writing and the challenge writing has posed for women. Focus is on writing by women; also considers how women have been represented by men. Features such 19<sup>th</sup>- and 20<sup>th</sup>-century writers as Charlotte Bronte, Mary Shelley, Edith Wharton, Emily Dickinson, Jane Austen, and Toni Morrison. Three class hours weekly.

ENGL 237      Film and Literature      (3)  
Prerequisite: ENGL 101-102. The relationships between film and literature, particularly novels adapted for the screen. Reading of selected novels and some plays, viewing film versions, discussion and analysis. Three class hours weekly. Note: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of any required English course.

ENGL 239      Special Topics      (3)  
Recommended background: ENGL 101-102. Devoted to a theme or topic in literature of language or to the works of a major writer or group of writers. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses. Three class hours weekly.

ENGL 240      Mythology      (3)  
Prerequisite: ENGL 101. Survey of cosmogonies, major deities, and hero tales: Graeco-Roman, Teutonic, Middle Eastern, North and South American, Asiatic. Considers the descriptive tales and the polytheistic concepts of at least one representative culture from each major area. Students choose one additional culture for an independent project. Three class hours weekly. NOTE: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of required literature courses. Alternate academic years

ENGL 245      African-American Literary Traditions      (3)  
Recommended background: ENGL 101-102. Examines the content, form, and literary devices and techniques of selected African-American literature from slavery to contemporary; fosters an understanding of negative consequences of racial stereotyping. Three class hours weekly. Offered upon indication of need

ENGL 247      Native American Myth, Legend, and Literature      (3)  
Introduces Native American creation myths and trickster tales. Follows the development of myth and legend into a distinctive Native American literary form, covering pertinent Native American culture and history. Three class hours weekly.

ENGL 250      Folklore      (3)  
Prerequisite: ENGL 101. Survey of American folklore through place names, mining camps and mines, cattle brands, quilt names, Ozark fiddle tunes, racehorses, hound dog names, nicknames. Considers children's folklore, street cries, legends, epitaphs, folk songs, ballads, superstitions; focus on the unit-

ing qualities of American folklore. Three class hours weekly.  
Note: May be used as an English or Liberal Arts elective, but cannot be taken in lieu of a required literature course.  
Alternate academic years

ENGL 255 Science Fiction and Fantasy (3)  
Prerequisite: ENGL 101. Recommended background: ENGL 102. This introduction to the historical background of science fiction explores the relationship between science fiction and classical horror and fantasy literature, and suggests critical methodologies for reading and writing about such material. Students are asked to enjoy this literature, view it critically, and note how it reflects concerns not only for the future but also for its own cultural time period. Three class hours weekly.

## Entrepreneurial Studies

ENTR 200 The Entrepreneurial Process (3)  
Covers the role of social and economic entrepreneurship and its impact on local, regional, national, and global cultures and economies. Students will evaluate the skills and commitment necessary to successfully operate an entrepreneurial venture, and will review the challenges and rewards of entrepreneurship as a career choice, as well as entrance strategies to achieve the goal. Students can explore areas and projects of interest individually and in teams. Three class hours weekly  
Every academic year

## French

FREN 101–102, 103–104  
Elementary and intermediate foreign languages begin in the fall as a year sequence. Students who need a full year should be aware of this. When in doubt about placement, seek advice from foreign language faculty or the Humanities Division chair.

FREN 101-102  
Elementary French I-II (4 / Semester)  
First-level comprehensive courses build a foundation in communication through necessary structures and vocabulary to function in everyday situations. The four skills (listening, speaking, reading, writing) are developed through class, labs, and assignments. Films, computer games, word processing, interactive videos and simple readings provide information on the French-speaking world and reinforce the curriculum. Recommended for beginning students to meet a foreign language requirement for degree or career. (Students who have had French through Regents level may not enroll in FREN 101.)  
Three class hours weekly/required lab.

FREN 103-104  
Intermediate French I-II (3 / Semester)  
Reviews and refines understanding of the structures of French, broadens the speaking and reading vocabulary and comprehension, and develops writing ability. Emphasis is on communication. Films, interactive videos, tapes, readings, word processing and computer programs are used as support materials. Recommended for students with a year of college French, high school Regents French, or two strong years of high school French. Three class hours weekly.

FREN 111-112  
Conversational French I-II (3 / Semester)  
Level I: no prerequisite. Level II presupposes basic knowledge of French. Elementary conversation course primarily for developing oral comprehension and expression. Includes reading, writing and structural considerations; evaluation is based largely on oral performance. Three class hours weekly.

## Geographic Information Systems

GIS 101 Foundations of Geographic Information Science (3)  
Fundamental concepts of spatial understanding and analysis for non-GIS majors. Introduces basic principles of GIS (Geographic Information Systems), RS (Remote Sensing), and GPS (Global Positioning System) and their applications in exploring and analyzing geospatial information. Students apply geographic information technologies to collect, manipulate, integrate, visualize, and analyze spatial data to generate information for solving complex problems. Hands-on lab training reinforces conceptual elements explained and discussed in lectures. Two lecture hours and two lab hours weekly.  
Every academic year

GIS 111 Introduction to GIS (3)  
Introductory course presents basic GIS theories and concepts. Fundamentals explored include a brief introduction to basic cartographic principles, data types, map scales, coordinate systems and projections. Hands-on training includes manipulating, analyzing, and creating maps using an industry-standard GIS system. Two class hours, two lab hours weekly.  
Fall semester only

GIS 121 Remote Sensing and Aerial Photogrammetry (3)  
Overview of theory and principles of remote sensing and aerial photogrammetry. Students learn how to use remotely sensed images in resource exploration and base mapping. Introduces fundamentals of photogrammetry, basic image interpretation, and classification techniques. Two class hours, two lab hours weekly.  
Spring semester only

GIS 122 Spatial Modeling with Raster GIS (3)  
Recommended background: GIS 111. Part of a sequence of GIS courses; provides hands-on training in modeling and analysis of spatial data using a raster GIS. Offers an in-depth understanding of raster GIS capabilities and helps students apply GIS technologies more effectively in spatial analysis and modeling. Two class hours, two lab hours weekly.  
Spring semester only

GIS 205 Introduction to Vector GIS (3)  
Prerequisite: GIS 111. Introduction to vector GIS, particularly ArcGIS. Functional and analytical capabilities of ArcGIS are introduced. Building on GIS 111 fundamentals, students learn data query, manipulation, integration, and analysis techniques in the vector domain. Two class hours, two lab hours weekly.  
Fall semester only



HLTH 104 Personal Health (3)  
In-depth course in maintaining lifelong good health examines emotional health, drug education, family health, personal fitness, disease, consumer, and environmental health. Three class hours weekly.

## History

Courses are offered every academic year unless otherwise noted.

HIST 101 Western Civilization I (3)  
Topical approach to Western civilization addresses political, social, intellectual and economic issues; extends beyond past politics and chronologies to increase understanding of the historical record. Course focuses on European cultures from classical antiquity to 17<sup>th</sup> century; may extend further for in-depth historical treatment. Topics serve as case studies from which to evaluate the present. Three class hours weekly.

HIST 102 Western Civilization II (3)  
Surveys major developments in European history from the 17<sup>th</sup> century to the present. Some topics may extend further for in-depth perspective. Focuses on the behavior of the many as well as the notable few. Topics serve as case studies from which to evaluate the present. Non-European peoples are of concern only as they and their histories impinge on the development of European culture. Three class hours weekly.

HIST 111 World Civilizations I (3)  
Survey of cultural interactions between civilizations; inquiry into ideas, events, and people as forces for contact, change, and continuity in human issues. Exploring China, India, Africa, the Middle East, and the Americas, ideas may include imperialist expansion, industrial transformation, revolts, wars, historiography of the other, slavery and race, religion and society, economy and ecology, decolonization, nationalism, globalism. Emphasizes relationships of events and global interaction of movements and ideas. Three class hours weekly. Alternate academic years

HIST 112 World Civilizations II (3)  
Builds on HIST 111 to explore different issues but common challenges in the past. Changes over time, experienced differently in various regions, result in a global network. How people adapt and evolve provides a basis for comparing times, places, communities, and experiences. Focus is 18<sup>th</sup> century to present; topics may extend further. Three class hours weekly. Alternate academic years

HIST 115 Leaders of the 20<sup>th</sup> Century (3)  
Examines the challenge to democratic nations and the international status quo by totalitarian regimes from 1919 to 1939. Explores the development of nationalistic rivalries prior to 1919, the crisis provoked by totalitarian states, and the societies of totalitarian states. Examines the influence of personalities such as Hitler, Mussolini, Stalin, Roosevelt and Churchill upon historical developments. Three class hours weekly. Alternate academic years

HIST 120 World War II (3)  
Examines political relationships and military conflicts among nations from 1939 to 1945. Includes development of nation-

istic rivalries preceding 1939 in introductory material, and the course concludes with a description of the establishment of the postwar system of international alliances. Three class hours weekly. Alternate academic years

HIST 155 Modern Africa (3)  
Surveys African history from ancient to present time. Focuses on Africa in the modern world with emphasis on interaction with Europe and America since 1500. Also covers nationalism and nation building since 1940. Three class hours weekly. Offered upon indication of need

HIST 199 Blacks in America (3)  
Overview of African backgrounds including the movement of African cultures to the Americas. Studies the history of blacks in America, black-white relationships and the current position of blacks in American society. Three class hours weekly. Offered upon indication of need

HIST 201 History of the United States I (3)  
Survey of the growth and development of the U.S. from colonial times to 1865, focusing on the formation of the federal government, Jeffersonian and Jacksonian democracy, westward expansion and the Civil War. Three class hours weekly.

HIST 202 History of the United States II (3)  
Surveys the growth and development of the U.S. from 1865 to the present with emphasis on economic growth after 1880 and emergence as a world power during World War I. Also: the Great Depression, U.S. role in World War II, the Cold War and America's role in today's world. Three class hours weekly.

HIST 210 American Military History (3)  
Traces the development of American military thought as well as evolution of military technology and weaponry, focusing on wars fought from the Revolution to the Vietnam conflict. Discussion of the current status of military technology and the future of warfare. Three class hours weekly. Offered upon indication of need

HIST 239 Selected Topics (3)  
This course is devoted to a particular historical event or personage, a particular theme or related themes in history, or the history of a particular area of the world. Note: This course may be used as a social science or liberal arts elective, but cannot be taken in lieu of a history requirement without permission of the division chair. Three class hours weekly.

## Honors

HON 201-202 Honors Seminar (3 / semester)  
Discussion-oriented class gives students the opportunity to think across disciplinary lines and engage in discussion and writing about significant questions in the field of expertise of the instructor. Since the seminar is defined by method and structure rather than by content, actual content can vary. The course is an opportunity for close faculty/student mentoring. Open to sophomore Honors Study students; others with instructor's permission. Three class hours weekly. Every academic year

## Humanities

HE 239 Special Topics in the Disciplines (3)  
Presents a topic or theme developed by faculty in different disciplines. Students approach the topic using various tools, methods, and skills from more than one disciplinary perspective. Course fosters appreciation of varying and often differing approaches to the same issue. Students enlarge their own perspectives; learn to think in more creative, original, and unconventional ways; practice synthesizing and integrating widely varying materials; and become more sensitive to disciplinary, political, and other biases. Prerequisites to be determined by individual instructors and divisions.  
Offered upon indication of need

## Interdisciplinary Studies

INT 239 Interdisciplinary Study in Navajo Culture and Education (3)  
Interdisciplinary study course includes a series of seminars, research, and discussion, culminating in a week-long, on-site service learning experience at the Tuba City Boarding School on the Navajo Nation in Arizona. Students will explore past and present perspectives of the Navajo culture to facilitate intercultural exploration and understanding. Service learning opportunities include but are not limited to in-class tutoring of children (pre-K through 8th grade), implementation of a week-long art program, and special programming for the library, computer lab, reading rooms, and physical education classes. May be used as a Liberal Arts or free elective, or to satisfy Honors study requirements.  
Intersession only

## Italian

ITAL 111–112 Italian Conversation Level I-II (3 / semester)  
For students who wish to learn, speak and understand Italian, but who are not primarily interested in reading or writing the language. Emphasis on correct pronunciation, idiomatic expressions, basic vocabulary and minimal grammar and structure necessary for speaking. Three class hours weekly.  
Offered upon indication of need

ITAL 165 Italian Language, Art and Culture (3)  
Two-week study/travel course in Italy. Offers a unique opportunity to explore Italian life and culture, past and present. Lectures in English on various aspects of Italian culture, art-walks covering Roman, Medieval, Renaissance, Baroque art and architecture, visits to noted museums and churches, and Italian conversation meetings. Cities visited are Rome, Florence, Venice, Assisi, Pompei, Amalfi Coast and Sorrento. No knowledge of Italian is required.  
Offered upon indication of need

## Library

LIB 102 Information Research Skills (1)  
Recommended for all students, a hands-on foundation for information literacy and research skills, using traditional library resources and computer applications. Topics include

understanding the research process; accessing sources through the online catalog, electronic databases, and the World Wide Web; evaluating sources; using information ethically and legally to fill an information need. Especially appropriate for students beginning college studies; also useful for students who want to be more successful in research projects for other college courses. Class meets twice a week for five weeks.  
Every academic year

## Mathematics

Courses are offered every academic year unless otherwise noted.

MATH 070 Basic Algebra (No Credit)  
See Math Flowchart, page 103. Provides the basic mathematical skills necessary to enter MATH 099. Topics include operations of whole numbers and signed numbers, fractions and decimals, as well as ratio, proportions, and percents. Introduces equations, geometric applications, the laws of exponents, operations with polynomials, and basic factoring. Three class hours weekly.

MATH 099 Elementary Algebra (No Credit)  
See Math Flowchart, page 103. Topics include the algebra of whole numbers, integers, and rational numbers; binary operations involving polynomials; introduction of the laws of exponents; equation-solving techniques for first-degree equations; solving simultaneous linear equations by graphing, substitution and addition methods; word problems. Assistance is available in the Academic Support Center. No previous knowledge of algebra is assumed. Three class hours weekly.

MATH 101 Elementary Mathematics with Computer Applications (3)  
Prerequisite: MATH 099 or equivalent. Set operations, logic, probability, elementary statistics, mathematical systems, systems of numeration, the structure of number systems, and an introduction to geometry. Introduction to computers with elementary programming is studied and applied to some of the listed topics. Use of microcomputers, available in the Academic Support Center and Microcomputer Lab, is an integral part of the course. Three class hours weekly.  
Offered upon indication of need

MATH 102 Intermediate Algebra (3)  
Prerequisite: MATH 099 or pass placement test for MATH 099. Assumes knowledge of elementary algebra. Reviews basic algebraic concepts, then progresses to rational exponents; solution of linear, rational, quadratic and radical equations; introduction of the function concept; factoring polynomials, synthetic division, and the algebra of radicals. Includes applications with word problems. Assistance is available in the Academic Support Center. Three class hours weekly.  
Offered upon indication of need

MATH 104 College Algebra and Trigonometry (3)  
Prerequisite: MATH 102 or equivalent. (See Math Flowchart, page 103.) Continuation of MATH 102 introduces the basics of trigonometry and reviews basic properties of the complex number system. The concept of function is applied to algebraic, rational, exponential, logarithmic and trigonometric

functions. Emphasis on applications of trigonometry to right and oblique triangles and vectors. Assistance available at Academic Support Center. A scientific calculator is required. Three class hours weekly.

**MATH 106 Pre-Calculus (3)**  
Prerequisite: MATH 104 or equivalent. (See Math Flowchart, page 103.) Completes the study of algebraic and trigonometric skills necessary for successful study of calculus. Trigonometric functions and identities are applied to analytic geometry. Systems of equations and inequalities are solved using algebraic, graphical and matrix/determinant methods. Theory of equations including remainder, factor and De Moivre's theorem are used to study and help in graphing of equations. Introduces series and sequences (arithmetic and geometric), the binomial theorem, and mathematical induction. Assistance is available in the Academic Support Center. A scientific calculator is required. Three class hours weekly.

**MATH 108 Calculus I (4)**  
Prerequisite: MATH 106 or equivalent. (See Math Flowchart, page 103.) Studies functions; properties of limits and continuity; derivatives with applications to related rates, maximum/minimum and curve sketching; the chain rule; differentials; the mean value theorem; Newton's Method; integration with applications to plane areas, volumes of solids of revolution by disk, shell, and cross sections. Differentiation and integration of exponential and logarithmic functions are applied to growth and decay. Four class hours weekly.

**MATH 112 Contemporary Mathematics (3)**  
Prerequisite: MATH 099 or equivalent. (See Math Flowchart, page 103.) Prepares students for an understanding of arithmetic, algebra, geometry, data analysis, and quantitative reasoning. Students will show competence in these skill areas with additional support using the computer software including the resources available on the internet. Three class hours weekly.

**MATH 114 Applied Mathematics for Technologists (3)**  
Prerequisite: MATH 102 or pass placement test for MATH 104. Intended for Mechanical Technology and Electrical Technology students, but open to any student. With emphasis on applications, focuses on various topics of algebra and trigonometry including mathematics misconceptions, linear/quadratic equations and functions, common and natural logarithms, properties of logarithms, trigonometric functions, right angle trigonometry, and the law of sines and cosines. Applications include calculator limitations, proportions, unit analysis, projectile motion, frequency response of electrical systems, vector and component analysis, and coordinate analysis of complex shapes. Assistance is available in the Academic Support Center. A scientific calculator is required. Three class hours weekly.

**MATH 115 Concepts of Elementary Mathematics I (3)**  
Prerequisite: MATH 099 or pass placement test for MATH 099. An experiential investigation of mathematical concepts currently taught in elementary school such as problem solving, sets and relations, numeration systems, whole numbers, integers, rational numbers, real numbers, and number theory. Students gain a comprehensive understanding of the cur-

riculum recommended by the National Council of Teachers of Mathematics (NCTM) Standards and learn various ways to communicate comprehension to the elementary student.

**MATH 116 Concepts of Elementary Mathematics II (3)**  
Prerequisite: MATH 099 or pass placement test for MATH 099. An experiential investigation of mathematical concepts currently taught in elementary school, such as probability, statistics, geometry, and the metric system. Students develop a comprehensive understanding of the curriculum recommended by the National Council of Teachers of Mathematics (NCTM) Standards, and learn various ways to communicate their comprehension to the elementary student.

**MATH 201 Calculus II (4)**  
Prerequisite: MATH 108 or equivalent. (See Math Flowchart, page 103.) Continuation of Calculus I. Topics include applications of integration in arc length and surface area, work, fluid pressure and fluid force, moments and centroids, integration techniques, L'Hopital's Rule and improper integrals. Also covers sequences, infinite series, Taylor Series, interval of convergence, conic sections, parametric equations, polar equations and their graphs. Four class hours weekly.

**MATH 202 Calculus III (4)**  
Prerequisite: MATH 201 or equivalent. (See Math Flowchart, page 103.) Multivariable calculus including vectors in planes and space; lines, planes and surfaces in space; rectangular, cylindrical and spherical coordinates; vector-valued functions, motion, arc length and curvature; functions of several variables, partial derivatives, chain rules, directional derivatives and gradients, tangent planes; Lagrange multipliers. Also multiple integration applied to volume center of mass and surface area; vector analysis including vector fields, line integrals, Green's Theorem, parametric surfaces, surface integrals, divergence, curl and Stokes' Theorem. Four class hours weekly.

**MATH 203 Linear Algebra (3)**  
Prerequisite: MATH 108 or equivalent. (See Math Flowchart, page 103.) Introduces linear algebra with emphasis on interpretation and the development of computational techniques. Topics include systems of equations; matrices are utilized for the interpretation of vector spaces, subspaces, independence bases, dimension, inner product, outerproduct, orthogonal and orthonormal sets. Also the transformation of matrices, matrix operations, inverses, conditions for invertibility, determinants and their properties. The characteristics equation and its eigenvalue are used for problem solving and the development of linear transformations. Three class hours weekly.

**MATH 204 Differential Equations and Series (4)**  
Prerequisite: MATH 201. (See Math Flowchart, page 103.) Techniques for solving differential equations of first and higher order; focus on linear differential equations. Methods include separation of variables, undetermined coefficients, variation of parameters, D-operators, Laplace transforms and infinite series. Applications include formulation, solution and interpretation of initial and boundary value problems in physics, electricity and engineering. Four class hours weekly.

**MATH 210 Math/Data Structures (3)**  
Prerequisite: C.S. 222. Introduces the student to most commonly used data structures and their implementation. Algorithms and operations show the use of major data structures in computer science. Includes stacks, symbol tables, queues, sets, search trees, strings and graphs. Study provides a basis for developing new algorithms. Three class hours weekly.

**MATH 212 Discrete Mathematics (3)**  
Prerequisite: MATH 103 or equivalent. Introduction includes propositional and predicate logic, sets, functions, matrix algebra, number theory, algorithms, valid arguments, direct and indirect proofs, proof by contradiction, mathematical induction, permutations, combinations and other counting techniques, and discrete probability.

**MATH 214 Statistics (3)**  
Prerequisite: MATH 103 or equivalent. Topics range from data collection, descriptive statistics and linear regression models to inferential statistics. Includes probability, counting principles, and binomial probability distribution. Normal probability distribution and student's t-distribution are discussed in single and two-populations applications. Statistical inference (confidence intervals and hypothesis testing) in sociology, psychology, and business/industry are stressed. Additional topics may include Chi-square goodness of fit test, tests for independence, and testing the significance of the linear regression model. Three class hours weekly.

## Music

Courses are offered every academic year unless otherwise noted.

**MUSI 100 College Chorus (1)**  
Open to all students. Provides an opportunity for students to enjoy and develop their singing voices. Activities include concerts for the College and community. Three lab hours weekly. May be repeated for a maximum of four credit hours.

**MUSI 101 Music Appreciation (3)**  
Studies the art of music listening including the basic elements of music, a variety of musical styles and performing media. Recordings and audio visual materials are supplemented with live music. Three class hours weekly.

**MUSI 102 Jazz (3)**  
History and appreciation of jazz for all musical experience levels. Includes discrimination between jazz and related styles; other listening skills include analysis of aspects of form, rhythm, harmony and melody. Three class hours weekly.

**MUSI 104 Music Essentials (3)**  
Presents music fundamentals to students and prospective teachers in pre-K, elementary, special, or physical education programs. Study at the piano keyboard introduces students to reading and writing music notation. Three class hours weekly.

**MUSI 111 Rock (3)**  
History and appreciation of rock music for students of all musical experience levels. Topics include rock artists, form, rhythm, harmony and melody; also discriminating between rock and related styles. Three class hours weekly.

**MUSI 112 Music in Performance (3)**  
Two-week course in music appreciation through live performances utilizes a trip to New York City. Detailed study and analysis of works precedes concert attendance. Concerts may include a Broadway musical, choral music, an opera or ballet, the symphony and/or a jazz performance. Offered upon indication of need

**MUSI 152 Class Voice (2)**  
Designed for students of any singing ability who desire to improve their singing voice. Students learn how to produce a good singing tone and sing effectively. Three lab hours weekly.

**MUSI 154 Piano I (3)**  
For beginning piano players. Students proceed at their individual pace learning basic theoretical concepts as applied to the keyboard. Students learn how to play piano melodies and perform written works. Correct piano technique is taught as well as proper phrasing and expressiveness in playing. Three class hours and one lab hour weekly.

**MUSI 156 Piano II (3)**  
Recommended background: MUSI 104, 154, private piano study or equivalent. Students move at an individual pace and build on previous playing skills. Solutions for technical problems are given. Three class hours and one lab hour weekly. Offered upon indication of need

**MUSI 158 Guitar (3)**  
Students of any playing level may enroll in this guitar course. Beginning students learn at their own pace to read music, chord notation, and to play chords, scales and fingering. Three class hours and one lab hour weekly.

**MUSI 170 Music Preparation for Audio Professionals (3)**  
Addresses the musical needs of both aspiring audio professionals and general students. Students have the opportunity to become comfortable with musical as well as technical language. Three class hours weekly.

## Nursing

Courses are offered every academic year unless otherwise noted.

**NURS 100 Nursing Success Strategies (1)**  
Concurrent enrollment: NURS 101. Provides matriculated nursing students with skills to develop and implement a successful plan of study in the nursing curriculum. Emphasis is placed on learning style awareness, goal setting, time management, student nurse stress management, critical thinking skills, study techniques, NCLEX (National Council Licensure Exam) test-taking techniques, and use of academic resources. Includes application of practical strategies to enhance the ability to survive and thrive within the academic rigors of a nursing program. One class hour weekly for 15 weeks.

**NURS 101 Fundamentals of Patient Care (8)**  
Concurrent enrollment in or completion of BIOL 203. Adult, child, and infant CPR certification required prior to clinicals. Provides the foundation for all subsequent nursing courses. Students learn the fundamental principles of interpersonal,

technical, and cognitive skills related to individualized client care of an adult's basic human needs. Learning activities develop the ability to think critically; reason and form judgments; and assess, analyze, and resolve client-centered problems. Content includes nursing concepts, infection control, communication principles, assessment and management of basic needs, and perioperative nursing. The roles of the nurse as provider and manager of care and member of the profession are introduced. Clinical experiences, which begin after four weeks of classroom and laboratory instruction, are correlated with theory by selection of clients in subacute and long-term care settings. Additionally, the student is expected to demonstrate competency of selected nursing skills in the nursing campus laboratory. Four class hours and 12 clinical laboratory hours weekly.

NURS 102      Nursing in Physical /  
Mental Health I      (8)

Prerequisite: NURS 101 and BIOL 203. Concurrent enrollment in or completion of BIOL 204. Adult, child, and infant CPR certification required. This course builds upon the skills, abilities, and knowledge from Nursing 101. Students learn interpersonal, technical and cognitive skills related to individualized nursing care of adults with common medical/surgical disorders. Learning activities develop the ability to think critically; reason and form judgments; and assess, analyze, and resolve client-centered problems. Content includes surgical, musculoskeletal, oncological, respiratory, circulatory, digestive, endocrine, urinary, hematological and integumentary disorders. The roles of nurse as provider and manager of care and member of the profession are further developed. Clinical experiences are correlated with theory by selection of clients in acute care settings. Additionally, the student is expected to demonstrate competency of selected nursing skills in the nursing campus laboratory. Four class hours and 12 clinical hours weekly.

NURS 165      Health Care in Great Britain:  
Historical, Contemporary,  
and Future Perspectives      (3)

International course for health care providers, administrators, and others explores British health care issues and the historical and cultural influences that led to current British practices. Participants exchange ideas with British counterparts and compare trends in the National Health Service and American systems. Intensive two-week series of tours, lectures and discussions includes noted London hospitals and hospices and schools of nursing and medicine, including visits to the Roman baths at Bath, Old St. Thomas' Hospital Operating Theater, Wellcome Medical Museum, Parliament, Stonehenge, Nurses' Chapel in Westminster Abbey, Nightingale Museum. Intersession only

NURS 203      Trends in Nursing      (1)

Concurrent enrollment in NURS 216 and 217. This course provides students with an overview of contemporary issues and trends and their impact on the nursing profession. The role of the associate degree nurse and the transition from student to member of the profession will be explored. Knowledge and skills acquired in this course will empower the student to

participate as a member within a multidisciplinary team and continue the development of professional growth within the discipline of nursing. One class hour weekly for 15 weeks.

NURS 207      Pharmacology      (3)

This course provides essential information to promote the knowledge and skills of safe drug therapy. Basic pharmacologic concepts and the nurse's role in drug therapy establish the framework of this course. The content is organized into topics by therapeutic drug classifications and their effects on particular body systems. Drug group discussions include mechanism of action, therapeutic uses, adverse effects, contraindications, toxicity, interactions, and relevant client teaching. The focus on rationale for nursing actions provides a strong knowledge base and scientific foundation for safe and effective drug therapy in clinical nursing practice. Three class hours weekly for 15 weeks.

NURS 211      Health Assessment      (3)

Prerequisite: NURS 101. This course provides the knowledge and skills necessary to collect a comprehensive health history and perform a physical assessment of the integumentary, respiratory, cardiovascular, gastrointestinal, neurological, musculoskeletal, lymphatic, and reproductive systems, and the eyes, ears, nose, throat, head and neck regions. Holistic client assessment is emphasized with nutritional and cultural nursing considerations. The lab component will provide practice and evaluation to ensure basic level competency. Two class hours and two lab hours weekly. Offered upon indication of need

NURS 212      Health Assessment I      (1.5)

Prerequisite: NURS 101. Concurrent enrollment in NURS 102 required. This course provides the knowledge and skills necessary to collect a comprehensive health history and perform a physical assessment of the integumentary, respiratory, cardiovascular, and gastrointestinal systems. Holistic client assessment is emphasized with nutritional and cultural nursing considerations. Students will independently practice assessment skills and provide documentation for each body system. One and one-half class hours weekly or 90-minute class weekly.

NURS 213      Health Assessment II      (1.5)

Prerequisite: NURS 102. Concurrent enrollment in NURS 214 or 215 required. This course will build upon the knowledge and skills acquired in Health Assessment I. Comprehensive health history and physical examination techniques of the neurological, musculoskeletal, lymphatic, reproductive, eyes, ears, nose, throat, head and neck regions and systems will be provided. Holistic client assessment is continued. Students will independently practice assessment skills and provide documentation for each body system. One and one-half class hours weekly or 90-minute class weekly.

NURS 214      Family / Community Nursing I      (4)

Prerequisite: NURS 102; BIOL 203 and 204; adult, child, and infant CPR certification. This course builds on the skills, abilities, and knowledge developed in NURS 101 and 102. Students will learn interpersonal, technical, and cognitive skills related to individualized nursing care of gynecological

clients and children from birth through adolescence, and clients in the community. Learning activities develop the ability to think critically, reason and form judgments, and assess, analyze and resolve client-centered problems. Course content includes family-centered care and community health concepts and services. The roles of nurse as provider and manager of care and member of the profession are further developed with increased complexity of client needs. An emphasis on the development of communication with clients in specialized settings is a focus of the course. Clinical experiences are correlated with theory by selection of clients in acute care settings, home care and varied community agencies. Additionally, students are expected to demonstrate competency of selected nursing skills in the campus nursing laboratory. Four class hours and 12 clinical lab hours weekly for seven weeks.

NURS 215 Nursing in Physical / Mental Health II (4)

Prerequisite: NURS 102; BIOL 203 and 204; adult, child, and infant CPR certification. This course builds on the skills, abilities, and knowledge developed in NURS 101 and 102. Students will learn interpersonal, technical, and cognitive skills related to individualized nursing care of adults with common medical-surgical and mental health disorders. Learning activities develop the ability to think critically, reason and form judgements, and assess, analyze and resolve client-centered problems. Course content includes cardiac, respiratory, and common mental health disorders. The roles of nurse as provider and manager of care and member of the profession are further developed with increased complexity of client needs. An emphasis on the development of communication with clients in specialized settings is a focus of the course. Clinical experiences are correlated with theory by selection of clients in acute care and mental health settings. Additionally, the student is expected to demonstrate competency of selected nursing skills in the nursing campus laboratory. Four class hours, 12 clinical hours weekly for seven weeks.

NURS 216 Family / Community Nursing II (4)

Prerequisite: NURS 102, 214, 215; BIOL 203 and 204; adult, child, and infant CPR certification. This course builds on the skills, abilities, and knowledge developed in NURS 101 and 102, NURS 214 and 215. Students learn interpersonal, technical, and cognitive skills related to individualized nursing care of mothers and infants through the maternity cycle, children with complex medical/surgical needs, and high risk antepartum and postpartum clients in the community. Learning activities are planned to develop the student's ability to think critically, to reason and form judgments, and to assess, analyze and resolve client-centered problems. Course content includes family-centered care and community health concepts and services. The roles of nurse as provider of care, manager of care and member of the profession are further developed with increased autonomy. An emphasis on the development of leadership skills is a focus of this course. Clinical experiences are correlated with theory by selection of clients in acute care settings, home care and varied community agencies. Additionally, the student is expected to demonstrate competency of selected nursing skills in the campus nursing laboratory. Four class hours, 12 clinical hours weekly for seven weeks.

NURS 217 Nursing in Physical / Mental Health III (4)

Prerequisite: NURS 102, 214 and 215; BIOL 203 and 204; adult, child, and infant CPR certification. Builds on the skills, abilities, and knowledge from NURS 101, 102, 214 and 215. The student learns interpersonal, technical, and cognitive skills related to individualized nursing care of adults with complex medical-surgical disorders. Learning activities develop the ability to think critically, reason, and form judgments and assess, analyze, and resolve client-centered problems. Content includes neurological, endocrine, renal and hepatic disorders. The roles of nurse as provider and manager of care and member of the profession are developed with increased autonomy and focus on developing leadership skills. Clinical experiences are correlated with theory by selection of clients in acute care settings and the clinical preceptorship. Additionally, the student is expected to demonstrate competency of selected nursing skills in the nursing campus laboratory. Four class hours, 12 clinical hours weekly for seven weeks.

NURS 220 The Art of Nursing: Alternative Therapies (1)

Introduction to several alternative health therapies in the practical context of learning to provide holistic health care. Students will not only learn about providing holistic health care, but will also apply course content as they experience and learn to use popular alternative therapies. Offered upon indication of need

## Philosophy

Courses are offered every academic year unless otherwise noted.

PHIL 101 Logic (3)

Introduces informal and formal logic, emphasizing methods of interpreting and evaluating arguments to develop critical thinking and reasoning skills. Three class hours weekly.

PHIL 105 Ethics (3)

Examines alternative theories of the nature of moral value in relation to basic issues concerning rights, justice, freedom and happiness. Course objective is to develop the ability to make well-reasoned judgments about value questions facing the individual and society. Three class hours weekly.

PHIL 201 Introduction to Philosophy (3)

General introduction to philosophy surveys fundamental problems and perspectives representing a range of philosophical fields, periods, and authors. Encourages questioning and reasoning on philosophical issues. Three class hours weekly

PHIL 203 World Religions (3)

Studies the beliefs and religious philosophies of major Eastern and Western religions including Hinduism, Buddhism, Judaism, Christianity and Islam. Three class hours weekly.

## Physical Education

Courses are offered every academic year unless otherwise noted.

### Lecture Courses

P.E. 101 / 102 Survey of Physical Education Activities (1 each)  
Instruction in carry-over activities including soccer, volleyball, basketball, archery, tennis, softball. Three class hours weekly. Alternate academic years

P.E. 148 Independent Study in Physical Education (1)  
Designed to meet student's unique circumstances.

P.E. 165 Introduction to Physical Education (1)  
For students who wish to transfer into a four-year program in physical education. Explores the diversity of the field, the place of physical education in educational settings, literature and research in the field, and careers. One class hour weekly. Alternate academic years

P.E. 170 Sports Management (3)  
Examines the sports industry and introduces sports management careers. Management functions, unique characteristics of sports, the sports manager's roles, skills, attributes, issues, social and ethical responsibilities. Three class hours weekly.

P.E. 199 Physical Education for Children (2)  
To provide philosophy, principles, activities, teaching strategies, evaluation procedures for children ages three to six through lecture and active participation in class.

P.E. 260 Basic Care and Prevention of Athletic Injuries (3)  
Lecture course covers basic injuries encountered in sports activities, with etiology, prevention, evaluation, and treatment of specific injuries to the head, shoulder, hip, knee, and ankle. Reviews first aid and emergency procedures for injuries. Meets New York State coaching certification course requirement for health science. Three class hours weekly. Students must provide their own transportation to off-campus locations.

P.E. 263 Internship For Athletic Training (1)  
Prerequisite: P.E. 260. Recommended background: anatomy and physiology. Hands-on introduction for athletic training students to basic injuries encountered in sports activities. Etiology, prevention, evaluation, treatment of specific injuries to head, shoulder, hip, knee, and ankle. First aid for injuries and emergency procedures. Three class hours weekly. Students must provide their own transportation to off-campus locations.

P.E. 270 Sports Promotions (3)  
Recommended background: P.E. 170. Course reviews strategies for selling sports, including advertising, merchandising, licensing, and sponsorship. Three class hours weekly.

### Personal Defense Courses

P.E. 107 Judo I (1)  
Introduces the art of Judo. Emphasis on skill development in the first 10 throws for promotion to the first two ranks of Kodokan Judo. Three class hours weekly.

P.E. 108 Judo II (1)  
Prerequisite: P.E. 107. Prepares students for the fourth rank of Kodokan Judo. Practice of skills in the second group of 10 throws for promotion to green belt. Three class hours weekly.

P.E. 109 Judo Practicum\* (1)  
Prerequisite: P.E. 108. Skill development in advanced techniques for the higher ranks of Kodokan Judo. Practice in Kata (form throws) for black belt status. Three class hours weekly.

P.E. 110 Karate (1)  
Basic techniques of Beikokujin Soo Do karate and basic tenets, ethics of the martial arts. Students are taught the fundamental kicks, blocks, strikes, vocabulary, self-defense techniques and katas necessary to attain the rank of gold belt. Additional techniques for advanced students. Three class hours weekly.

P.E. 111 Karate II (1)  
Advanced techniques of Beikokujin Soo Do karate and tenets of martial arts. Fundamental vocabulary, kicks, blocks, strikes, self-defense techniques and katas necessary to attain the rank of black belt. Additional techniques offered to advanced students. May be repeated. Three class hours weekly.

P.E. 157 Personal Defense (1)  
Planned progression of experience in self-defense. Situations include sexual assault, robbery and assault, domestic violence. Three class hours weekly.

P.E. 158 Personal Defense Practicum\* (1)  
Prerequisite: P.E. 157. Continues self-defense skills, emphasizing avoidance, levels of response, psychological strategies and legal/moral implications. Three class hours weekly.

### Related Areas

P.E. 145 First Aid-Responding to Emergencies (1)  
Meets requirements for Red Cross first aid certification: students recognize, evaluate, and prioritize first aid needs and apply appropriate aid in emergencies. One class hour weekly.

P.E. 146 CPR Basic Support (1)  
Basic life support in cardiopulmonary resuscitation. Students are trained in course "C" basic life support, meeting American Heart Association standards. One class hour weekly for half the semester.

P.E. 147 CPR Instructor (1)  
Prerequisite: P.E. 146. Designed to meet American Heart Association standards. Produces highly skilled C.P.R. instructors. One class hour weekly for half the semester

### Racquet Sports

P.E. 114 Tennis (1)  
Introductory skill development and practice in tennis. Emphasis on rules, scoring, technique and fundamental strokes. Three class hours weekly.

P.E. 115 Tennis Practicum\* (1)  
Prerequisite: P.E. 114. Advanced technique and competitive experience; improving groundstrokes, serving, strategy; observing and correcting errors. Three class hours weekly.

P.E. 119 Racquetball I (1)  
Demonstration of safety procedures. Proper grip, stroke and stance, a reasonable degree of court awareness, and an ability to execute basic shots. Three class hours weekly.

P.E. 120 Racquetball II (1)  
Prerequisite: P.E. 119. Intermediate level skills and practice including effective serving skills, shot placement, court position, and competitive attitude. Three class hours weekly.

P.E. 121 Racquetball Practicum\* (1)  
Prerequisite: P.E. 120. Competitive play with demonstrated skill in all aspects of the game. Three class hours weekly.

### Fitness Activities

P.E. 112 Aerobic Kickboxing (non-combative) (1)  
Cardio/aerobics workout uses kickboxing techniques of punching, striking and kicking. Includes warm-up, instruction in techniques, workout with kicks and punches in the air, and punches on targets including heavy bags, body opponents and hand targets, and cool-down. Three class hours weekly.

P.E. 113 Advanced Aerobic Kickboxing (non-combative) (1)  
Continuation of P.E. 112. Three class hours weekly.

P.E. 130 Weight Training (1)  
Use of free weight room. Brief presentation of the history of strength building includes Olympic lifting, power lifting, bodybuilding, strength research, and strength fitness. Three class hours weekly.

P.E. 131 Weight Training Practicum (1)  
Review of P.E. 130 and current theories in strength training. Three class hours weekly.

P.E. 144 Fitness Theory and Application (1)  
Basic theory of fitness, appraisal of fitness levels and applying knowledge to personal fitness goals. One class hour weekly. Alternate academic years

P.E. 150 Aerobics I (1)  
Improves fitness levels through rhythmic dance routines. Three class hours weekly.

P.E. 151 Aerobics II (1)  
Prerequisite: P.E. 150. Continuation of rhythmic workouts; student-choreographed programs. Three class hours weekly.

P.E. 152 Aerobics Practicum\* (1)  
Prerequisite: P.E. 151. Aerobic dance workouts for high-level fitness through rhythmic routines professionally developed and choreographed by students. Three class hours weekly.

P.E. 154 Exercise and Weight Control (1)  
Set point theory applied to a fitness program for long-term weight control. An explanation of why diet programs fail and how lifestyle modification can help people lose weight permanently. One class hour weekly.

P.E. 161 Wellness Center I (1)  
Training program designed to meet cardiovascular requirements and improve strength and flexibility. Following orienta-

tion, lecture, assessment, and testing, students attend a specified number of classes on their own. Three class hours weekly.

P.E. 162 Wellness Center II (1)  
Prerequisite: P.E. 161. Continues fitness regimen, providing weight control module. Three class hours weekly.

P.E. 163 Wellness Center III Practicum\* (1)  
Prerequisite: P.E. 162. Pursue fitness goals through aerobic exercise machines including stairmasters, treadmills, air-dynes, gravitrons and rowers. Sub-maximal aerobic testing available. Three class hours weekly.

### Team and Individual Sports

P.E. 128 Basketball (1)  
Basic instruction in the skills and fundamentals of basketball. Students learn rules and officiate games within the class setting. Three class hours weekly.

P.E. 129 Basketball Practicum\* (1)  
Prerequisite: P.E. 128. Opportunity to improve basketball skills in a competitive setting. Three class hours weekly.

\* May not be counted for graduation credit under certain circumstances. See physical education requirements as stipulated for each degree, or contact division chair.

### Varsity Sports

P.E. 030 Varsity Basketball (1)  
Develops specialized knowledge, skills, and strategies. Special attention given to techniques to improve individual peak performance and team competitiveness. Students must provide their own transportation to practice locations.

P.E. 060 Varsity Basketball II (1)  
Develops specialized knowledge, skills, and strategies. Special attention to techniques to improve individual peak performance and team competitiveness. Prerequisite – must meet NJCAA academic standard in order to enroll in this class. Students must provide their own transportation to practice locations.

P.E. 050 Varsity Lacrosse (1)  
Develops specialized knowledge, skills, and strategies. Special attention given to techniques to improve individual peak performance and team competitiveness. Prerequisite – must meet NJCAA academic standard in order to enroll in this class. Students must provide their own transportation to practice locations.

P.E. 080 Varsity Lacrosse II (1)  
Prerequisite: must meet NJCAA academic standard in order to register. Develops specialized knowledge, skills, and strategies. Special attention given to techniques to improve individual peak performance and team competitiveness. Students must provide their own transportation to practice locations.

P.E. 040 Varsity Soccer (1)  
Prerequisite: must meet NJCAA academic standard in order to register. Develops specialized knowledge, skills, and strategies in soccer. Special attention given to techniques to improve individual peak performance and team competitiveness. Students must provide their own transportation to practice locations.

P.E. 070 Varsity Soccer II (1)  
Prerequisite: must meet NJCAA academic standard in order to register. Develops specialized knowledge, skills, and strategies. Special attention given to techniques to improve individual peak performance and team competitiveness. Students must provide their own transportation to practice locations.

P.E. 020 Varsity Cross Country (1)  
Prerequisite: must meet NJCAA academic standard in order to register. Develops specialized training and knowledge in distance running. Special attention given to improving individual peak performance and achieving team recognition.

P.E. 090 Varsity Cross Country II (1)  
Prerequisite: must meet NJCAA academic standard in order to register. Develops specialized training and knowledge in distance running. Special attention given to improving individual peak performance and achieving team recognition.

### Combined Activities

P.E. 143 Volleyball / Archery (1)  
Fundamentals of target archery or hunting. Combined elective with basic volleyball skills and knowledge. Three class hours weekly. Each activity meets for half of the semester.

### Physics

Courses are offered every academic year unless otherwise noted.

PHYS 101 Technical Physics I (4)  
Prerequisite: MATH 099 or equivalent. Introduces the basic principles of physics including scalars and vectors, displacement velocity and acceleration, force, work, energy, momentum, circular and rotational motion. Three class hours and one three-hour lab weekly.  
Offered upon indication of need

PHYS 102 Technical Physics II (4)  
Prerequisite: PHYS 101. Continuation of PHYS 101. Covers the principles of electricity, magnetism, waves, sound, light, and an introduction to optics. Three class hours and one three-hour lab weekly.  
Offered upon indication of need

PHYS 103 General Physics I (4)  
Recommended background: MATH 104 or MATH 114 (or both concurrently), high school physics. For students with satisfactory experience in physics. Includes kinematics in one and two dimensions, Newton's Laws of motion, free body diagrams, work-energy theorem, conservation of energy and linear momentum, center of mass, centripetal acceleration, translations and rotations of rigid bodies, torque and equilibrium. Three class hours and one three-hour lab weekly.

PHYS 104 General Physics II (4)  
Recommended background: MATH 104 or MATH 114 and high school physics. Continuation of PHYS 103. Course content includes Kirchhoff's voltage and current rules; reactance and resonance; electromagnetism, Faraday's Law, standing waves, the Doppler effect, reflection and refraction, mirror and lens ray diagrams, interference, diffraction and polarization. Three class hours and one three-hour lab weekly.

PHYS 200 Physics I—Mechanics (4)  
Prerequisite: MATH 108 or equivalent. First in a three-course sequence for engineering students and science or math majors with strong mathematics background. Study of Newton's Laws, work and energy, gravitation of falling bodies, motion in a plane, momentum, rotation of a rigid body, elasticity, periodic motion, hydrostatics, fluids in motions, temperature, heat and energy, heat transfer, change of state and thermodynamic laws. Three class hours and one three-hour lab weekly.

PHYS 201 Physics II – Electricity and Magnetism (4)  
Prerequisite: PHYS 200 and concurrent enrollment in MATH 202. A study of the electromagnetic theory using Maxwell's equations, DC and AC circuitry, electrical instruments, measurement, machinery and discharges and an Introduction to Optics. Three class hours and one three-hour lab weekly.

PHYS 202 Physics III – Modern Physics (4)  
Prerequisite: PHYS 201. Studies electromagnetic wave properties including propagation, reflection, refraction, diffraction polarization and optical instruments. Also, atomic structure, quantum theory, relativity, nuclear models and radioactivity. Three class hours and one three-hour lab weekly.  
Offered upon indication of need

### Political Science

Courses are offered every academic year unless otherwise noted.

PSCI 101 Modern Government (3)  
Examines fundamental political concepts, theories and issues. Emphasis on the nature and importance of politics, aspects of the political community, states and nations, and the process and machinery of government. Covers a comparison of governments of several modern nations. Three class hours weekly.

PSCI 102 American Government (3)  
Introduces the national system of government and politics. Describes, analyzes, and explains the political process of the American national government. Studies the legislative, executive and judicial branches, the operation of parties and elections, the role of law and the courts, public policy making and the formulation of diplomatic and military policy. Provides an understanding of the way behavior of Congressional members, Supreme Court justices and ordinary citizens influences formulation of government policies. Three class hours weekly.

PSCI 206 International Relations (3)  
Covers issues pertaining to international peace and security, economic relations, human rights, social and cultural developments, colonialism and international law. These issues are discussed in terms of their development and importance. Also considers actions of the international community in dealing with these problems. Three class hours weekly.  
Offered upon indication of need

PSCI 207 U.S. Constitution (3)  
Introduces the study of public law. Covers separation and delegation of governmental powers, the federal system, powers of the national government, the judicial function and its limitations, due process and civil liberties. Three class hours weekly.  
Offered upon indication of need

PSCI 214 Comparative Legal Traditions (3)  
 Recommended background: PSCI 102, CJ 111, or CJ 115.  
 Examines the legal and criminal justice systems of different nations and cultures. Focus on the influence of historical, political and social factors on these systems. Compares other societies and the United States in perceived causes of crime and differing approaches to rehabilitation and crime prevention. Cultures representing Europe, Africa, Asia and America, (before 1500 CE), are included. Three class hours weekly. Offered upon indication of need

## Psychology

Courses are offered every academic year unless otherwise noted.

PSY 101 Introductory Psychology (3)  
 Basic orientation to the psychology of human behavior. Studies the aims and methods of psychological investigation and measurement, and biological and social influences on behavior. Also focuses on learning, motivation, emotion, perception, and personality development. Three class hours weekly.

PSY 105 Psychology of Interpersonal Relations (1)  
 Study of techniques to help understand, get along with, communicate with, and influence other people. Not designed as an encounter group, but includes active demonstrations as required. Characteristics of self-concept, group structure and leadership, personal perception, affiliations. One class hour weekly for 15 weeks or 3 class hours weekly for 5 weeks. Offered upon indication of need

PSY 106 Psychology of Sleep and Dreams (1)  
 Basic theory and current research on sleep and dreams. Topics include sleep patterns, deprivation, disorders and dream work. Extensive class discussion of actual dream reports and interpretations. One class hour weekly for 15 weeks or 3 class hours weekly for 5 weeks.

PSY 107 Introduction to Hypnosis and Meditation (1)  
 Theory, research, practice of hypnosis, self-hypnosis, meditation. Includes similarities, differences, use for personal growth, methods, potential benefits and abuses. 1 class hour weekly for 15 weeks or 3 class hours weekly for 5 weeks. Alternate academic years

PSY 203 Social Psychology and Interpersonal Relations (3)  
 Prerequisite: PSY 101. Basic social psychology concepts in contemporary theoretical orientations and related research findings. Covers motivation, personality, attitude formation and change, leadership, group dynamics, roles, social norms, audiences, collective behavior. Three class hours weekly. Offered upon indication of need

PSY 205 Psychology of Personality (3)  
 Prerequisite: PSY 101. Basic orientation to the psychology of personality. Examines major theories including psychoanalytic, behavior, humanistic, phenomenological and others. Explores certain general issues such as achievement, motivation, psychopathology, sexual adjustment, and personal religious orientation. Three class hours weekly. Alternate academic years

PSY 206 Abnormal Psychology (3)  
 Prerequisite: PSY 101. Scientific view of abnormal behavior and mental illness covers historical overview, unscientific attitudes and legends; emergence of science; movements; classifications; origins of behavior; personality; defensive reactions; psychoneuroses; functional and organic psychosis; addiction; mental deficiency; psychosis of the aged; criminal psychosis; diagnostic procedures and types of therapy. Also examines modern mental hospitals and clinics and discusses professional disciplines. Three class hours weekly.

PSY 207 Organizational Behavior (3)  
 Recommended background: PSY 101. Considers psychological principles, applications and methods relating to problems in business, industry and the professions. Topics include management, development, behavioral engineering/productivity, motivation, leadership, social interactions, job selection and adjustment and research methods. A lecture, discussion and case study approach is taken. Three class hours weekly. Alternate academic years

PSY 211 The Social Psychological Aspects of Aging and Death (3)  
 Prerequisite: PSY 101. An understanding of the psychological and sociological implications of growing old. Examines what the aging process involves and how it affects the individual in various aspects of everyday life. Also examined is the phenomenon of death as it affects the individual and society. Students examine the psychological problems involved in dealing with death as well as practical problems such as funeral preparation and expense. Three class hours weekly.

PSY 212 Development Psychology - Life Span (3)  
 Prerequisite: PSY 101. Introduction to the foundations of human development across the life span. Developmental processes and issues characterizing various stages of aging are studied, with attention to the interrelationships of the various stages and intergenerational issues. Three class hours weekly.

PSY 213 Psychology of Sport and Motivation (3)  
 Prerequisite: PSY 101. Examines sport psychology and motivation, goal-setting, group dynamics. Characteristics of successful athletes, coaching and counseling young athletes, motivational theories, team development, attribution theories, female athletes, building athletes' self-esteem. Focuses on the perspective of coaches and counselors in educational and community settings. Three class hours weekly. Alternate academic years

PSY 214 Selected Topics in Psychology (3)  
 Prerequisite: PSY 101. Studies contemporary issues. A reading and discussion oriented format. Topics include learning and motivation, perception and consciousness, psychology, literature and art, stress, and distress. Three class hours weekly.

PSY 215 Child Psychology (3)  
 Prerequisite: PSY 101. Examines human growth and development from conception to puberty. Students are exposed to a scientific perspective regarding theory and research in the areas of physical, cognitive and psychosocial development. Topics include childbirth, language development, child abuse and parenting styles. Three class hours weekly.

PSY 216 Adolescent Psychology (3)  
Prerequisite: PSY 101. Examines the growth and behavior of the adolescent and young adult. Studies the effect of physical and environmental changes on the individual, physical, social, emotional, and personal growth and development. Considers individual differences, applications of development and the effect of rapidly changing times. Three class hours weekly.

PSY 217 Introduction to Children with Exceptionalities (3)  
Recommended background: PSY 101. Focusing on working with children in an educational setting, course introduces students to the various exceptionalities, characteristics of children with exceptionalities, federal and state laws, educational implications, and strategies for working effectively with families and other professionals. Off-campus observations may be required; students must provide their own transportation.

PSY 220 Psychology of Alcohol, Drug Use and Abuse (3)  
Prerequisite or concurrent enrollment: PSY 101. Introductory orientation to the psychology of human behavior related to substance use, abuse, and dependence; aims and methods of psychological investigation; the impact of alcohol and drug use on the individual, family, and community. A review of alcohol, prescription medications, over-the-counter medications, and illegal substances is examined and discussed. 3 class hours weekly.  
Offered upon indication of need

PSY 221 Assessment, Evaluation and Treatment Planning (3)  
Prerequisites: PSY 101 and PSY 220. Orientation to assessment, evaluation, and developing treatment plans for the addicted client as in cases of substance use, abuse, and dependence. It explores the assessment of alcohol and drug use on the individual, family, and community. It studies the aims and methods of treatment utilization specifically designed towards the addicted client. 3 class hours weekly.  
Offered upon indication of need

## Sociology

Courses are offered every academic year unless otherwise noted.

SOC 101 Introductory Sociology (3)  
Introduces sociology as a science concerned with relationships, institutions, organizations, and the physical environment. Outlines the major theories as a basis for sociological perspectives on social issues. Covers the origins of sociology as a science, diverse patterns of social organization from a global perspective, the nature and substance of cultural systems and social institutions, and sociological perspectives in analyzing trends in human society. Three class hours weekly.

SOC 102 Contemporary Social Issues (3)  
Prerequisite: SOC 101. An in-depth examination of selected social problems, their nature, causes, extent and their effect upon society. Includes theoretical explanations, significant research studies and evaluations of various techniques of control. Three class hours weekly.  
Offered upon indication of need

SOC 104 Marriage and the Family (3)  
Prerequisite: SOC 101. A sociological analysis of the family and its forms and functions in various cultural settings. Provides a sociological framework for viewing one of the major social institutions of our society. Emphasis on the American family in its industrial setting with consideration given to courtship, marriage and divorce. Three class hours weekly.  
Offered upon indication of need

SOC 105 Deviant Behavior (3)  
Prerequisite: SOC 101. Sociological approach to the nature and substance of deviant behavior. Examines the body of sociological theory dealing with the causes, distribution, and societal reaction to deviant behavior. Three class hours weekly.  
Offered upon indication of need

SOC 110 Race and Ethnicity (3)  
Prerequisite: One of the following courses: SOC 101, ANTH 101, HIST 101, 102, 201, or 202. Provides an overview of the social and ethnic diversity of the United States. Delves into the cultures of various racial and ethnic American minorities and deals with theories of prejudice, discrimination and inter-group relations. Discusses techniques for eliminating these problems. Three class hours weekly.

SOC 120 Sociology of Sport and Leisure (3)  
Recommended background: SOC 101. The study of sport and leisure in society is concerned with how sport influences, and in turn, is influenced by, institutions (education, politics, religion, science, economics, mass media). Sport has been described as a microcosm of our society values—competition, materialism, bureaucracy, power (Coakley, 1986; Eitzen and Sage, 1982). The pervasiveness of sport as an institution is the academic focus of the course. Three class hours weekly.  
Alternate academic years

SOC 203 Selected Topics in Substance Abuse (3)  
Prerequisite: SOC 101 or PSY 101. Studies contemporary issues and problems through readings, discussion, role-playing, experiential work. Topics cover addictive/compulsive behaviors, medical and religious models of addiction; learning theory and addiction; addiction to alcohol, legal and illegal drugs, love, sex, food, cigarettes, coffee, shopping, soap operas, gambling; workaholic syndrome; cleaning compulsion; hypochondria; weight problems including bulimia and anorexia; family patterns in addiction; children of addictive/maladjusted families; other addictions/compulsive behaviors as viewed in public and therapy. Three class hours weekly.  
Offered upon indication of need

## Spanish

SPAN 101–102, 103–104

Elementary and intermediate foreign languages begin in the fall only and continue as a year sequence. Students who need a full year should be aware of this. When in doubt about placement, students are urged to seek advice of foreign language faculty or the Humanities Division chair.

SPAN 101-102 Elementary Spanish I-II (4 / semester)  
Introduces fundamentals of Spanish grammar and develops all

four skills of communication: listening, speaking, reading and writing. Videos and music help familiarize students with cultural aspects of Hispanic society. Focus on classroom audio-lingual practice, supplemented by laboratory work. Recommended for beginning students to meet a foreign language requirement for degree or career. (Native Spanish speakers should not enroll. Students who have had high school Spanish through Regents level may not take SPAN 101.) Three class hours weekly/required laboratory.

SPAN 103-104 Intermediate Spanish I-II (3 / semester)  
Improves understanding, speaking, reading, and writing through review and further study of grammar, readings, and video material on Hispanic civilization, people, and culture. Recommended for students with a year of college Spanish, high school Regents Spanish, or two strong years of high school Spanish. Three class hours weekly.

SPAN 111-112 Spanish Conversation I-II (3 / semester)  
Develops proficiency in speaking and understanding basic Spanish. Videocassettes and slides are used to familiarize students with everyday life in the Hispanic world. Practice with tapes is encouraged. No previous knowledge of Spanish is required for SPAN 111. Three class hours weekly.

## Student Development

Courses are offered every academic year unless otherwise noted.

S.D. 101 Career and Life Planning (3)  
Provides a systematic method for making career and life style decisions. Presents a structured method for practicing effective decision-making skills, clarifying one's values and learning job-hunting techniques. Examines other topics that influence life and career choices such as goal setting, stress management and communication styles. Individuals develop personal strategies for short- and long-term educational and career planning. Three class hours weekly.

S.D. 102 College Success (1)  
Extended orientation to college, recommended for the first freshman semester. Addresses academic success through topics such as getting organized, reading for learning, test-taking skills, faculty expectations, careers and choosing a major, library research, college services, extracurricular activities, personal growth. Two class hours weekly.

## Telecommunications

Courses are offered every academic year unless otherwise noted.

TELC 101 Introduction to Mass Media (3)  
Prerequisite: ENGL 101 or concurrent enrollment. Introduces the practices and business aspects of American mass media industries. Explores the history, structure, organization, function and effects of mass media. Three class hours weekly.

TELC 102 Introduction to Telecommunications (3)  
Introduces the practices and business aspects of American telecommunications industries. Explores the history, structure, organization, and function of telecommunications. Three class hours weekly.

TELC 103 Introduction to the Moving Image (3)  
Covers the development and employment of television and film techniques. Emphasis on how these techniques are used as a form of artistic expression and create meaning. Classic films, from the silent period to the present day, and television programs are screened. Three class hours weekly.

TELC 104 Broadcast Techniques I (3)  
Focuses equally on basic radio and television production techniques. Beginning in first week of class, two-hour weekly labs provide practice in proper operation of television and radio devices, using techniques explained in lectures. Two class hours and two lab hours weekly.

TELC 105 Broadcast Techniques II (3)  
Prerequisite: TELC 104. Teaches the techniques of planning and executing radio and television productions and how to apply them to the basic radio/TV production techniques acquired in TELC 104. Provides additional training in the use of audio and television equipment. Requires production of original radio and television programs suitable for broadcast. Two class hours and two lab hours weekly.

TELC 106 Radio and Television Announcing (3)  
Prerequisite: TELC 104. Develops the techniques involved in non-dramatic performance in the broadcast industry. Includes the mechanics of voice, diction and vocal presentation with emphasis on message design and communicating ideas. Students complete a variety of exercises for presentation in the radio and television media. Three class hours weekly.

TELC 114 Lighting (3)  
Lectures and labs teach the theories and methods of lighting techniques for television, film, and theatre production. Instrument selection and application, circuiting and control systems, metering techniques, basic design. Required for radio and television majors. Three class hours weekly.

TELC 140 Analysis of Broadcast Equipment Systems (3)  
Recommended background: TELC 104 or ELEC 101. Lecture and laboratory course teaches how various components within radio, television and cable facilities form a working system. Emphasis on proper interface of equipment, equipment compatibility, and changes and substitutions which may be made during equipment failures. Three class hours weekly.

TELC 150 Photography: Digital Imaging and Visual Communications (3)  
Lectures, demonstrations and hands-on activities explore the theory and applications of film-based and electronic imaging. Students learn how to work with captured images, process and manipulate digital images, and create picture files that can be sequenced, saved or outputted to electronic imaging or printing devices. Three class hours weekly.

TELC 165 Broadcasting: The British Experience (3)  
Travel-study course offers a comprehensive view of the broadcasting industry in Great Britain. Examines the major differences between the British and American broadcasting systems, as well as the impact of American programming and

technology in Britain. Includes visits to broadcast facilities and lectures by professionals in the British broadcasting industry. Intersession only

TELC 170 Introduction to Interactive Media Techniques I (3)

Introduction to techniques and processes of content creation in interactive and digital media formats. Covers the use of CDs, DVDs and websites by broadcast, cable, satellite and internet delivery providers. Two classes, two lab hours weekly. Offered upon indication of need

TELC 171 Introduction to Interactive Media Techniques II (3)

Prerequisite: TELC 170. This course is designed to give students basic knowledge of the audio, video and imaging systems used by broadcasters and filmmakers to produce digital and interactive media. Two classes, two lab hours weekly. Offered upon indication of need

TELC 175 Interactive Media Production (3)

Prerequisite: TELC 170. In this class students will produce an interactive media project, suitable for use by a media outlet (radio or television broadcaster, film or video producer) in a digital format. Two classes, two lab hours weekly. Offered upon indication of need

TELC 180 Video Field Production (3)

Prerequisite: TELC 104. An introductory course in video field production. Students will learn the aesthetics and techniques of single camera on-location video recording and postproduction editing. Includes practice in planning location shoots, operating camcorders, location lighting and audio, and video editing. Students will produce single-camera video projects individually and in groups. Two lecture, two lab hours weekly.

TELC 192 Script Analysis and Production (3)

Prerequisite: TELC 104. Introduces the student to the analysis and development of scripts from written form into actual video and film productions. Each student will take an idea for a short narrative film through the stages of concept, script, and finished production and produce a short narrative production. Three lecture hours weekly. Offered upon indication of need

TELC 199 Selected Topics in Telecommunications Technology (1)

Provides experience in the operation of specific software and hardware technologies in audio, video, telecommunications and related media fields. One class hour weekly for 15 weeks or three class hours weekly for five weeks. Offered upon indication of need

TELC 204 Journalism Practicum (3)

Extensive experience in the operation of a college newspaper. Students participate in editorial, design, advertising, and circulation activities. Requires a minimum of six hours per week of practical activity and two class hours per week. Also requires research into a specific area of newspaper operations.

TELC 205 Practicum in Radio Operations (3)

Prerequisite: TELC 104. Provides extensive experience in radio operations. Students may participate in on-air operations, public service production, or news gathering and presentation. Requires at least 10 hours per week of practical activity and one 1-1/2 hour class period for each student for 10 weeks. Also requires research into a specific area of radio management, operations or engineering.

TELC 206 Practicum in Radio Operations Management (3)

Prerequisite: TELC 205. Extensive experience including all phases of operations management and decision-making for all activities at the student radio station. Includes FCC legal and technical compliance, selection and training of staff, music format, selection policy, news, station promotion, traffic, and continuity. Requires at least 10 hours per week of practical activity and one 1-1/2 hour class period for 10 weeks, and research into a specific area of radio management. Enrollment limited to student managers of the college's radio station.

TELC 207 Television Production I (4)

Prerequisite: TELC 104. Hands-on equipment operations course builds on knowledge from TELC 104. Lectures cover equipment use and production techniques. TV studio, portable television equipment, and editing facility are used in weekly four-hour labs. Students produce several studio and remote programs which may be cablecast for public viewing. Two class hours and four lab hours weekly.

TELC 208 Television Production II (4)

Prerequisite: TELC 207. Combines production knowledge from TELC 104 and 207 with effective communication theory. Lectures emphasize preproduction planning, audience research, and effective script design. Labs add experience and expertise in operations. Students produce studio programs for public view, and small teams work on longer remote productions requiring more sophisticated message design and technical editing. Two class hours and four lab hours weekly.

TELC 210 Special Topics in Telecommunications and Mass Media (3)

Devoted to a specific topic or area of expertise in audio, video, or media-related field. An opportunity for in-depth experience in an area not fully covered in other classes. Offered upon indication of need

TELC 220 Advanced Audio Production (3)

Prerequisite: TELC 104. Provides an advanced understanding of audio equipment in the field and in the recording studio. Topical areas include sound reinforcement, recording studio techniques and acoustic analysis. Three class hours weekly.

TELC 230 Music / Multi-Track Recording (3)

Prerequisite: TELC 104. Corequisite: TELC 220. Advanced instruction in methodology of live and multi-track recording includes acoustics, microphones, tape recorders, mixing consoles, loudspeakers. Emphasis on multi-track technology includes overdubbing, remixing and signal processing. Also studies basic industry practices. Three class hours weekly.

TELC 231 Advanced Recording Techniques (3)  
Prerequisite: TELC 230. Advanced course in multi-track recording technology and recording industry practices. Topics include business aspects of the recording industry, studio operations and maintenance, current practices and anticipated future developments. Covers in-depth study of over-dubbing, remixing and album production. Students prepare a professional quality recording production. Three class hours weekly.

TELC 240 Audio for Media (3)  
Prerequisite: TELC 104. Designed to develop understanding of the relationship of audio production to various related media including radio, television, video, multimedia and film. Emphasis on sound design and on the creation and recording of radio spots, dialogue, music beds and soundtracks. Students produce several projects under the supervision of the instructor. Three class hours weekly.

TELC 260 Broadcast Systems Maintenance (3)  
Recommended background: TELC 140. Provides instruction in the maintenance of radio and television broadcast equipment. Emphasis on procedures common in daily routine preventive maintenance. Three class hours weekly.

TELC 270 RF Transmission Systems (3)  
Recommended background: MATH 104 and ELEC 102. Provides instruction in the operation and maintenance of RF Transmission Systems. Studies radio and TV broadcasting systems, microwave, satellite and cable systems for video, audio, voice and data. Includes visits to various types of transmission facilities. Three class hours weekly.

TELC 275 Internship in Radio and TV (3)  
Prerequisite: TELC 104 and 207. Intensive individual study and field experience in a telecommunications area of choice to obtain in-service training at a broadcasting facility. Requires a minimum of eight hours weekly at internship site and one weekly class meeting for a progress report. Requires periodic written reports and a journal of on-site activities. May be taken only during the final semester. One class hour weekly.

## Theatre Arts

Courses are offered every academic year unless otherwise noted.

THA 101 Introduction to Theatre (3)  
Enhances appreciation for the theatre arts through a study of theatre history and reading and discussion of selected pieces of dramatic literature. Also focuses on the personnel and functions involved in a theatrical production. Class discussion relates theatre to other types of performance events. Does not require acting. Three class hours weekly.

THA 113 Introduction to Technical Theatre (3)  
Lecture and hands-on course develops awareness and appreciation as it explores scenic construction and painting, lighting, costuming, make-up, properties, stage management, show run crews and safety practices. Note: Course requires hours outside of class for the preparation of a live theatre piece. Alternate academic years

THA 152 Basic Acting (3)  
Treating acting as an avocation rather than a profession, this course introduces mental, physical, and vocal techniques used by actors, students become aware of the image they present. Requires class participation in improvisational exercises, scene work and character studies, with an emphasis on process rather than performance. Three class hours weekly.

THA 165 Selected Topics in International Theatre: The London Theatre (3)  
Participants spend two weeks in London attending and discussing plays presented by the National Theatre, Royal Shakespeare Company in Stratford-on-Avon, several West End theatres, and experimental companies of the Fringe. Seminars discuss productions with guests from these companies, including directors, actors, playwrights and designers. Intersession only

THA 210 Creating a Character (3)  
Prerequisite: THA 152. Explores techniques used by actors in developing a character. Studies concentrate on skills used by modern actors to create a realistic character. This studio course requires acting in class. Three class hours weekly. Alternate academic years

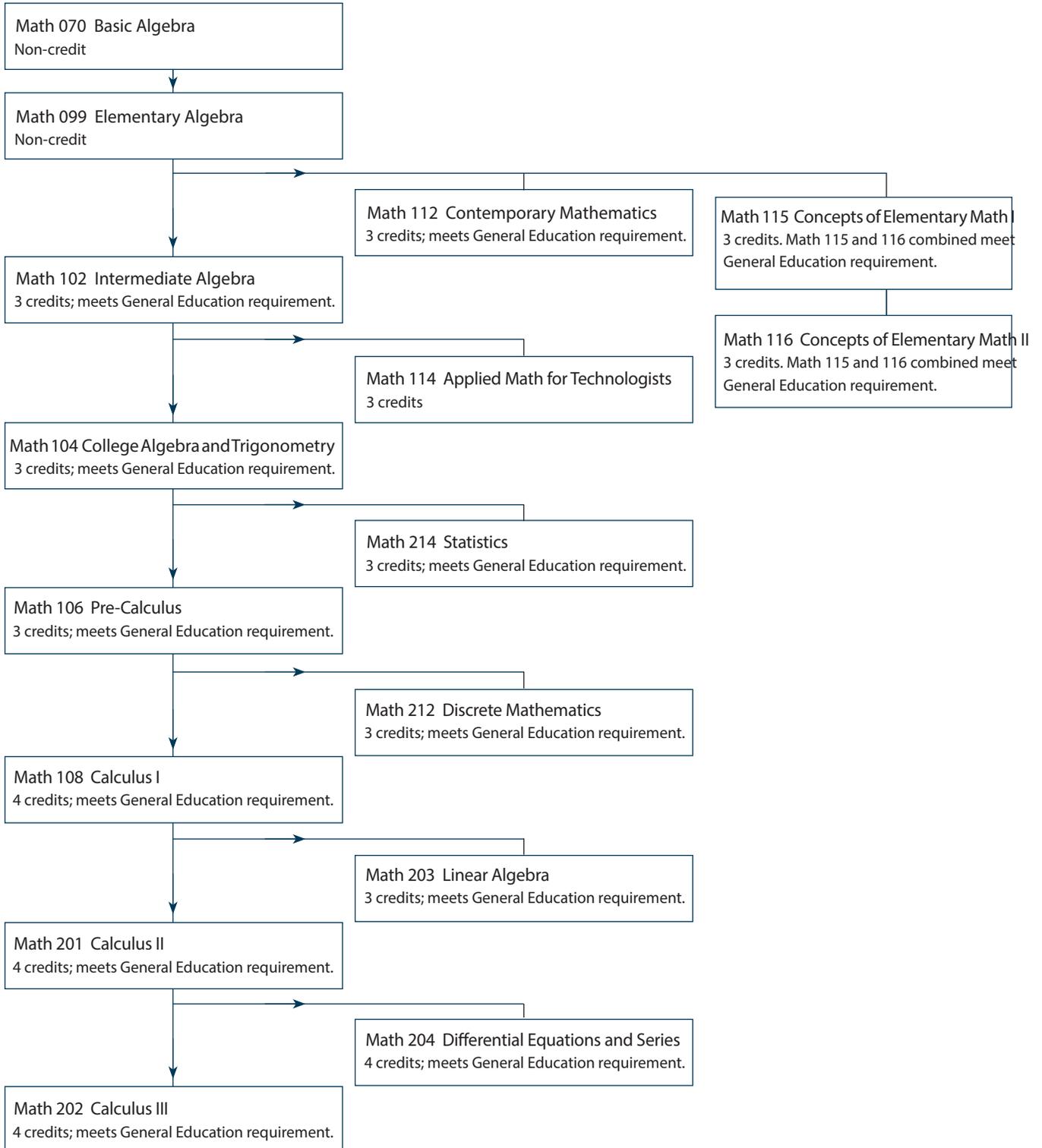


## Mathematics flowchart

Students are required to take the mathematics placement test to determine their first college math course. The only exception is made for students who have passed high school calculus; these students are automatically placed in Calculus I. Students who request placement in Calculus II will be given a separate examination by the mathematics faculty.

### Math Sequence

### Supplemental



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# Cayuga Community College

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