Academic Programs

Registered Programs

The programs offered are registered by the State Education Department and State University of New York. Enrollment in other than a registered program may jeopardize a student's eligibility for financial aid.*

New York State Education Department, Office of Higher Education and the Professions, Cultural Education Center, Room 5B28, Albany, New York 12230 (518) 474-5851

Associate Degrees

Orange County Community College operates under the supervision of the State University of New York and is authorized by the Board of Regents of the University of the State of New York to award three degrees—the Associate in Arts (A.A.), the Associate in Science (A.S.), and the Associate in Applied Science (A.A.S.).

The Associate in Arts and the Associate in Science degrees are designed for students who intend to transfer to four-year colleges or universities. The Associate in Applied Science degree is awarded in professional/technical fields and is designed to prepare the graduate for the demands of the world of work.

One-Year Certificate Programs

Orange County Community College also offers a number of one-year certificate programs. They are designed to develop job-entry skills at the collegiate level.

General Degree Requirements

The following academic standards apply to all first degrees:

- 6 credits of Freshman English
- 2 credits of Physical Education (including PES 100 Concepts of Physical Wellness) in addition to 60 credit hours
- Achievement of at least an overall "C" average (CQPA of 2.00)
- 30 of the total number of required credits must be taken at SUNY Orange
- For all A.A.S. degree programs, students are also required to achieve at least an overall "C" average (CQPA of 2.00) in their professional/technical major

Each of the degrees must meet the minimum requirements as set forth by New York State Education Law. These include at least 60 credit hours of study of which 45 credits must be in the liberal arts for the A.A. degree, 30 credits for the A.S. degree and 20 credits for the A.A.S.

As of the Spring 2011 semester, students enrolled in the Business Management, Criminal Justice, Criminal Justice–Police, Human Services, Liberal Arts: Humanities and Social Science, Liberal Arts: Individual Studies and Nursing degree programs on the Newburgh campus can complete all of their degree requirements at that campus. Students enrolled in the College's remaining degree programs may take courses in Newburgh but must also complete a portion of their degree requirements at the Middletown campus.

Students may complete no more than 30 of their credits online as the College does not offer complete degree programs online.

The degree earned depends upon the educational and career goals of the individual. Each of the degrees offered at SUNY Orange is listed by degree title on the pages that follow with a description of the purpose, goals and specific course requirements.

Accounting

Degree Awarded: Associate in Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester	Credits
ENG 101 Freshman English 1	3
_____ Restricted SUNY Elective*	3
MAT ___ Math Course**	3/4
OFT 106 Keyboarding***	1
ACC 153 Financial Accounting	4
BUS 161 Computer Applications for Business****	3
PES 100 Concepts of Physical Wellness	1

Second Semester	
ENG 102 Freshman English 2	3
_____ Restricted SUNY Elective*	3
MAT ___ Math Course	**3/4
ECO 201 Macro-Economics	3
ACC 154 Managerial Accounting	4
PES ___ Physical Education	1

Third Semester	
ECO 202 Micro-Economics	3
_____ SUNY Natural Science (GE 2)	3/4
BUS 201 Business Law 1	3
ACC 205 Accounting w/ Micro. Appl. or	
BUS 205 Business Statistics	3
ACC 201 Intermediate Accounting 1	4

Fourth Semester	
_____ Restricted SUNY Elective*	3
MKT 101 Marketing **or**	
MGT 201 Principles of Management	3
BUS 202 Business Law 2	3
ACC 202 Intermediate Accounting 2	4
BUS 203 Business Communications	3

Total Credits: 67-70

ACC 220 Accounting Internship+	3

* *Select from three different SUNY lists; do not duplicate: American History (GE 4), Western Civilization (GE 5), Other/World Civilization (GE 6), Arts (GE 8), Foreign Language (GE 9).*
** *Select one of the following pairs:*
  (MAT 121 and MAT 122) (MAT 122 and MAT 205) (MAT 131 and MAT 205) (MAT 205 and MAT 206)
*** *Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.*
+ *This course is an **additional, optional course** and does not replace any other course in this program.*
**** *formerly CIT 101 Microcomputer Applications*

Program Description

The Associate in Science degree program in Accounting prepares graduates to continue their education in accounting or finance at a four-year college or university.

Sudents learn the accounting cycle including preparation of financial statements in accordance with GAAP. Special projects teach analytical skills through finding, extracting and evaluating financial information to make sound decisions. Students use Excel extensively to solve a variety of accounting problems. The Financial Accounting Research System (FARS) database is introduced so that students can learn to research complex accounting issues, thus preparing them for both the CPA exam and professional practice as an accountant. Students may also complete an internship course which gives them the opportunity to build their resume and earn college credits.

Students entering the workforce after completing a baccalaureate degree in accounting benefit from a strong demand for accountants. Employment opportunities include positions in public accounting firms, private and public companies, government and not-for-profit agencies. Most will achieve the professional Certified Public Accountant (CPA) designation and many pursue graduate degrees.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Developmental courses should be completed before students attempt the courses in this program. Since College Algebra and Trigonometry are required sequences, students placing into lower levels are required to complete these prior to attempting College Algebra and Trigonometry.

Students entering this A.S. program should have successfully completed three or more years of college preparatory math and have an overall high school average of 75 or above.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Accounting

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- demonstrate knowledge of the accounting cycle, including preparation of financial statements in accordance with Generally Accepted Accounting Principles (GAAP).

- demonstrate analytical skills through finding, extracting and evaluating financial information to make sound business decisions.

- create and edit Excel spreadsheets to solve various accounting problems.

- research answers to accounting problems using a research database (FARS).

- explain the purpose and responsibilities of the professional accountant in the business community.

- express business information effectively in both oral and written form.

- learn critical thinking skills through an analytical business report project.

Career Opportunities

- CPA (certified public accountant)
- CMA (certified management accountant)
- financial analyst
- financial planner

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- Franklin University
- Marist College
- Mercy College
- Mount St. Mary College
- Pace University
- Ramapo College
- SUNY Albany
- SUNY Cortland
- SUNY Empire State College
- SUNY Institute of Technology
- SUNY New Paltz

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Accounting

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester	Credits
ENG 101 Freshman English 1	3
MAT ___ Mathematics	3
BUS 101 Business Math	3
BUS 103 Introduction to Business	3
ACC 101 Accounting Principles 1	4
OFT 106 Keyboarding*	1
PES 100 Concepts of Physical Wellness	1

Second Semester	
ENG 102 Freshman English 2	3
MAT ___ Mathematics	3
BUS 161 Computer Applications for Business***	3
BUS 105 Business & Society	3
ACC 102 Accounting Principles 2	4
PES ___ Physical Education	1

Third Semester	
_____ Social Science Elective	3
BUS 201 Business Law 1	3
BUS 203 Business Communications	3
ACC 211 Income Tax Procedures	3
ACC 205 Accounting with Microcomputer Applications	3

Fourth Semester	
_____ Social Science Elective	3
BUS 202 Business Law 2	3
ACC 214 Accounting Practice**	4
_____ Liberal Arts Elective	3
ACC 111 Personal Finance **or**	
ACC 220 Accounting Internship	3

Total Credits: 66

* *Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.*
** *Students must achieve a grade of C or better to graduate from this program.*
***formerly CIT 101 Microcomputer Applications*

Program Description

The Associate in Applied Science degree program in Accounting prepares graduates to begin their careers assisting accountants as full-charge bookkeepers, junior accountants, accounting clerks or office managers in the private, public or government sectors.

Students take a sequence of accounting coursework including Accounting Principles 1 and 2, Income Tax Procedures, Accounting with Microcomputer Applications and Accounting Practice. With computer software, students learn to use correct accounting procedures through the accounting cycle. Special Excel spreadsheet and QuickBooks projects are provided to enhance the understanding of real world applications.

The accounting assistant provides bookkeeping capabilities to a variety of employers through such responsibilities as accounts receivable/payable, payroll, balance sheets, and income statements, billing, and bank statement reconciliation.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Developmental classes should be completed before attempting the courses in this program.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- demonstrate knowledge of the accounting cycle, including preparation of financial statements in accordance with Generally Accepted Accounting Principles (GAAP).
- express business information effectively in both oral and written form.
- demonstrate the ability to effectively interface with an automated accounting system.
- create and edit Excel spreadsheets to solve various accounting problems.
- learn critical thinking skills through an analytical business report project.

Career Opportunities

General accounting and bookkeeping positions exist in the following fields:
- service
- education
- travel
- entertainment
- manufacturing
- insurance
- industrial
- media/advertising

Transfer Opportunities

While the A.A.S. is a degree leading to immediate employment, SUNY Orange has a special relationship for transfer to a B.S. degree in accounting with Franklin University. Other transfers agreements of courses exit with

- Mount St. Mary College
- Ramapo College
- SUNY Empire State College

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Accounting Procedures

Degree Awarded: Certificate

Recommended Course Sequence

		Credits
ACC 101	Accounting Principles 1	4
BUS 101	Business Math **or**	
ACC 111	Personal Finance	3
BUS 103	Introduction to Business	3
BUS 161	Computer Applications for Business***	3
OFT 106	Keyboarding**	1
BUS 201	Business Law 1	3
ACC 102	Accounting Principles 2	4
BUS 105	Business and Society **or**	
BUS 203	Business Communications	3
ACC 205	Acctg. w/Microcomputer Applications	3
ACC 214	Accounting Practice*	4
	Total Credits:	31

* *Students must achieve a grade of C or better to graduate from this program.*
** *Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.*
*** *formerly CIT 101 Microcomputer Applications*

Program Description

The Accounting Procedures certificate program prepares graduates to work in entry-level bookkeeping positions. Emphasis is placed on developing bookkeeping skills and knowledge of general business practices.

Students take a sequence of accounting coursework including Accounting Principles 1 and 2, Accounting with Microcomputer Applications, and Accounting Practice. Students learn the accounting cycle using both manual and computer software systems. Special Excel spreadsheet and QuickBooks projects are provided to enhance the understanding of real world applications.

Graduates can utilize their acquired skills in various entry-level positions such as bookkeepers, accounts receivable/payable clerks, and payroll clerks with responsibilities and abilities in balance sheets, income statements, billing and bank statement reconciliation.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Developmental courses should be completed before attempting the courses in this program.

Student Learning Outcomes

Students will:

- demonstrate knowledge of the accounting cycle, including preparation of financial statements in accordance with Generally Accepted Accounting Principles (GAAP).
- demonstrate the ability to effectively interface with an automated accounting system.
- create and edit Excel spreadsheets to solve various accounting problems.
- learn critical thinking skills through an analytical business project.

Career Opportunities

General accounting and bookkeeping positions exist in the following fields:

- service
- education
- travel
- entertainment
- manufacturing
- insurance
- industrial
- media/advertising

Transfer Opportunities

While the Certificate program leads to immediate job placement upon graduation, SUNY Orange has a special relationship with Franklin University for transfer to a B.S. degree in Applied Management or Accounting. In addition, all courses taken for this certificate may be applied to the A.A.S. Accounting degree program at SUNY Orange.

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Architectural Technology

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
MAT 107	Technical Math 1	3
CAD 101	Introduction to CAD	3
ARC 101	Architectural Graphics	3
ARC 105	Bldg Materials & Methods 1	2
ARC 111	Architectural Design 1	3
Second Semester		
ENG 102	Freshman English 2	3
CAD 102	Computer Aided Drafting 2	2
ARC 102	Advanced Arch. Graphics	3
ARC 106	Bldg Materials & Methods 2	4
ARC 112	Architectural Design 2	3
ARC 215	Architecture to the 18th Century	3
Third Semester		
_____	Social Science Elective	3
PHY 111	Applied Physics 1	3
ARC 211	Architectural Design 3	3
ARC 205	Working Drawings 1	3
ARC 201	Digital Portfolio	1
ARC 216	Architecture from the 19th C	3
PES 100	Concepts of Physical Wellness	1
Fourth Semester		
_____	Social ScienceElective	3
ARC 220	Mechanical and Electrical Equip.	3
ARC 206	Working Drawings 2	4
ARC 212	Architectural Design 4	4
ARC 221	Strength of Materials	3
PES ____	Physical Education	1

Total Credits: 70

Program Description

The Associate in Applied Science degree program in Architectural Technology prepares graduates to enter the workforce as architectural team members. While other opportunities exist, the largest job opportunities are positions as interns / CAD operators for architectural firms. Graduates' skills will prepare them to produce working drawings in a variety of settings, such as engineering firms or manufacturers. If graduates have field experience in a building trade, all program outcomes are directly transferable to entry-level positions in construction management and supervision. A broad cross-section of course content is covered in the program; this familiarizes students with many aspects of the architectural profession, the work of building professionals and the construction process.

When working under the supervision of a licensed professional (i.e. Registered Architect, Professional Engineer, etc.), a graduate's primary responsibilities would include measuring and documenting existing conditions of buildings and sites, preparing construction documents, interpreting construction documents, preparing design presentations for clients or other audiences, and coordinating architectural drawings with consultants' drawings.

Fluency with computer-aided drawing (AutoCAD) and computer literacy, as it applies to generating architectural drawings, are fundamental skills graduates will possess. Meanwhile, freehand sketching is stressed wherever possible as a valuable communication method. Beyond preparing construction drawings, students will build models, prepare reports and orally present their work to groups.

Most courses in the program are a combination of lecture and lab. In the lecture component, foundational material is presented, often accompanied by samples, examples or other visual cues. In the lab component, students will either work on short-term exercises designed to hone very specific knowledge bases or skills or they will work on long-term projects designed to simulate the types of projects that they will eventually encounter in the workforce. Students should be prepared to spend a significant amount of time on projects outside the classroom.

Many students who enter this degree program plan to transfer to an upper division institution. Because these opportunities exist, second year students who intend to transfer should select their courses in careful consultation with their academic advisor. Portfolio production will be required.

For those students wishing to become Registered Architects, New York State Department of Education guidelines must be followed. To become a Registered Architect, one must earn an NAAB-accredited Bachelor of Architecture or Master of Architecture degree, fulfill NCARB internship requirements (a proscribed three year apprenticeship), and pass a challenging and comprehensive licensing examination.

For those students wishing to pursue baccalaureate degrees in Landscape Architecture and Construction Management, an A.S. degree from SUNY Orange with electives from the Architectural Technology degree program may be most suitable. Course selection should be made carefully in consultation with academic advisors.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Maintenance of a C average or better in courses in the major is also required.

Student Learning Outcomes

Students will:

- demonstrate an understanding of building materials and methods.

- graphically communicate architectural forms and building assemblies, both two and three dimensionally.

- demonstrate fluency using AutoCAD software to produce architectural drawings.

- demonstrate an ability to visualize and manipulate three dimensional spaces.

- demonstrate an appreciation for basic forms of architectural problem solving and aesthetic appreciation.

- demonstrate an understanding of the need for architectural projects to coordinate with related professions (e.g. various forms of engineering).

- demonstrate an understanding of fundamental structural principles.

- demonstrate an understanding of basic life safety issues in buildings and an ability to apply regulatory requirements to building projects.

- utilize research from electronic and other sources (e.g. Sweet's catalog or manufacturers' literature) in architectural projects.

- identify basic methods of sustainable building practices and environmental impacts of architectural choices.

- demonstrate an understanding of the historical and social context of the development of western architecture.

Career Opportunities

- architectural firms
- engineering firms
- manufacturing firms
- construction firms
- governmental agencies
- utility companies

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students have successfully transferred to:

- Alfred State College
- New York Institute of Technology
- New Jersey Institute of Technology
- Pratt Institute
- SUNY Environmental Science and Forestry

Contact Information

Science,Engineering and Architecture Department Chair
(845) 341-4571
Admissions Office
(845) 341-4030

Business Administration

Degree Awarded: Associate in Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
COM 101	Foundations of Communication	3
MAT ___	Selected Math Courses*	3/4
MKT 101	Principles of Marketing	3
ACC 153	Financial Accounting	4

Second Semester		
OFT 106	Keyboarding***	1
ENG 102	Freshman English 2	3
_____	Restricted SUNY Elective**	3
MAT ___	Selected Math Courses*	3/4
ACC 154	Managerial Accounting	4
MGT 201	Principles of Management	3

Third Semester		
ECO 201	Macro-Economics	3
_____	SUNY Natural Science (GE 2)	3/4
BUS 205	Business Statistics	3
BUS 201	Business Law 1	3
MGT 205	Human Resource Management	3
PES 100	Concepts of Physical Wellness	1
PES ___	Physical Education	1

Fourth Semester		
ECO 202	Micro-Economics	3
_____	SUNY Natural Science (GE2)	3/4
BUS 161	Computer Applications for Business*****	3
_____	Restricted SUNY Elective****	3
BUS 207	International Business	3
BUS 202	Business Law 2	3

Total Credits: 68-72

* *Select one of the following pairs of courses: MAT 121 and MAT 122 (minimum requirement); or MAT 122 and MAT 205; or MAT 131 and MAT 205, or MAT 205 and MAT 206.*
** *SUNY American History (GE 4), Western Civilization (GE 5) or Other/World Civilization (GE 6) or Arts (GE 8) or Foreign Language (GE 9) lists.*
*** *Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.*
**** *Select from list not chosen in Second Semester Restricted SUNY Elective list above.*
***** *formerly CIT 101 Microcomputer Applications*

Program Description

The Associate in Science degree program in Business Administration has been designed for those students who plan to transfer and continue their business education at a four-year college. This degree is designed to parallel the bachelor's degree requirements at most four-year colleges in the region. After transfer, graduates may major in areas such as: management, marketing, finance or human resource management. Students enrolled in this degree program acquire an understanding of the relationship between the liberal arts/social sciences and the management of business enterprises. The required mathematics, science and economics courses provide a solid grounding for making proper business decisions.

Because degree requirements vary at transferring institutions, majors are urged to see their business faculty advisors and contact the Admissions Office of the transfer institution. Business Department faculty are well-trained and experienced in their areas of expertise and highly motivated to work with students, helping them to succeed in their quest for transfer to a four-year college.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students are required to complete most developmental classes before attempting the courses in this program. See the Developmental Course List on page 47. Students entering this A.S. program should have successfully completed three or more years of College Preparatory Math and have an overall high school average of 75 or above.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- understand the general nature, structure, resources and operations of business organizations.

- demonstrate the ability to explain an organization's basic accounting, finance, management, marketing and legal functions.

- express business ideas and information effectively in both oral and written forms.

Career Opportunities

- management trainee
- business owner/ entrepreneur
- finance management
- insurance planning and sales
- human resource manager

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer. These transfer institutions include:

- Alfred University
- Berkley College
- Clarkson College
- Columbia University
- Fordham University
- Franklin University
- Manhattan College
- Marist College
- Marymount College
- Mount St. Mary College
- Pace University, Lubin School of Business
- Ramapo College
- St. Thomas Aquinas College
- SUNY Albany
- SUNY Empire State College
- SUNY New Paltz
- SUNY Oswego

Please note: Because degree requirements vary at transferring institutions, majors are urged to see their business faculty advisors and contact the Admissions Office of the transfer institution.

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Business Management

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	Social Science Elective	3
_____	Math or Liberal Arts Science	3
BUS 101	Business Math	3
BUS 103	Introduction to Business	3
OFT 106	Keyboarding*	1

Second Semester		
ENG 102	Freshman English 2	3
_____	Social Science Elective	3
_____	Math or Liberal Arts Science	3
BUS 105	Business and Society	3
MKT 101	Principles of Marketing	3
PES 100	Concepts of Physical Wellness	1

Third Semester		
ACC 101	Accounting Principles 1	4
BUS 161	Computer Applications in Business***	3
BUS 203	Business Communications	3
BUS 201	Business Law 1	3
MGT 205	Human Resource Management	3
PES ____	Physical Education	1

Fourth Semester		
ACC 102	Accounting Principles 2	4
MGT 201	Principles of Management	3
BUS 202	Business Law 2	3
MGT 203	Entrepreneurship **or**	3
MGT 220	Internship: Business**	
_____	Liberal Arts Elective	3

Total Credits: 65

*Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.
**Students need approval of the department chair to register for this course and at least a 2.5 CQPA.
***formerly CIT 101 Microcomputer Applications

This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

The Associate in Applied Science degree program in Business Management prepares graduates to begin their careers as management trainees, first line supervisors, and higher level management positions in either profit or non-profit organizations. Students develop interpersonal and conceptual skills such as motivation, communication, performance appraisal, decision making and problem solving. Various business tools including accounting, computer information systems and law, as well as liberal arts courses, are integrated into the program.

The primary focus of the curriculum is on entrepreneurship for those interested in operating their own business or applying this managerial approach in a medium to large organization in the public or private sector. The program's concentration of business courses provides a strong background for employment. The Business Internship is a popular feature of this degree. Students work for regional companies for academic credit and real-world experience.

Business Department faculty are well-trained and experienced in their areas of expertise, and highly motivated to work with students, helping them to succeed in their quest for a job. Many students complete this degree and transfer to four-year colleges to earn a bachelor's degree; however, students who have this objective are advised that they may suffer transfer credit losses due to the concentration of business courses.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students are required to complete most of the developmental classes before attempting the courses in this program. Please see the Developmental Course List on page 47.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Business Management

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- integrate management theories and tools in a variety of functional areas within an organization.
- demonstrate the ability to use a variety of analytical tools in the functional areas of business.
- express business ideas and information effectively in both oral and in written forms.

Career Opportunities

- supervisor
- management trainee
- business owner/entrepreneur
- financial insurance planning and sales
- human resource specialist trainee

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students have successfully transferred to:

- Franklin University
- Mount St. Mary College
- Ramapo College
- SUNY Empire State College
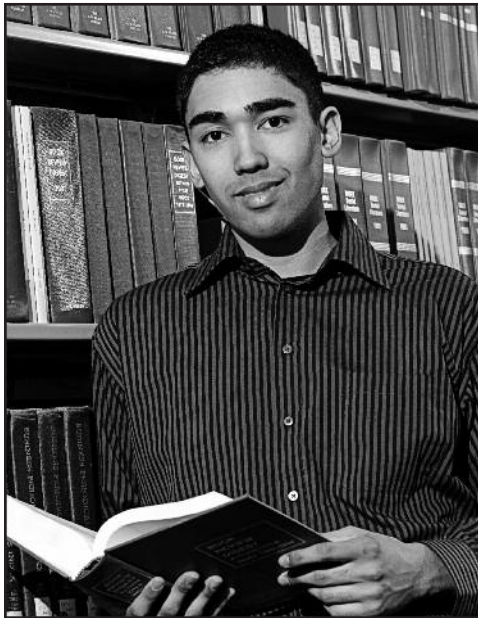
Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Business Studies

Degree Awarded: Certificate

Recommended Course Sequence

SUNY Orange Courses		Credits
ECO 201	Macro Economics **or**	
ECO 202	Micro-Economics	3
ACC 153	Financial Accounting	4
ACC 154	Managerial Accounting	4
MKT 101	Principles of Marketing	3
MGT 201	Principles of Management	3
CSC 101	Computer Science 1 **or**	
CIT 107	Intro to C++ Programming	3
MAT 205	Calculus 1	4

Remaining 10 credits (3 courses) must be taken at SUNY New Paltz

Total: 34

New Paltz Courses	Credits
33207 Macro-Economics or	3
33206 Micro-Economics	
20201 Financial Accounting	4
20202 Managerial Accounting	4
20325 Marketing	3
20252 Principles of Management	3
_____ Computer Program Elective	3
64245 Basic Calculus	4
20341 Fund. of Corporate Finance	3
20309 Stats. for Bus. & Econ. 1	3
20311 Stats. for Bus. & Econ. 2	4

Program Description

The Business Studies certificate program is a joint venture between SUNY Orange and SUNY New Paltz. It offers course work that enables students with non-business undergraduate degrees to enter SUNY New Paltz's Master of Science in Business program.

The objective of this partnership is to provide the citizens/students of the Mid-Hudson Valley Region a quality, cost-effective, geographically convenient education for those non-business students desiring entrance into a graduate business program.

Students take courses in economics, accounting, marketing, management, computer science, and calculus.

Admission Criteria

Students must have completed a non-business baccalaureate degree.

Degree Awarded: Certificate

Student Learning Outcomes

Students will:

- articulate all course content into the M.S. degree at SUNY New Paltz.

- be able to apply for finance, international business or other options in the master's program at SUNY New Paltz.

Career Opportunities

Career paths for this certificate are based upon opportunities after the completion of the master's degree at SUNY New Paltz.

Transfer Opportunities

To learn more about transfer options, contact the School of Business, SUNY New Paltz.

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Clerical Office Assistant

Degree Awarded: Certificate

Recommended Course Sequence

First Semester		Credits
OFT 108	Intermediate Computer Keyboarding	3
OFT 208	Computer Fundamentals for the Office **or**	
_____	Business Elective	3
OFT 209	Microsoft Word and PowerPoint	3
_____	Business Elective	3

Second Semester		
OFT 109	Advanced Computer Keyboarding	3
BUS 203	Business Communications	3
OFT 201	Records/Information Management	3
OFT 207	Transcription Skills	3
OFT 214	Microsoft Excel and Access	3

Total Credits: 27

Program Description

The Clerical Office Assistant certificate program provides the opportunity for graduates to either begin their careers as office assistants or to update their current office skills for re-entry into the business world. Areas of concentration include information processing, data entry, business communications and information management.

The office assistant provides office support to employers in a wide variety of settings. This support includes document production, computer software capability, records management, telephone interaction, customer service, keyboarding and data entry.

Students take a sequence of office skills courses such as keyboarding, Microsoft Word and PowerPoint, Excel and Access, and transcription. They also learn to compose business documents through the Business Communications course and to manage office documents through the Records/Information Management course.

Students learn to use modern office equipment and computer software as they apply to various work environments. Microsoft Office (Word, Excel, PowerPoint, and Access) as well as WordPerfect software programs are presented.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students without sufficient keyboarding ability will be required to take Elementary Computer Keyboarding. Students with sufficient keyboarding ability to pass the waiver for Intermediate Computer Keyboarding fulfill this requirement with a business elective. To complete this program in one year, students must have basic keyboarding skills before enrolling in the program.

Clerical Office Assistant

Degree Awarded: Certificate

Student Learning Outcomes

Students will:

- demonstrate the ability to keyboard business correspondence using various computer software programs in word/information processing.
- demonstrate the ability to keyboard straight copy for five minutes with a maximum of three errors.
- understand computer concepts and applications for the office environment.
- learn critical thinking skills through an analytical business report project.

Career Opportunities

- service
- education
- travel
- entertainment
- manufacturing
- legal & medical
- insurance
- industrial
- media/advertising

Transfer Opportunities

While this certificate program leads to immediate job placement upon graduation, SUNY Orange has a special relationship with Franklin University for transfer to the B.S. degree in Applied Management. In addition, all courses taken for this certificate may be applied to the A.A.S. Office Technologies degree program at SUNY Orange.

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Computer Information Technology–Networking

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
MAT ___	College Algebra or higher	3
CIT 103	Management Information Systems	3
CIT 107	Introduction to C++ Programming	3
CIT 105	Data Communic. & Networking	3
CIT 100	Computer Literacy	3

Second Semester		
ENG 102	Freshman English 2	3
MAT ___	College Trigonometry or higher	3
CIT 112	Computer Hardware and Software	4
CIT 116	Networking 1	4
PES 100	Concepts of Physical Wellness	1

Third Semester		
_____	Social Science Elective	3
CIT 211	Systems Analysis	3
CIT 225	Database Fundamentals	3
CIT 217	Unix/Linux	3
CIT 203	Networking 2	4
PES ____	Physical Education	1

Fourth Semester		
_____	Social Science Elective	3
CIT 212	Systems Design	3
CIT 206	Network Security	3
CIT 230	Internship	3
_____	Restricted Elective*	3

Total Credits: 65

Restricted Electives:
CIT 111   Internet & HTML Programming
CIT 115   Visual Basic
Any course approved by department

Program Description

The Associate in Applied Science degree program in CIT–Networking prepares students for employment in a variety of entry-level careers in computer networking and information technology occupations. The theory and practical experience students gain allows them to enter jobs with highly competitive salaries.

This degree program offers the coursework that provides background information for students to take the CompTIA's A+, Security+, Networking+, Linux+ and CISCO's CNA certification exams. The primary focus of this degree program is networking computer systems including implementation, configuration, maintenance and administration of networking equipment, which includes creation of networking servers. The degree course work introduces students to basic computer systems and builds on theoretical and technical knowledge and skills to develop a strong understanding of networking topologies, mediums and medium access techniques in both local area and wide area networks (LANs and WANs). Classes are designed to provide students with hands-on training utilizing state-of- the-art computer facilities. Students are also placed in a work environment in order to provide actual service to a business through the CIT–Networking internship.

Students are encouraged to discuss their future career and/or transfer goals with a CIT–Networking advisor.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Computer Information Technology–Networking

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- install and configure networking equipment.
- implement and configure network protocols.
- troubleshoot PC hardware problems.
- assemble a PC.
- identify and summarize security threats and appropriate actions to minimize those threats.
- install, configure and manage a networking operating system.
- analyze an existing system and determine appropriate systems design implementation strategies.

Career Opportunities

- banks
- law firms
- medical offices
- hospitals
- small businesses
- government agencies
- corporations
- schools
- colleges
- consulting firms

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students have successfully transferred to:

- Marist College
- Mount St. Mary College
- St. John's University
- SUNY Institute of Technology

Contact Information

Applied Technologies
Department Chair
341-4523
Admissions Office
(845) 341-4030

Computer Science

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester

ENG 101	Freshman English 1	3
_____	SUNY Social Science (GE 3)	3
CSC 101	Computer Science 1	4
MAT 205	Calculus 1	4
COM 101	Foundations of Communication	3
PES 100	Concepts of Physical Wellness	1

Second Semester

ENG 102	Freshman English 2	3
HIS ____	Restricted History Elective*	3
MAT 206	Calculus 2	4
CSC 102	Computer Science 2	4
EET 104	Digital Electronics 1	4
PES ____	Physical Education	1

Third Semester

PHY 101	General Physics 1** **or**	
PHY 105	General Physics 1 w/calculus	4
MAT 211	Linear Algebra	3
CSC 201	Data Structures	3
_____	Restricted SUNY Elective***	3

Fourth Semester

PHY 102	General Physics 2** **or**	
PHY 106	General Physics 2 w/calculus	4
MAT 120	Introduction to Statistics	3
MAT 136	Discrete Mathematics	3
CSC 204	Computer Organization & Assembly Language Prog.	3
_____	Electives	2/4

Total Credits: 65-67

SUNY American History (GE 4) or Western Civilization (GE 5) or Other/World Civilization (GE 6).

**Consult catalog of the college to which you intend to transfer. Some require the General Physics with calculus.*

***SUNY Arts (GE 8) or Foreign Language (GE 9) lists or any list not selected from in Second Semester SUNY History Elective above.*

Program Description

The Associate in Science degree program in Computer Science is designed for students of mathematics and science who wish to pursue a Bachelor of Science degree in Computer Science at senior colleges and universities. Its goal is to prepare the students for a successful transfer into such degree programs.

The curriculum is structured to emphasize scientific applications and the theoretical concepts which underlie computer design and development, languages, and systems. The program provides the core courses that would be encountered in the first two years of study at most four-year institutions.

Associate degree core courses in calculus, linear algebra, discrete math, digital electronics, computer science, data structures and assembly language programming constitute the nucleus of this program. Selected courses in the liberal arts support and enhance this central core.

To initiate this plan of study, students must have tested into college algebra (MAT 121) or higher on the mathematics placement test. Students who do not meet the math requirement can be successful in reaching their academic goals by taking foundation courses and extending the program to three years.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- demonstrate ability in problem solving and communicating algorithms clearly, utilizing structures/top-down algorithm design processes.

- demonstrate familiarity with a wide variety of abstract data structures and data encapsulation concepts.

- demonstrate knowledge of assembler language programming as it applies to computer architecture and operating systems.

- demonstrate ability in computational methods of mathematics and physical science necessary for computer modeling.

Career Opportunities

- computer engineering
- computer systems analysis
- education
- computer programming
- cryptology
- applied mathematics
- financial analysis

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- Clarkson University
- Florida Memorial University
- Marist College
- R.P.I.(Rensselaer Polytechnic Institute)
- St. John's University
- SUNY Binghamton
- SUNY Buffalo
- SUNY Institute of Technology
- SUNY New Paltz
- SUNY Oneonta
- SUNY Purchase

Contact Information

Applied Technologies
Department Chair
(845) 341-4523
Admissions Office
(845) 341-4030

Criminal Justice

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
CRJ 101	Criminal Justice	3
_____	SUNY Math (GE 1) - MAT 120 or higher*	3/4
PSY 101	General Psychology 1 or	
SOC 101	Introduction to Sociology	3
CRJ 107	Industrial/Private Security or	
CRJ 106	Patrol Operations	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
CRJ 111	Criminology	3
CRJ 113	Correction, Probation & Parole	3
CRJ 105	Police Community Relations	3
COM 101	Foundations of Communication	3
PES ____	Physical Education	1

Third Semester		
CRJ 213	Police Organization Admn.	3
_____	SUNY Natural Science (GE 2)	3/4
CRJ 215	Criminal Investigations 1	3
_____	Restricted SUNY Elective**	3
CRJ 115	Constitutional Law & Criminal Procedure	3

Fourth Semester		
CRJ 226	Criminalistics	3
_____	Restricted SUNY Elective**	3
CRJ 103	Understanding the Juvenile Offender	3
CRJ 211	Criminal Law	3
_____	Elective	3

Total Credits: 62-64

Students must complete MAT 120 (or higher). MAT 102 can be counted as an elective.
**Select two from SUNY Western Civilization (GE 5) or Other/World Civilization (GE 6) or Arts (GE 8) or Foreign Language (GE 9) or American History (GE 4) lists. Do not duplicate category.*

This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

The Associate in Science degree program in Criminal Justice prepares students to continue their education in four-year degree programs in criminal justice or related liberal arts areas of study. These may include forensic psychology, public administration, sociology, cyber security, criminology and pre-law. It is designed to facilitate the acquisition of technological and critical thinking skills that are essential for success in the criminal justice field. Graduates of this degree program will have both the general educational background as well as the criminal justice expertise to pursue careers in the many diverse criminal justice areas of study.

The program is regularly reviewed to ensure that course content is current with contemporary issues that impact the criminal justice system, such as homeland security, terrorism, cyber security, technological advancements, diversity and ethics. The program courses explore contemporary criminal justice issues such as the nature and causes of crime, crime as a public policy issue, racial profiling and global issues such as transnational terrorism. There are specific courses devoted to the institutional treatment of the adult and juvenile offender as well as an internship program where students are afforded the opportunity to utilize their newly acquired skills and knowledge in an actual criminal justice related work environment. This program assures the students of a solid foundation to pursue higher education and rewarding careers in criminal justice.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- develop critical thinking skills and apply these skills in discussing complex issues in criminal justice.

- identify common concepts relevant to the understanding of the criminal justice system and be able to critically assess and debate these issues.

- develop problem solving skills and be able to apply these skills to issues that impact the diverse areas of the criminal justice system.

- develop an understanding of our legal system, constitutional law, procedural law and substantive law.

- be able to understand and discuss the complex issues of diversity and ethics and their impact on the criminal justice system.

Career Opportunities

- Federal Bureau of Investigation (FBI)
- Immigration and Naturalization Service (INS)
- park police
- postal inspector
- secret service agent
- secret service uniformed
- deputy sheriff
- state police/trooper
- police officer
- district attorney
- defense counsel
- correction officer
- forensics specialist
- court clerk
- judge

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- John Jay College of Criminal Justice
- Pace University
- State University of New York (SUNY)

Contact Information

Criminal Justice
Department Chair
845-341-4355
Admissions Office
(845) 341-4030

Criminal Justice–Police

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
CRJ 101	Criminal Justice	3
CRJ 105	Police/Community Relations	3
CRJ 107	Industrial & Private Security	3
CRJ 215	Criminal Investigation 1	3
PES 100	Concepts of Physical Wellness	1
Second Semester		
ENG 102	Freshman English 2	3
PSY____	Psychology Course	3
CRJ 111	Criminology	3
CRJ 106	Patrol Operations	3
CRJ 216	Criminal Investigation 2	3
PES ___	Physical Education	1
Third Semester		
SOC 120	Social Problems or	
SOC 101	Introduction to Sociology	3
CRJ 103	Understanding the Juvenile Offender	3
_____	Math or Liberal Arts Science	3
CRJ 213	Police Organization & Administration	3
CRJ 226	Criminalistics	3
Fourth Semester		
COM 101	Foundation of Communication	3
POL 102	U.S. Gov't-State & Local	3
CRJ 211	Criminal Law	3
_____	Math or Liberal Arts Science	3
_____	Elective*	3

Total Credits: 62

* *Recommend taking CRJ 109 Critical Issues in Law Enforcement*

This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

The Associate in Applied Science degree program in Criminal Justice–Police provides the student with the necessary credits required to apply for employment in one of the many local, state or federal criminal justice agencies.

The overall program design is to prepare the student for a career path in law enforcement, security, law, probation, parole, juvenile justice and investigation. The coursework provides study and practice in the necessary critical thinking and technological skills the student will need to function effectively in the law enforcement field. The program offers courses on criminal investigations that cover all aspects of an investigation, including interviewing techniques, rights of the accused, search warrant requirements and wiretapping. It also includes a complete course of criminalistics which focuses on fingerprinting and fingerprint classification and identification, blood analysis and crime scene photography. Contemporary law enforcement issues are examined, including searching without a warrant, automobile stops, racial profiling, transnational terrorism and police-community relations are thoroughly discussed and critically evaluated. All classes emphasize interactive critical assessment of contemporary policing issues as well as hands-on practical application of skills. All instructors, in addition to their advanced educational backgrounds, are experienced practitioners in the fields of law enforcement, courts and corrections.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Student Learning Outcomes

Students will:

- develop critical thinking skills and apply these skills in discussing complex issues that confront police administrators.

- be able to identify the origins of policing systems and be able to assess problems that confront modern policing systems.

- be able to identify relevant issues of constitutional, procedural and substantive law.

- be able to understand and critically discuss the complex issues involving diversity and ethics as they relate to professional policing.

- be able to understand the importance of crime scene protection and be able to demonstrate the proper methods of gathering and presenting evidence properly.

Career Opportunities

- Federal Bureau of Investigation (FBI)
- Immigration and Naturalization Service (INS)
- park police
- postal inspector
- secret service agent
- secret service uniformed
- deputy sheriff
- state police/trooper
- police officer
- district attorney
- defense counsel
- correction officer
- forensics specialist
- court clerk
- ballistics specialist
- fingerprint specialist
- security

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- Pace University
- State University of New York (SUNY)

Contact Information

Criminal Justice
Department Chair
(845) 341-4355
Admissions Office
(845) 341-4030

Cyber Security

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
MAT 121	College Algebra	3
CRJ 101	Intro to Criminal Justice	3
CIT 100	Computer Literacy	3
CIT 105	Data Communications and Introduction to Networking	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
CIT 116	Networking 1	4
CIT 112	Computer Hardware and Software	4
CIT 118	Operating Systems	4

Third Semester		
CIT 203	Networking 2	4
CIT 217	Introduction to Unix/Linux	3
CFR 221	Computer Forensics	3
CSS 223	Information Security	3
PSY ___	Psychology	3
PES ___	Physical Education	1

Fourth Semester		
CFR 222	Network Forensics	3
CSS 224	Network Perimeter Security	3
CSS 226	Cyber Crime Investigations	3
CRJ 111	Criminology	3
_____	Math or Liberal Arts Science	3

Total Credits: 65

Program Description

The Associate in Applied Science degree program in Cyber Security prepares students for employment in a variety of entry level careers in Cyber Security. Today, everyone is concerned with security, and people with knowledge in this area are in high demand. Positions can include such titles as Network Administrator, network security specialist, information security technician, just to name a few. The main thrust is protection of information and limiting access to network resources. In addition to security, students will also be instructed in techniques used to track perpetrators once an attack has occurred.

In addition to basic computer and networking skills, the student will be instructed in Operating Systems, Computer Forensics, Network Forensics, Information Security, Network Perimeter Security, and Cyber Crime Investigation.

Classes are designed to provide students with hands-on training utilizing state-of-the-art computer facilities. Lab work and assignments will present real world cyber security scenarios encountered in the work place. For forensics studies, industry standard software will be used.

While A.A.S. graduates are prepared to enter the workforce immediately, many students choose to transfer to upper-level programs leading to a bachelor's degree in technology. If students are considering this, they should consult with the department chair and advisors for program planning. Special planning is available for students entering the program with previous college credit or equivalent training/work experience.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission.

Hudson Valley Educational Consortium students from Sullivan County Community College or Ulster Community College who plan to register for Cybersecurity courses must apply to and be accepted in the program by the following dates: August 15 for a Fall semester; December 15 for a Spring semester.

Student Learning Outcomes

Students will:

- develop basic network administration skills
- perform computer forensic analysis
- demonstrate an understanding of network forensics
- develop an understanding of the legal issues associated with cyber security
- document an appropriate procedure of handling case evidence

Career Opportunities

Entry level
- Network Administrator
- Network Security Specialist
- Computer Crime Investigation

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- St. John's University

Contact Information

Applied Technology
Department Chair
341-4523

Admissions Office
(845) 341-4030

Dental Hygiene

Degree Awarded: Associate in Applied Science

Accredited by the Commission on Dental Accreditation, American Dental Association
211 East Chicago Avenue, Chicago, Illinois 60611, (312) 440-2500.

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
BIO 115	Human Biology	4
CHM 110	General and Biological Chemistry	3
DNT 101	Preventive Oral Health Services 1	5
DNT 103	Maxillofacial Anatomy and Oral Histology	4

Second Semester		
ENG 102	Freshman English 2	3
DNT 102	Preventive Oral Health Services 2	5
DNT 104	Dental Radiology	3
DNT 106	Oral Health Education	2
DNT 108	Pharmacology	2
MLT 106	Microbiology for Health Professionals	3

Summer Session 1		
DNT 110	Pain Management in Dentistry	2

Third Semester		
BIO 125	Nutrition	3
DNT 201	Preventive Oral Health Services III	5
DNT 203	Oral Pathology	2
DNT 205	Periodontology	2
DNT 207	Dental Bio-Materials and Advanced Functions	3
PES 100	Concepts of Physical Wellness	1

Fourth Semester		
COM 101	Foundations of Communication	3
PSY 101	General Psychology 1	3
SOC 101	Introduction to Sociology	3
DNT 202	Preventive Oral Health Services IV	5
DNT 206	Community Dental Health	2
PES ____	Physical Education	1

Total Credits: 72

Note: An additional requirement is current certification in CPR. "BLS (Basic Life Support) for Healthcare Providers" is the recommended course (American Heart Association). Certification documentation must be submitted at the beginning of the second semester.

Program Description

The Associate in Applied Science degree program in Dental Hygiene prepares students for licensing by the State Board for Dentistry of New York to practice dental hygiene. Dental hygienists work under the supervision of a licensed dentist. They provide preventive, therapeutic and educational services within the parameters of the state law governing the practice of dental hygiene. In addition to traditional skills, these responsibilities include the administration of local infiltration anesthesia and nitrous oxide sedation.

The curriculum is focused on the three professional Standards of Care: professionalism, health promotion and disease prevention, and patient care. Coursework includes requirements in English, social sciences, the sciences, and program-specific courses and laboratory experiences. In order to develop necessary skills, students first practice on peers. Then they actively participate in clinical dental hygiene experiences in the College dental hygiene clinic, as well as at off-campus sites including hospitals. Dental hygiene courses are offered once each year. Courses must be taken in the sequence in which they are offered without interruption. Dental hygiene courses cannot be taken on a part-time basis. A minimum grade of C (75%) is required in all dental hygiene courses. Program requirements for graduation also include the presentation of table clinics at off-campus locations, portfolio development and case-based clinical case presentations. Membership in the Student American Dental Hygienists' Association is mandatory.

Students who are considering this program must understand that they are required to provide their own transportation to these off-campus facilities and are required to purchase their own instruments and related supplies. They must also have a yearly physical examination and TB test and criminal background check. Upon initial entrance into the program, a negative 10- panel drug test will also be required. The Hepatitis B vaccine is strongly recommended. Students with disabilities should meet with the Coordinator of Special Services upon entering the program. Foreign students must have permanent residence status to obtain a dental hygiene license in New York State. An individual who has charges pending or has ever been convicted of a felony or misdemeanor and/or has been found guilty of professional misconduct or negligence may not be eligible for licensure. Contact the Office of Professional Discipline, New York State Education Department prior to applying to this program. Finally, pregnant or potentially pregnant students should note that there is a risk associated with exposure to nitrous oxide gas. Students who are unwilling or unable to sit as patients should not apply to this program.

Admissions Criteria

Academic Requirements:

- *New, Transfer, Readmit and Seeking 2nd SUNY Orange Degree Students ONLY:* Must have a current college application on file

- High School Diploma or GED

- Eligible to take Freshman English 1 (ENG 101)

Degree Awarded: Associate in Applied Science

• Eligible to take Intermediate Algebra (MAT 102) or have successfully completed Elementary Algebra (MAT 101), or equivalent, with a "C" or higher

• Completed one of the following within 5 years of the application deadline: Intro to Biology (BIO 110), General Biology I (BIO 101), Human Biology (BIO 115), Anatomy & Physiology I (BIO 111), Anatomy & Physiology II (BIO 112) with a grade of "C" or higher; Passing grade on the Biology CLEP examination; or High School AP Biology (score of 3 or higher) – submit the official AP transcript from College Board

• Completed High School Regents (New York State) course or College Prep Chemistry course with a grade of 75 or higher, passing grade on the Chemistry CLEP examination (no credit will be given, but will count towards meeting admissions criteria), or a college Chemistry course (with a lab), all with a grade of "C" or higher and all within 5 years of the application deadline

• Students must attain a minimum cumulative GPA of 2.5

Department Specific Requirements:

• Attendance at a Dental Hygiene pre-admission seminar within 3 years of the application deadline. At this seminar, students will receive and sign off on information pertaining to health forms, drug testing, and criminal record policies.

• Submit Dental Hygienist Observation Form (16 hour minimum with documentation) within 3 years of the application deadline.

Pre-Admission seminar dates and observation forms are available online at www.sunyorange.edu/admissions/healthforms.shtml

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CQPA and credits completed towards the degree, Orange County residency and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

Student Learning Outcomes

 Students will:

• discern and manage the ethical issues of dental hygiene practice in a rapidly changing environment.

• acquire and synthesize information in a critical, scientific and effective manner.

• be concerned with improving the knowledge, skills and values of the profession.

• provide planned educational services using appropriate interpersonal communication skills and educational strategies to promote optimal health.

• initiate and assume responsibility for health promotion and disease prevention activities for diverse populations.

• systematically collect, analyze and accurately record baseline data on the general, oral and psychosocial health status of the patient using methods consistent with medicolegal principles.

• discuss the condition of the oral cavity, the actual and potential problems identified, the etiological and contributing factors, as well as recommended and alternative treatments available.

• provide treatment that includes preventive and therapeutic procedures to promote and maintain oral health and assist the patient in achieving oral health goals.

• evaluate the effectiveness of planned clinical and educational services and modify them as necessary.

Career Opportunities

• private practice
• hospitals
• health service agencies
• overseas
• military

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students can transfer to:

• Manhattan College

• Massachusetts College of Pharmacy and Health Sciences

• Pennsylvania College of Technology

Contact Information

Dental Hygiene
Department Chair
341-4306
Admissions Office
(845) 341-4030

Early Childhood Development and Care

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
PSY 101	General Psychology 1	3
EDU 105	Preparing to Teach Young Children	2
EDU 101	Child Development 1++	3
EDU 111	Childhood Health and Safety	3
EDU 107	Mandated Training	1
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
EDU 102	Child Development 2++#	3
_____	SUNY Gen Ed Elective**	3
MAT ___	SUNY Math* (GE1)	3
EDU 208	Home, School, Community#	3
PES ____	Physical Education	1

Third Semester		
COM 101	Foundations of Communication	3
EDU 109	Language and Literacy Development in the Young Child	3
EDU 203	Child Care Curriculum Development/Field Experience 1++	5
EDU 201	Observation & Assessment++	3
_____	SUNY Gen Ed Elective**	3

Fourth Semester		
PED 156	Infant/Child First Aid & CPR	1
EDU 202	Infant and Toddler Care++#	3
EDU 204	Child Care Curriculum Development/Field Experience 2++#	5
EDU 206	Administration and Management#	3
_____	SUNY Gen Ed Elective**	3

Total Credits: 64

++ *Local daytime observations beyond college classroom required.*
\# *Offered Spring semester ONLY*
* *MAT 102 or higher (MAT 111 recommended)*
** *These electives MUST satisfy **three (3) different** SUNY General Education categories chosen ONLY from: Natural Sciences (GE2), American History (GE4), Western Civilization (GE5), Other World Civilizations (GE6), Arts (GE8), Foreign Languages (GE9), with at least ONE from either Category GE 4, GE 5 or GE 6.*

Program Description

The Associate in Applied Science degree program in Early Childhood Development and Care prepares students for responsible and effective employment in positions ranging from aide to head teacher in a variety of early childhood settings. The program provides theory, practical information and extensive supervised experience concerning normal early human development, developmental difficulties, caring for and educating young children, methods for fostering child development, and the operation and management of early childhood facilities.

The primary goals of the Early Childhood Development and Care program are to develop cognitive and critical thinking skills through an integrated education plan; to promote the use of applied knowledge of developmentally appropriate practices in both the College classroom and early learning field site environments; to furnish opportunities for self-directed, creative, professional learning activities; to provide field experiences ranging from minimal observation to full participation, allowing students to demonstrate increasing technical skills working with young children.

Because current research shows that the early years are among the most vital in human development, professional and appropriate educational experiences will develop the ECDC student's thinking, practical and personal skills necessary to teach and care for young children. These activities take place in college classes and seminars, and also in local area field sites. In the field, extensive "hands-on" observation and participation give opportunities to apply education principles, receive individual guidance and feedback, and be involved first-hand, with day-to-day activities in diverse early childhood learning environments. Upon completion of the coursework students will have accumulated 235 hours of field work.

A grade of C (2.00) or better is required in all EDU courses for progression in the program and graduation with an A.A.S. or Certificate in Early Childhood Development and Care.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- demonstrate knowledge of physical, intellectual, language, creative, social and emotional domains by incorporating developmentally appropriate practices in an early childhood environment.

- apply knowledge by effectively planning relevant stage and age level learning activities using varied curricula and lesson plan formats.

- provide a balanced learning atmosphere evidenced by an appropriate physical environment and supportive cognitive and affective methods.

- welcome and integrate into their classroom an unbiased understanding and appreciation of a population that is diverse in appearance, performance, ability and culture.

- demonstrate effective communication skills with children, colleagues and parents.

- develop and exhibit professional and ethical standards of integrity, confidentiality, personal growth and collaborative teamwork in College classrooms and field assignments.

Career Opportunities

- center director
- head teacher (non-public settings)
- teacher assistant
- family child care provider
- early childhood business owner
- nanny or au pair
- early intervention specialist
- recreation leadership
- home visitor
- child care resource and referral
- curriculum consultant

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students have successfully transferred. Please check with the intended transfer school for details.

Contact Information

Education
Department Chair
341-4482
Admissions Office
(845) 341-4030

Early Childhood Development and Care

Degree Awarded: Certificate

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
PSY 101	General Psychology 1	3
EDU 105	Preparing to Teach Young Children	2
EDU 101	Child Development 1++	3
EDU 107	Mandated Training	1
EDU 201	Observation & Assessment++	3

Second Semester		
ENG 102	Freshman English 2	3
EDU 102	Child Development 2++#	3
PED 156	Infant/Child First Aid & CPR	1
EDU 111	Childhood Health and Safety	3
EDU 202	Infant Toddler Development++#	3
EDU 206	Administration & Management# **or**	
EDU 208	Home, School, and Community#	3

Total Credits: 31

++ *Local daytime observations beyond college classroom required.*
# *Offered Spring semester ONLY*

Program Description

The Early Childhood Development and Care certificate program is designed to develop professional career skills in preparation for entry level positions in a variety of early childhood fields. Students will complete 60 hours of observation in local early learning centers in addition to college classroom time. This field work provides an opportunity to link theory with hands-on practice. Students will be required to demonstrate an understanding of the theories related to child development, the techniques for fostering such development and the operation of a child care facility. Nine of the 12 courses in the ECDC certificate program directly relate to early childhood. All courses apply to an Associate in Applied Science (A.A.S.) degree in Early Childhood Development and Care. A grade of C (2.00) or better is required in all EDU courses for progression in the program and graduation.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Early Childhood Development and Care

Student Learning Outcomes

Students will:

- demonstrate knowledge of physical, intellectual, language, creative, social and emotional domains by incorporating developmentally appropriate practices in an early childhood environment.

- apply knowledge by effectively planning relevant stage and age level learning activities using varied curricula and lesson plan formats.

- provide a balanced learning atmosphere evidenced by an appropriate physical environment and supportive cognitive and affective methods.

- welcome and integrate into their classroom an unbiased understanding and appreciation of a population that is diverse in appearance, performance, ability and culture.

- demonstrate effective communication skills with children, colleagues and parents.

- develop and exhibit professional and ethical standards of integrity, confidentiality, personal growth and collaborative teamwork in College classrooms and field assignments.

Career Opportunities

Entry level or aide positions in:
- child care centers
- preschools
- nursery schools.

Transfer Opportunities

The ECDC certificate is designed to prepare graduates for immediate entry into the workplace. However, every credit from the certificate will apply to the SUNY Orange ECDC A.A.S. degree.

Contact Information

Education
Department Chair
341-4482
Admissions Office
(845) 341-4030

Engineering Science

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester-Fall		Credits
ENG 101	Freshman English 1	3
CHM 105	General Chemistry 1	4
PHY 103	Physics for Science & Eng. 1	4
MAT 205	Calculus 1	4
EGR 101	Engineering 1	3
PES 100	Concepts of Physical Wellness	1

Second Semester-Spring		
ENG 102	Freshman English 2	3
PHY 104	Physics for Science & Eng. 2	4
CHM 106	General Chemistry 2	4
MAT 206	Calculus 2	4
EGR 102	Engineering 2	3
PES ____	Physical Education (two)	1

Third Semester-Fall		
_____	SUNY Social Science (GE 3)	3
PHY 203	Physics for Science & Eng. 3	4
MAT 207	Calculus 3	4
EGR 205	Mechanics 1 (Statics)	4
_____	Engineering Elective	3

Fourth Semester-Spring		
_____	SUNY American History (GE 4)	3
MAT 214	Differential Equations &Series	4
EGR 206	Mechanics 2 (Dynamics)	4
_____	Engineering Elective	3
_____	Engineering Elective	2/3

Total Credits: 72-73

Note: Students must take a minimum of three courses (eight credits) from the following depending on their area of specialization:
Thermodynamics (EGR 214) summer
Solid Mechanics (EGR 220) spring
Circuit Theory (EGR 212) spring
Modern Physics (PHY 204)
Materials Science (EGR 218) fall
Linear Algebra (MAT 211) fall/summer
Engineering Computations (EGR 216)
Students majoring in chemical, biological or environmental engineering should plan to take:
Organic Chemistry I (CHM201) and
Organic Chemistry II (CHM202)
Computer Engineering majors should take:
Computer Science II (CSC 102) and
Data Structures (CSC 201).
(Organic Chemistry II or Data Structures may be substituted for Mechanics II with the permission of the department chair.) Proper advising is crucial for proper course selection.

Program Description

The Associate in Science degree program in Engineering Science is designed specifically to enable students to transfer, with junior status, to the upper-level engineering college or university of their choice, where they can complete the Bachelor of Science degree in Engineering. As such, the program provides the same core courses that would be encountered in the first two years of study at most four-year institutions offering engineering degrees in the following disciplines:

- Aeronautical Engineering
- Architectural Engineering
- Biological Engineering
- Chemical Engineering, ChE
- Civil Engineering, CE
- Computer Engineering
- Electrical Engineering, EE
- Environmental Engineering
- Geological Engineering
- Materials Engineering
- Mechanical Engineering, ME
- Nuclear Engineering

Core courses in calculus, chemistry, engineering physics and engineering science constitute the nucleus of this program. Selected courses in the liberal arts support and enhance this central core.

To begin the two year program, students must be at the mathematical level of Calculus 1 (MAT 205) or must have completed either College Trigonometry* (MAT 122) or Pre-Calculus Mathematics* (MAT 131).

Students who do not meet the above requirements should not be discouraged. Many students, who have either missed some foundational courses or who have family/job commitments, opt to take the extended program, which prepares them for Calculus 1 (MAT 205). Although this path will require more than four semesters, it enables students to reach their educational goal and to work as professional engineers in the above-mentioned fields. Students taking the extended option should meet with their advisor to arrange a planned course of study.

The Engineering Science program at SUNY Orange strives to form a student's ability to think critically in real time, to develop a professional work ethic built on cooperation and group problem solving, and to provide the rigorous conceptual and ethical framework required in a field where professional competence is expected.

These prerequisite courses may be taken in the summer.

Degree Awarded: Associate in Science

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students must have tested into or completed Calculus 1 (MAT 205) to begin progress toward this degree. If recent high school graduates have concerns about their mathematics preparation they should consider taking Pre-Calculus Mathematics (MAT 109) during the summer before their entrance into the program.

Student Learning Outcomes

Students will:

- demonstrate literacy in the basic mathematical, computational and scientific languages of engineering science.
- demonstrate a mastery of communication skills, both written and oral, especially in their applications to Engineering Science.
- demonstrate literacy in a programming language and in computer assisted techniques for engineering design.
- plan, organize and implement laboratory experiments and prepare a formal detailed laboratory report of findings.
- set up and solve Engineering Science problems, using advanced mathematical techniques, with and without computers.
- conduct herself or himself in a professional manner consistent with acceptable standards and ethics.
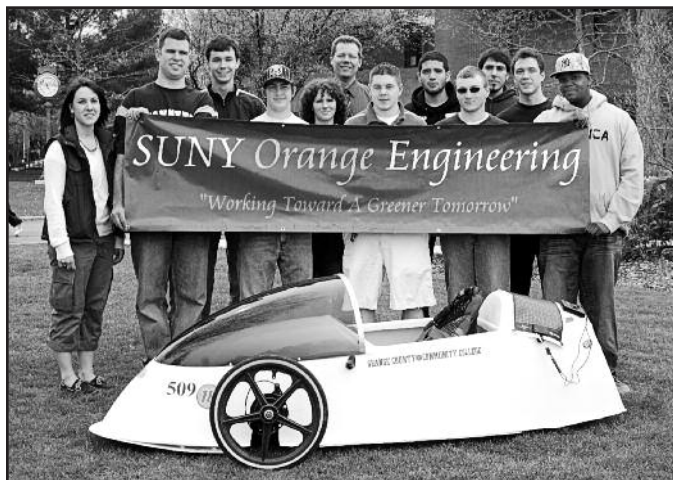
Career Opportunities

- private sector engineering firms
- research and development opportunities in private and public sector
- engineering positions in city, state or federal agencies
- excellent background for other fields, i.e. law or medicine

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- Clarkson University
- Manhattan College
- New Mexico Tech
- Ohio State University
- Penn State University
- Rensselaer Polytechnic University (RPI)
- Stevens Institute of Technology
- SUNY Binghamton
- SUNY Buffalo
- SUNY New Paltz.
- SUNY Stony Brook
- Syracuse University
- University of Colorado
- University of Dayton
- University of Illinois

Contact Information

Science, Engineering and Architecture Department Chair
341-4571
Admissions Office
(845) 341-4030

Exercise Studies

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	SUNY Math (GE 1) - MAT 102 or higher	3
BIO 110	Introduction to Biology	3
PEM____	Skills	1
PED 100	Introduction to Phys. Ed. **or**	
PED 101	Introduction to Exercise Studies	2
PED 150	First Aid	2
_____	Restricted SUNY History Elective*	3

Second Semester		
BIO 111	Anatomy and Physiology 1	4
ENG 102	Freshman English 2	3
_____	SUNY Social Science (GE 3)	3
PEM___	Skills	1
PED 201	Introduction to Human Movement^	3
BIO 125	Nutrition	3

Third Semester		
BIO 112	Anatomy & Physiology 2	4
PED 112	Contemporary Health	3
PED 202	Basic Exercise Physiology @	3
COM 101	Foundations of Communication	3
PEM____	Skills	1
PED_____	Exercise Studies Elective**	2/3

Fourth Semester		
PED 203	Physical Fitness & EXRX+ **and**	3
PED 204	Lab Fitness Assessment+	1
_____	Restricted SUNY Elective***	3
PED 230	Exercise Studies Capstone	2
PED 280	Exercise Studies Practicum	2
PES 111	Substance Abuse	3

Total Credits   64/65

* *SUNY American History (GE 4) or Western Civilization (GE 5) or Other World Civilization (GE 6) list*
**Any PED course NOT required in the above curriculum*
***SUNY Arts (GE 8) or Foreign Languages (GE 9) list or any list not selected from the Restricted History elective*
+ *PED 203 & 204 are co-requisites and MUST be taken together*
^ *PED 201 has a pre/co-requisites of BIO 111*
@ *PED 202 has a pre/co-requisites of BIO 112*

Program Description

The Associate in Science degree program in Exercise Studies is designed for students who are interested in professional areas of fitness and exercise specialties in a variety of physical fitness/health promotion programs. This program prepares students to pursue further education and careers in such fields as athletics, medicine, instruction, research and community health. Completing this degree program, students will have built a base knowledge and prepare for transfer to four-year programs including physical education, health and wellness programs, exercise physiology or nutrition.

The theoretical coursework is concentrated in the areas of human movement, exercise physiology, exercise prescription and fitness assessment. These classes give students a broad background in, as well as a practical experience with, the mechanics and physiology of the human body with regard to fitness, health and well-being. The Exercise Studies students complete specific lifetime and sport skills coursework. In addition, students complete coursework in a broad liberal arts education; this work includes study in arts, foreign language, English, history, and sociology.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

In addition, students must declare themselves exercise studies majors and meet with a Movement Science faculty member to review their career goals and course selections. Once students are accepted, they are required to attend one of the program orientation sessions.

Exercise Studies

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- possess a broad educational background which includes humanities, mathematics, social sciences, biological sciences, and technologies to prepare for transfer to a four-year institution for a bachelor's degree in Exercise Science.

- prepare and sit for the national personal trainer and or group fitness instructor exam.

- learn problem solving and critical thinking in context to the world of exercise science.

- design, implement, manage and evaluate health promotion, wellness programs and recreational opportunities.

- demonstrate appropriate skills and abilities for the physical fitness assessment and exercise prescription for apparently healthy individuals and special populations.

- reflect upon their personal experiences in physical activity and improve their own levels of skills and fitness.

- welcome the idea of being "physically educated."

Career Opportunities

- athletic trainer
- cardiac technician
- coach
- director of recreation
- exercise physiologist
- health instructor
- personal trainer
- physical educator
- recreational therapist
- strength and conditioning coach
- sports agent
- sports equipment designer
- weight management specialist
- wellness coordinator
- cardiopulmonary rehabilitation specialist
- community health director

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- Dominican College
- East Stroudsburg University
- Montclair State University
- Queens College
- SUNY Brockport
- SUNY Cortland

Contact Information

Movement Science
Department Chair
341-4245
Admissions Office
(845) 341-4030

Fire Protection Technology

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester:	Credits:
Freshman English I (ENG 101)	3
Introduction to Sociology (SOC 101)	3
Elementary Algebra (MAT 101)	3
Introduction to Fire Technology (FIR 101)	3
Intro. to Fire & Emergency Services Admin.	3
*Physical Education Elective	1

Second Semester:	
Freshman English II (ENG 102)	3
General Psychology (PSY 101)	3
Race, Ethnicity, and Society (SOC 220)	3
Principles of Building Construction (FIR 103)	3
Fire Protection Tech. Elective (FIR Elective)	3
Physical Education Elective (PED Elective)	1

Third Semester:	
U.S. Government (POL 103)	3
Foundations of Communication (COM 101)	3
Fire Protection Tech. Elective (FIR Elective)	3
Fire Protection Tech. Elective (FIR Elective)	3
Fire Protection Tech. Elective (FIR Elective)	3
Physical Education Elective (PED Elective)	1

Fourth Semester:	
Natural Science Gen Ed Elective	3-4
Computer Literacy (CIT 100)	3
Fire Protection Tech. Elective (FIR Elective)	3
Fire Protection Tech. Elective (FIR Elective)	3
Fire Protection Tech. Elective (FIR Elective)	3
Total Credits	64-65

Program Description

Given the unique conditions that have developed in our country over the last several years in public safety and homeland security, the Fire Protection Technology Program has gained increasing importance. The program is designed to meet the growing needs of Rockland, Orange, Sullivan and Ulster Counties and their neighboring communities for persons preparing for a career as a firefighter, fire and emergency service practitioner or engineer specialist.

The study of fire protection technology is multifaceted. It involves the study of the complete fire protection system, including fire department resources, private resources and system, chemistry and physics of fire safety, fire department management, emergency management, the legal environment and fire protection.

This program includes field training off campus which requires students to travel to Rockland County.

Studies in fire protection technology guide the student through a series of college-level courses that are designed to prepare the student for a career in the highly demanding field of fire and emergency services. Through the study of fire protection technology the student will discover the entire process for the requirements of becoming a firefighter.

The role of the firefighter has increased in complexity in recent years. The scope of responsibilities and knowledge requirements of a firefighter has grown significantly and now includes emergency medical services, assisting in the recovery from disasters, and responding to and recovering from hazardous materials incidents, building safety compliance issues, public education, wildlands fire fighting, mutual aid and more. The program is designed to prepare the students to perform as a firefighter and an effective member of a multi-agency emergency response team.

The program is designed to meet the guidelines established by the New York Emergency Management System and the National Interagency Integrated Management System (NIIMS) under the Department of Homeland Security. The A.A.S. degree in Fire Protection Technology has already received SUNY and NYSED approval through the Hudson Valley Educational Consortium.

SUNY Rockland has taken a leadership role in developing the Fire Protection Technology curriculum and the Associate of Applied Sciences degree is currently available there. Students wishing to register in this program from other HVEC colleges (SUNY Orange, SUNY Ulster and SUNY Sullivan) and participate via the Interactive Television Training Rooms will receive their degree from SUNY Rockland. Interested students should contact their home school Registrars office for assistance in the registration process.

Fire Protection Technology

Degree Awarded: Associate in Science

Recent graduates have secured positions within the New York City Fire Department and as Fire Inspectors for local government. The current fire protection management program follows the recommendations of the Fire and Emergency Service Higher Education (FESHE) model which is a division of the Federal Department of Homeland Security. An articulation agreement with John Jay College, a member of the City University of New York (CUNY) system is available for those student intending to continue their education in fire protection management.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Student Learning Outcomes

Students will:

- discover the entire process for the requirements of becoming a firefighter.

- effectively communicate knowledge of Fire Science content areas, including fire safety critical incident command system, emergency planning, fire scene operations, fire exercise planning, fire and emergency operations center organization and management, leadership, resource planning, and utilization of national fire science operation guidelines.

- demonstrate critical thinking, communications and management skills by analyzing situations, determining proper actions, understanding the costs and benefits of actions, evaluating possible alternatives and unforeseen circumstances, and then taking appropriate actions as an incident responder or manager.

- possess the technical and general education courses needed to be able to pursue a baccalaureate degree in fire science or emergency management.

- •support the community by providing fire and emergency services when required.

Career Opportunities

- firefighter
- fire heavy equipment operator
- fire prevention specialist
- fire hazard program specialist
- fire training specialist
- public safety and education
- dispatcher
- fire equipment manufacturing, sales, service, research and development
- forestry service fire control
- technician and consultant in aerospace services
- fire protection education

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, SUNY Orange students have successfully transferred to:

- John Jay College
- University of Maryland - University College
- University of New Haven

Contact Information

Criminal Justice
Department Chair
(845) 341-4355
Admissions Office
(845) 341-4030

Green Building Maintenance and Management

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

Pre-Program Requirements

Math Comp

First Semester:		Credits
CCS 102	College Life Skills	1
ENG 101	Freshman English I	3
MAT 101	Elementary Algebra	3
GRB 1100	Intro to Green Buildings (fall only)	3
GRB 1200	Intro to Renewable Energy‡ (fall only)	3
_____	Computer Science elective	3
PES 100	Concepts of Wellness	1
PES ____	Physical Education Activity	1

Second Semester:		
ENG 102	Freshman English II	3
PHL 220	Ethics	3
GRB 1300	Energy Management‡ (spring only)	3
GRB 1400	Green Building Materials‡ (spring only)	3
BIO 101	General Ecology	4

Third Semester:		
ECO 202	Microeconomics	3
GRB 2100	Building Automation and Controls ‡ (fall only)	3
GRB 2200	Solar & Wind Systems ‡ (fall only)	3
BIO 205	General Ecology	3
GRB 2300	Commercial Electrical ‡ (fall only)	3

Fourth Semester:		
GRB 2400	Care of Green Spaces‡ (spring only)	3
MGT 205	Human Resources Management	3
GRB 2500	Troubleshooting Building Systems ‡ (spring only)	3
_____	Liberal Arts elective	3-4
GRB 2600	Green HVAC ‡ (spring only)	3
	Total Credits:	65-66

* Required of all first-time, full-time students
NOTE: See College Catalog for math competency requirement.
**All AAS degrees require ENG 1001 Composition I, ENG 1301 Fundamentals of Speech, a 4 credit science course with lab and a minimum of 10 additional Liberal Arts credits from at least two other areas of study. Liberal Arts prefixes: ANT, ART, ECO, ENG, FLA, GEO, HIS, HON, HUM, MAT, PHO, POL, PSY, SCI, and SOC. CPT 1301, Logic and Problem Solving, is also singularly classified as liberal arts.
‡The technical courses for this program will be delivered on site and/or through interactive TV Distance Learning Technology approved for all Consortium colleges.

Offered through the Hudson Valley Educational Consortium.
Lead college: SUNY Sullivan

Program Description

The associate in applied science degree in Green Building Maintenance and Management provides students with the skills and knowledge needed to maintain and manage high-performance commercial buildings.

New construction and existing buildings that have upgraded energy systems rely on sustainable technology. Recent emphasis on green technologies and LEED-certified (Leadership in Energy and Environmental Design) building standards support the use of alternative forms of energy as well as the use of sustainable products for construction, interior design and building maintenance. In addition to learning the most current theories, students will acquire the hands-on training needed to work with rapidly evolving technologies including photovoltaic cells, wind generators and geothermal heating, ventilation and air conditioning (HVAC) systems.

This program has a hands-on component which may require students to travel to Sullivan County. .

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission.

Green Building Maintenance and Management

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will learn:

- the skills and knowledge necessary to make decisions about the management and maintenance of building systems,

- to maintain both conventional and green building technologies and systems that are used to produce energy, heat, light, and ventilation as well as those that consume energy,

- to calculate energy efficiency and recommend changes for better outcomes,

- the essential components of building wiring, heating, cooling, and ventilation systems so they can assume responsibility for maintenance of these systems,

- the basic principles for the positioning and use of wind turbines, photovoltaic cells, passive solar systems and other green building systems,

- to manage projects, including communication with the building owners, utilities, planners, and contractors to assure effective and efficient building maintenance and management.

Career Opportunities

- Energy and indoor air quality auditor
- HVAC operations and maintenance technician
- Solar and wind energy technician
- Green building, renewable energy and energy efficiency consultant

Transfer Opportunities

While the A.A.S. degree leads to immediate employment, please check with the intended transfer school for details.

Contact Information

Stacey Moegenburg
Associate Vice President
Business, Math, Science and
Technologies Division
845-341-4286
Admissions Office
(845) 341-4030

Honors Program

Degree Awarded: Associate in Arts, Science or Applied Science

Member of the National Collegiate Honors Council and Regional NCHC

Program Requirements

A.A. Degree

6 credits Honors English: ENG 101H and ENG 102H
3 credits Honors Social Science
3 credits Honors Humanities
MAT 205 — Calculus 1 *
HON 201H — Honors Seminar
(3 semesters, 1 credit each) ***
HON 120H — Service Learning (1 cr) freshman year
HON 288H — Honors Capstone: Planning & Research
HON 289H — Honors Capstone: Writing & Presentation

A.S. Degree

6 credits Honors English: ENG 101H and ENG 102H
6 credits Honors Social Science
MAT 205 — Calculus 1 *
HON 201H — Honors Seminar
(3 semesters, 1 credit each) **
HON 120H — Service Learning (1 cr) freshman year
HON 288H — Honors Capstone: Planning & Research
HON 289H — Honors Capstone: Writing & Presentation

A.A.S. Degree

6 credits Honors English: ENG 101H and ENG 102H
6 credits Honors Social Science **or**
3 credits Honors Social Science **and**
3 credits Honors Humanities *
MAT 205 — Calculus 1 *
HON 201H — Honors Seminar
(3 semesters, 1 credit each) **
HON 120 — Service Learning (1 cr) freshman year
HON 288H — Honors Capstone: Planning & Research
HON 289H — Honors Capstone: Writing and Presentation

** May be fulfilled by taking one of the following math courses **and** one of the following four credit lab science courses, depending upon degree requirements:*

Math: MAT 120 Introduction to Statistics
MAT 121 College Algebra
MAT 122 College Trigonometry
MAT 131 Pre-Calculus
Lab Science: PHY 101 General Physics 1
CHM 105 General Chemistry 1
BIO 101 General Biology 1
BIO 143 Field Biology
GLG 110 General Geology

** The seminar, service and capstone credits are specific requirements of the Honors Program. They also may be counted as Liberal Arts or General Electives. They are restricted to those students who have been admitted into the program.

Program Description

The Honors Program was created to offer highly motivated and talented students an opportunity to develop their potential more fully as they study for the associate degree. Honors courses are selected from the areas of: English, social science, arts, communication, humanities, math, biology, movement science and business. Honors sections of these courses follow the Socratic dialogue format and offer enrichment through alternative texts, outside readings, research projects and abstract concept development beyond the traditional course section. Additionally, students complete three Honors seminars, the service course and the capstone project.

The Honors Program is open to both full and part-time degree-seeking students.

Student Learning Outcomes

Students will:

• engage in interdisciplinary academic inquiry

• raise cultural awareness

• strengthen community responsibility

• develop transformational leadership

For expanded student learning outcomes, please visit the Honors web page at www.sunyorange.edu/honors.

Admission Criteria

Admission requirements are for first-time college students, transfers, current SUNY Orange students, GED holders and 24 Credit Hour students.

All applicants must:

• complete the Honors Program application.

• take the required College Placement Assessment in English and math and place into Freshman English 1. Those who have taken and passed a college-level English class may obtain an Assessment Waiver. Information is available on the College's web site.

• provide two letters of recommendation from faculty, counselors, administrators or mentors.

Students who already possess a first Honors degree may not seek a second should they pursue a second degree at SUNY Orange.

Degree Awarded: Associate in Arts, Science or Applied Science

Additionally:

1. First time college students must be graduates of a college prep high school program with at least one of the following: 1) high school average of 90% at the end of junior year; 2) class rank in the top 10% of the class; 3) combined SAT score of 1200 (math + verbal) or 1800 (3 parts); 4) ACT score of 27.

    Home schooled students and GED holders are welcome to the Honors Program. They must talk with Admissions and the Honors Program Coordinator to discuss eligibility.

2. High school seniors with accumulated college credits:

    a) Between 1 and 11.5 credits must meet the requirements for first time college students and have attained a cumulative average of 3.5 for completed college courses.

    b) Twelve or more credits must meet transfer student requirements.

3. Transfer students with 12 or more credits must have a GPA of 3.5 and must provide a two- to five-page typed essay to be evaluated as part of the admissions application.

    Honors courses taken at other colleges will be accepted toward the SUNY Orange Honors Program, where appropriate, following current transfer course guidelines.

    Students may meet an honors English course requirement with a course previously taken at another college with a grade of "A" in an appropriate transfer English course or a grade of 4 in Advanced Placement English from high school. If AP English, student must also submit the essay component of the AP English exam for evaluation; however, the Honors Program required credits must be made up with other honors courses, in consultation with the Program Coordinator.

4. Current SUNY Orange students, including 24 Credit Hour students, must have a GPA of 3.5 and provide an essay to be included with the admissions application for evaluation.

    Note: If students have already achieved an "A" in SUNY Orange's Freshman English 1 and/or 2*, the above noted essay and Honors English 1 and/or 2 requirement will be satisfied. Still, the three or six honors credits must be made up with other honors courses, in consultation with the Program Coordinator.

Dependent upon major

> Students who are are not in the Honors Program but are interested in taking an honors course should contact the Honors Program Coordinator.

Transfer Opportunities

Completion of the Honors program may enhance transfer and scholarship opportunities to more selective colleges and universities and prepare students for the academic work required for continued pursuit of undergraduate and graduate degrees.

Our students have successfully transferred to many prestigious schools including:

- Smith College
- Clemson University
- Rensselear Polytechnic Institute (RPI)
- Vassar College
- Emerson University
- American University
- Cornell University
- Bard College

Requirements for Honors Designation

In order for students to show the Honors Designation on their transcripts and seal on their diplomas upon graduation, they must have been accepted to and have attained the following in the Honors Program:

1. Completion of all degree requirements;
2. Achievement of a 3.5 GPA at the time of graduation, with no semester GPA less than 3.0.

Contact Information

Honors Program Coordinator
(845) 341-4004
Admissions
(845) 341-4030

Human Services

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
COM 101	Foundations of Communication	3
PSY 101	General Psychology 1	3
SOC 120	Social Problems	3
HMS 101	Intro to Human Services	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
_____	SUNY American History (GE 4)	3
PSY 102	General Psychology 2	3
_____	SUNY Natural Science (GE 2)	3-4
PHL 220	Ethics	3
PES ____	Physical Education	1

Third Semester		
_____	SUNY Other/World Civilizations (GE 6)	3
_____	SUNY Arts Course (GE 8)	3
SOC 101	Intro to Sociology	3
MAT ___	Restricted SUNY Math course*	3
HMS 201	Human Services Field Exp 1	2
ENG 160	Technical Writing	1.5

Fourth Semester		
_____	SUNY Western Civilization (GE 5)	3
_____	SUNY Foreign Language (GE 9)	3
SOC 231	Family	3
PSY ___	Psychology Elective*	3
HMS 202	Human Services Field Exp 2	2
ENG 161	Technical Writing	1.5

Total Credits: 63-64

* *either MAT 102 or (if tested into MAT 120 or higher) MAT 120*

** *PSY 220 Developmental Psychology*
   PSY 221 Child Psychology
   PSY 222 Adolescent Psychology
   PSY 230 Abnormal Psychology
   PSY 223 Adulthood and Aging

This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

The Associate in Science degree program in Human Services prepares graduates to transfer and complete a bachelor's degree in human services, psychology or sociology. Because of the broad liberal arts component, concentration in psychology and sociology with field experiences in at least two human services agencies, the program also prepares the graduate for employment as a direct care worker.

The primary goal of the curriculum is the development of critical thinking and clinical problem solving skills as they relate to populations served by human service agencies. The program offers introductory coursework in human services, psychology and sociology, writing skills directly related to the human services field, and field experiences in at least two human service agencies. Most courses are offered each year, often in the Fall, Spring and Summer semesters. Field Studies in human services are offered each year: Field Studies 1 in the Fall semester, and Field Studies 2 in the Spring. The course of study may be pursued on a part-time basis, daytime or evening. Some courses are available on Saturdays.

This program was developed in support of both the Coalition for Direct Care Providers and the New York State Family Development Training and Credentialing Program goals. Students may seek tuition assistance through the Coalition for Direct Care Providers.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admissions process for all applicants.)

Students may begin taking the required program courses upon completion of all required developmental courses. Students are also required to:

- complete two field placement courses, each requiring 48 hours of observation/interaction in at least two human service settings, with a grade of C or better.

- have an overall C average upon completion of all coursework.

Human Services

Student Learning Outcomes

Students will:

- develop a portfolio demonstrating application of theory, goals and objectives associated with current direct care positions in the human services field.

- demonstrate appropriate critical thinking and problem solving skills necessary to continue their education toward a four-year degree or seek entry level employment in a human service agency.

- interact with recipients, families and professionals in a manner that demonstrates an appreciation of cultural and socioeconomic diversity.

- demonstrate an awareness of an appreciation of the goals and objectives set forth by the Coalition for Direct Care Providers and New York State Family Training and Credentialing Program (FDC).

Career Opportunities

- In-patient and out-patient mental health and rehabilitation facilities such as AHRC, Occupations Inc., RSS and MHA
- State facilities such as MPC, Mid-Hudson and Crystal Run.
- social services agencies

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- SUNY four year schools
- other public and private institutions
- transfer agreements are being developed with SUNY New Paltz's Direct Care Program and Mount St. Mary's Human Services Degree Program

Contact Information

Behavioral Sciences
Department Chair
(845) 341-4344
Admissions Office
(845) 341-4030

International Studies

Degree Awarded: Associate in Arts

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
COM 101	Foundations of Communication	3
MAT ___	SUNY Math (GE 1)	3/4
GEO 102	Human Geography **or**	
ANT 101	Cultural Anthropology	3
POL 220	Comparative Governments	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
PSY 101	General Psychology 1	3
_____	SUNY Natural Science (GE 2)	3/4
POL 221	International Relations	3
HIS 121	World History to 1500	3
PES ___	Physical Education	1

Third Semester		
ENG 203/4	World Literature	3
HIS 122	World History Since 1500	3
_____	SUNY Art (GE 8)	3
_____	SUNY Foreign Language (GE 9)	
	(Elementary 2 or above)	3
ECO 201	Macro-Economics	3

Fourth Semester		
ENG 225	International Literature	3
_____	General Elective	3
_____	Liberal Arts Science or	
	Math (MAT 113 or higher)	3/4
_____	Restricted Elective*	3
_____	Restricted Elective*	3

Total Credits: 62-64

Choose two of the following courses:
COM 211 Intercultural Communications
ECO 203 Economic Development
HIS 123 Latin American Heritage
HIS 124 Africa: Past and Present
HIS 133 Modern Europe
HIS 220 Modern China and Japan
HIS 222 The Middle East
_____ Non-Western Art
_____ Foreign Language Intermediate 1
or higher
BUS 207 Intro to International Business

Program Description

The Associate in Arts degree program in International Studies provides students with a range of studies that emphasize the interconnections among global political, economic, social, and cultural events and processes. As globalization literally makes the world a smaller place, International Studies helps prepare students to take advantage of those changes, both in terms of their personal growth and career opportunities. The degree is designed to prepare students for transfer and continued academic success within a liberal arts setting, especially one dedicated to the study of international and global events. This program also features a solid grounding in liberal arts education.

The curriculum is designed to include a broad range of courses with international themes in the humanities and social sciences. In addition to core courses in the liberal arts common to many programs, International Studies requires students to take classes in foreign languages, international relations, world history and international literature. Through these courses, students will develop critical learning skills, a foundation of knowledge about the international system and the ability to clearly write, analyze and communicate about concepts in the discipline.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Degree Awarded: Associate in Arts

Student Learning Outcomes

Students will:

- develop a foundation of essential knowledge about the cultural, social and natural worlds, and processes contributing to globalization and interdependence.

- understand both the commonalities and diversity of human experiences, values and opinions among and between cultures.

- understand the forms of international artistic expressions and their inherent creative processes.

- think critically, applying systematic reasoning, information management and quantitative skills.

- communicate effectively in English and develop a basis for continued progress in acquiring skills in a language other than English.

- be prepared for transfer to, and success at, upper-level institutions offering programs of study in International Relations.

Career Opportunities

- language interpreter
- high school teacher
- international business
- international law
- government or diplomatic work
- export-import work

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- four-year SUNY units

- a variety of public and private four-year colleges with whom articulation agreements are under development

Contact Information

Global Studies
Department Chair
(845) 341-4828
Admissions Office
(845) 341-4030

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Arts

Recommended Course Sequence

JRTEP A.A. — B-2 English

First Semester   **Credits**

ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
PSY 101	General Psychology 1	3
MAT 111	Foundations of Elementary School Mathematics	3
PES 100	Concepts of Physical Wellness	1

Second Semester

ENG 102	Freshman English 2#	3
PSY 221	Child Psychology	3
SOC 120	Social Problems	3
_____	SUNY Natural Science (GE 2)	3/4
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3

Third Semester

ENG___	Restricted English Elective*	3
ENG___	Restricted English Elective^	3
ENG___	Restricted English Elective**	3
_____	SUNY Foreign Language - Elementary 1 or Intermediate 1 (GE 9)	3
EDU 201	Observation and Assessment++	3
PES ____	Physical Education	1

Fourth Semester

ENG___	Restricted English Elective+	3
ENG___	Restricted English Elective**	3
GEO 101	Elements of Physical Geography	3
HIS 121	World History to 1500 **or**	
HIS 122	World History since 1500	3
_____	SUNY Western Civilization (GE 5)	3
_____	SUNY Foreign Language - Elementary 2 (GE9) **or**	
EDU 202	Infant/Toddler Development++***	3

Total Credits: 65-66

* ENG 207 or ENG 208   ^ ENG 209 or ENG 210
+ ENG 211 or ENG 212
**Choose from the following: ENG 120, ENG 203, ENG 204 , ENG 205, ENG 206, ENG 211, ENG 212, ENG 215, ENG 216, ENG 217, ENG 220, ENG 221, ENG 222, ENG 223, ENG 225, ENG 226, ENG 230, ENG 297
++Local observations beyond college classroom required.
***Spring semester only
> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
@ B- or higher required for JRTEP
 # Must earn grade of B or higher

Program Description

The Associate in Arts degree in this Jointly Registered Teacher Education Program (JRTEP) is primarily for students who plan to transfer to SUNY New Paltz or another SUNY school and become certified to teach in New York State in either Early Childhood, Elementary or Secondary Education. Developed by Orange County Community College and SUNY New Paltz, this jointly registered liberal arts/teacher education program has been approved by the New York State Education Department. Students in this program are, at the same time, given priority status for admission consideration into The College at New Paltz. Upon successful completion of the A.A. or A.S. degree at SUNY Orange, with a minimum 2.75 grade point average, students who are accepted will transfer to SUNY New Paltz with full junior standing in order to complete the bachelor's degree.

The primary focus of the JRTEP concentration is to develop and integrate critical thinking, problem solving, and creative skills with information and theories about education. Coupled with a broad general liberal arts foundation, JRTEP students will experience between 10 and 80 hours of observation in local schools and centers. This field work provides excellent practical application opportunities.

Students planning to transfer to other SUNY four-year schools may also benefit from these courses. They should see their advisor and check transfer credits with transfer school if other than SUNY New Paltz.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Before beginning their coursework, JRTEP students must choose an age level: birth to second grade (B-2), first to sixth grade (1-6), or seventh to twelfth grade (7-12). These are NYS Teaching Certification age level categories and determine course sequences at SUNY Orange.

Then, students must choose an educational concentration:

- English (available in B-2 or 1-6 or 7-12) OR
- History (available in B-2 or 1-6 or 7-12) OR
- Spanish (available in B-2 or 1-6 or 7-12) OR
- Biology (available in 1-6 or 7-12) OR
- Math (available in 1-6 or 7-12)

Jointly Registered Teacher Education Program (JRTEP)

Student Learning Outcomes

Students will:

- acquire a broad base of knowledge in the academic area of concentration.

- demonstrate developmentally appropriate practices in teaching methodology.

- understand, welcome, and integrate an unbiased appreciation of a classroom population that is diverse in appearance, performance, ability and culture.

- plan effective, relevant, innovative lesson plans adhering to New York State Learning Standards and/or National Association for the Education of Young Children (NAEYC) Standards.

- grow in professional and ethical standards, collaborative teamwork, self-confidence, confidentiality and personal achievement.

Transfer Criteria:

To transfer, SUNY Orange JRTEP students must:

- meet all entry criteria for SUNY Orange.

- declare their intent to be in JRTEP at or prior to registration for proper advice/courses.

- complete the courses outlined in their academic concentration.

- complete SUNY-mandated General Education Requirements.

- maintain a minimum cumulative GPA of 2.75 (some courses have higher GPA requirements). SUNY New Paltz recommends a GPA of 3.25.

- complete the A.A. or A.S. degree.

- complete separate application and/or procedures for SUNY New Paltz or another SUNY school.

- show evidence of completion of fingerprinting through NYS Department of Education.

Note: Because teacher education programs and the New York State Education Department certification regulations are precisely defined, it is essential that JRTEP students work closely with both their SUNY Orange advisor and their New Paltz advisor, who is on the SUNY Orange campus by appointment.

Career Opportunities

- classroom teacher
- positions in related educational fields, such as special education, guidance

Transfer Opportunities

JRTEP is specifically designed to transfer seamlessly to SUNY New Paltz. Other SUNY and non-SUNY schools with teaching preparatory programs may accept all or a large percentage of credits (see transfer criteria below left).

When JRTEP students successfully complete the A.A. or A.S. at SUNY Orange, they may apply for transfer to SUNY New Paltz to complete the bachelor's degree. JRTEP applicants are given priority review and the highly academically prepared student will be accepted first.

Contact Information

Education
Department Chair
(845) 341-4482
Admissions Office
(845) 341-4030

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Arts

JRTEP A.A. — B-2 History

First Semester		Credits
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 133	Modern Europe **or**	
HIS 131	Medieval/Renaissance Europe	3
PSY 101	General Psychology 1	3
MAT 111	Foundations of Elementary School Mathematics	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2#	3
PSY 221	Child Psychology	3
_____	SUNY Natural Science (GE 2)	3/4
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
_____	SUNY Arts (GE 8)	3
PES ____	Physical Education	1

Third Semester		
ENG___	Advanced English (ADVE)	3
GEO 101	Elements of Physical Geography	3
HIS 101	US History to 1865	3
ANT 101	Social/Cultural Anthropology	3
_____	SUNY Foreign Language (GE 9)<	3
EDU 201	Observation and Assessment++	3

Fourth Semester		
ENG__	Advanced English (ADVE)	3
HIS 102	US History since 1865	3
HIS 220	China and Japan **or**	
HIS 221	India and Southeast Asia	3
POL 103	US Government National	3
_____	SUNY Foreign Language (GE 9)<	3
EDU 202	Infant/Toddler Development++***	3

Total Credits: 68-69

< If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.

++Local observations beyond college classroom required.

****Spring semester only.*

> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
@ B- or higher required for JRTEP
 # Must earn grade of B or higher

JRTEP A.A. — B-2 Spanish

First Semester		Credits
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
PSY 101	General Psychology 1	3
SPN 201	Intermediate Spanish 1##	3
EDU 107	Mandated Training	1

Second Semester		
ENG 102	Freshman English 2#	3
HIS 123	Latin American Heritage & History	3
MAT 111	Foundations of Elementary School Mathematics	3
SPN 202	Intermediate Spanish 2***	3
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
PES 100	Concepts of Physical Wellness	1

Third Semester		
_____	SUNY Western Civilization (GE 5)	3
PSY 221	Child Psychology	3
_____	SUNY Natural Science (GE 2)	3/4
SPN 203	Spanish Conversation and Composition##	3
EDU 201	Observation and Assessment++	3
PES ____	Physical Education	1

Fourth Semester		
SOC 120	Social Problems	3
_____	Add'l Math (MAT 102 or higher), Liberal Arts Science or Computer Science	3/4
SPN 204	Introduction to Spanish Lit.***	3
EDU 207	Social and Philosophical Foundations of Education++>	3
EDU 202	Infant/Toddler Development++***	3
_____	SUNY Arts (GE 8)	3

Total Credits: 66-68

++Local observations beyond college classroom required.

****Spring semester only.*

> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
Fall semester only
@ B- or higher required for JRTEP
 # Must earn grade of B or higher

Degree Awarded: Associate in Arts

JRTEP A.A. 1 - 6 English

First Semester

ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
MAT 111	Foundations of Elementary School Mathematics	3
_____	SUNY Foreign Language (GE 9)<	3
PES 100	Concepts of Physical Wellness	1

Second Semester

ENG 102	Freshman English 2#	3
PSY 101	General Psychology 1	3
_____	SUNY Natural Science (GE 2)	3/4
_____	SUNY Foreign Language (GE 9)<	3
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
PES ____	Physical Education	1

Third Semester

ENG __	Restricted English Elective*	3
ENG __	Restricted English Elective#	3
ENG __	Restricted English Elective**	3
PSY 221	Child Psychology	3
SOC 120	Social Problems	3

Fourth Semester

ENG __	Restricted English Elective+	3
ENG___	Restricted English Elective**	3
GEO 101	Elements of Physical Geography	3
HIS 121	World History to 1500 **or**	
HIS 122	World History since 1500	3
_____	SUNY Western Civilization (GE 5)	3

Total Credits: 62-63

*ENG 207 or ENG 208   ^ENG 209 or ENG 210
   +ENG 211 or ENG 212

**Choose from the following: ENG 120, ENG 203, ENG 204, ENG 205, ENG 206, ENG 211, ENG 212, ENG 215, ENG 216, ENG 217, ENG 220, ENG 221, ENG 222, ENG 223, ENG 225, ENG 226, ENG 230, ENG 297

< If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language must be taken. If a student takes Intermediate Language 1 as the first foreign language in this sequence, he or she MUST either take the next level of the same language OR a non-developmental three-credit academic course to replace the credits.

++Local observations beyond college classroom required.
> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
@ B- or higher required for JRTEP
# Must earn grade of B or higher

JRTEP A.A. — 1-6 History

First Semester		**Credits**
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 133	Modern Europe	3
PSY 101	General Psychology 1	3
MAT 111	Foundations of Elementary School Mathematics	3
PES 100	Concepts of Physical Wellness	1

Second Semester

ENG 102	Freshman English 2#	3
HIS 131	Medieval/Renaissance Europe	3
_____	SUNY Natural Science (GE 2)	3/4
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
_____	SUNY Arts (GE 8)	3
PES ____	Physical Education	1

Third Semester

ENG __	Advanced English (ADVE)	3
GEO 101	Elements of Physical Geography	3
HIS 101	US History to 1865	3
ANT 101	Social/Cultural Anthropology	3
_____	SUNY Foreign Language (GE 9)<	3

Fourth Semester

ENG __	Advanced English (ADVE)	3
HIS 102	US History since 1865	3
HIS 220	China and Japan **or**	
HIS 221	India and Southeast Asia	3
POL 103	US Government National	3
PSY 221	Child Psychology	3
_____	SUNY Foreign Language (GE 9)<	3

Total Credits: 65-66

< If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1 of the same language, no other language need be taken.
++Local observations beyond college classroom required.
> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
@ B- or higher required for JRTEP
# Must earn grade of B or higher

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Arts

JRTEP A.A. 1 - 6 Spanish

First Semester		Credits
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
MAT 111	Foundations of Elementary School Mathematics	3
SPN 201	Intermediate Spanish 1##	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2#	3
PSY 101	General Psychology 1	3
_____	SUNY Natural Science (GE 2)	3
SPN 202	Intermediate Spanish 2***	3
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
PES ____	Physical Education	1

Third Semester		
ENG__	Advanced English (ADVE)	3
_____	SUNY Western Civilization (GE 5)	3
PSY 221	Child Psychology	3
SOC 120	Social Problems	3
SPN 203	Spanish Conversation and Composition##	3

Fourth Semester		
ENG __	Advanced English (ADVE)	3
GEO 101	Elements of Physical Geography	3
_____	Restricted SUNY World Civilization*	3
SPN 204	Introduction to Spanish Literature	3
_____	SUNY Arts (GE 8)***	3

Total Credits: 62-63

HIS 123, HIS 121 or HIS 122
++Local observations beyond college classroom required.
> Evidence of completion of fingerprinting through NYS Dept. of Education is required.
Fall semester only
**** Spring semester only*
@ B- or higher required for JRTEP
 # Must earn grade of B or higher

JRTEP A.A. — 7-12 English

First Semester		
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
_____	SUNY Math (GE 1) - MAT 102 or higher	3
_____	SUNY Foreign Language (GE 9)<	3
EDU 107	Mandated Training	1
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2#	3
_____	SUNY Arts (GE 8)	3
PSY 101	General Psychology 1	3
_____	SUNY Natural Science (GE 2)	3/4
_____	SUNY Foreign Language (GE 9)<	3
PES ____	Physical Education	1

Third Semester		
ENG 207	English Literature: 14th Through 18th Century	3
ENG 209	American Literature: To the Civil War	3
ENG ___	Restricted English Elective**	3
ENG ___	Restricted English Elective**	3
PSY 222	Psychology of Adolescence	3
EDU 207	Social and Philosophical Foundations of Education++>	3

Fourth Semester		
ENG 208	English Literature: 19th and Early 20th Century	3
ENG 210	American Literature: 1865 to Present	3
ENG ___	Restricted English Elective**	3
_____	SUNY Western Civilization (GE 5)	3
_____	SUNY Other World Civilization (GE 6)	3
_____	Add'l Math (MAT 102 or higher), Liberal Arts Science or Computer Science	3/4

Total Credits: 69-71

***Choose from the following: ENG 120, ENG 203, ENG 204, ENG 205, ENG 206, ENG 211, ENG 212, ENG 215, ENG 216, ENG 217, ENG 220, ENG 221, ENG 222, ENG 223, ENG 225, ENG 226 , ENG 230, ENG 297*
<If completed Elementary Language 1, must also complete Elementary Language 2of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.
++Local observations beyond college classroom required
 # Must earn grade of B or higher
> Evidence of completion of fingerprinting through NYS Dept. of Education is required

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Arts

JRTEP A.A.—7-12 Social Studies

First Semester / Credits

ENG 101	Freshman English 1#	3
HIS 101	US History to 1865	3
PSY 101	General Psychology 1	3
_____	SUNY Math (GE 1) - MAT 102 or higher	3
_____	SUNY Natural Science (GE 2)	3/4
EDU 107	Mandated Training	1

Second Semester

ENG 102	Freshman English 2#	3
COM 101	Foundations of Communication	3
HIS 102	US History since 1865	3
PSY 222	Psychology of Adolescence	3
_____	SUNY Arts (GE 8)	3
PES 100	Concepts of Physical Wellness	1

Third Semester

GEO 102	Human Geography	3
ECO 201	Introduction toMacroeconomics	3
HIS 131	Medieval and Renaissance Europe	3
_____	SUNY Foreign Language (GE 9)<	3
EDU 207	Social and Philosophical Foundations of Education++>	3
PES ____	Physical Education	1

Fourth Semester

ECO 202	Introduction to Microeconomics	3
HIS ____	Restricted SUNY Social Science**	3
POL ____	Restricted SUNY Social Science*	3
POL ____	Restricted SUNY Social Science*	3
_____	Add'l Math (MAT 102 or higher), Liberal Arts Science or Computer Science	3/4
_____	SUNY Foreign Language (GE 9)<	3

Total Credits: 66-68

* *Choose from the following: POL 102, POL 103, POL 221*
**Choose from the following: HIS 123, HIS 221, HIS 222*
<*If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.*
++*Local observations beyond college classroom required*
Must earn grade of B or higher
> *Evidence of completion of fingerprinting through NYS Dept. of Education is required*

JRTEP A.A. — 7-12 Spanish

First Semester

ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
HIS 101	US History to 1865 **or**	
HIS 102	US History since 1865	3
PSY 101	General Psychology 1	3
SPN 201	Intermediate Spanish 1##	3

Second Semester

ENG 102	Freshman English 2#	3
PSY 222	Psychology of Adolescence	3
_____	SUNY Natural Science (GE 2)	3/4
SPN 202	Intermediate Spanish 2***	3
EDU 207	Social and Philosophical Foundations of Education++>	3
EDU 107	Mandated Training	1

Third Semester

ENG ___	Restricted English Elective**	3
_____	SUNY Western Civilization (GE 5)	3
SOC 120	Social Problems	3
_____	SUNY Math (GE1) - MAT 102 or higher	3
SPN 203	Spanish Conversation and Composition##	3
PES 100	Concepts of Physical Wellness	1

Fourth Semester

ENG __	Restricted English Elective**	3
HIS 123	Latin American Heritage & History	3
_____	Add'l Math (MAT 102 or higher), Liberal Arts Science, or Computer Science	3/4
SPN 204	Introduction to Spanish Lit.***	3
_____	SUNY Arts (GE 8)	3
PES ____	Physical Education	1

Total Credits: 63-65

**Choose from the following: ENG 120, ENG 203, ENG 204, ENG 205, ENG 206, ENG 211, ENG 212, ENG 215, ENG 216, ENG 217, ENG 220, ENG 221, ENG 222, ENG 223, ENG 225, ENG 226, ENG 230, ENG 297*
++*Local observations beyond college classroom required*
Must earn grade of B or higher
> *Evidence of completion of fingerprinting through NYS Dept. of Education is required*
Fall semester only
***Spring semester only*

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Science

Recommended Course Sequence

JRTEP A.S. — 1-6 Biology

First Semester		Credits
ENG 101	Freshman English 1#	3
PSY 101	General Psychology 1	3
BIO 101	General Biology 1	4
MAT 120	Intro. to Statistics or Higher	3
_____	Restricted SUNY Elective*	3
PES 100	Concepts of Physical Wellness	1

Second Semester

ENG 102	Freshman English 2#	3
PSY 221	Child Psychology	3
BIO 102	General Biology 2	4
MAT 111	Foundations of Elementary School Mathematics	3
_____	Restricted SUNY Elective*	3

Third Semester

BIO 201	Genetics	4
BIO ___	Approved Biology Elective+	3
_____	SUNY Foreign Language (GE 9)<	3
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
_____	Restricted SUNY Elective*	3

Fourth Semester

COM 101	Foundations of Communication	3
GEO 101	Elements of Physical Geography	3
BIO 202	Comparative Vertebrate Anatomy **or**	
BIO 204	General Botany	4
_____	SUNY Foreign Language (GE 9)<	3
_____	Restricted SUNY Elective*	3
PES ____	Physical Education	1

Total Credits: 66

* *Student must take one course from each of the following SUNY General Education Requirements: American History (GE 4); Western Civilization (GE 5); Other/World Civilizations (GE 6); and Arts (GE 8)*
+ *BIO 146, BIO 148 or BIO 143*
< *If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.*
++*Local observations beyond college classroom required.*
> *Evidence of completion of fingerprinting through N YS Dept. of Education is required.*
@ *B- or higher required for JRTEP*
# *Must earn grade of B or higher*

Program Description

The Associate in Science degree in this Jointly Registered Teacher Education program (JRTEP) is primarily for students who plan to transfer to SUNY New Paltz and become certified to teach in New York State in either early childhood, elementary or secondary education. Students may transfer to another SUNY school and should check transfer requirements with transfer school. Upon successful completion of the A.S. degree at SUNY Orange, with a minimum 2.75 grade point average, students who are accepted will transfer to SUNY New Paltz to complete the bachelor's degree.

The primary focus of the JRTEP concentration is to develop and integrate critical thinking, problem solving, and creative skills with information and theories about education. Coupled with a broad general liberal arts foundation, JRTEP students will experience between 10 and 80 hours of observation in local schools and centers. This field work provides excellent practical application opportunities.

Students planning to transfer to other SUNY four-year schools may also benefit from these courses. They should see their advisor and check transfer credits with transfer school if other than SUNY New Paltz. SUNY Orange students are, at the same time, given priority status for admission consideration into The College at New Paltz.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Department-Specific Requirements:

Before beginning their coursework, JRTEP students must choose an age level: birth to second grade (B-2), first to sixth grade (1-6), or seventh to twelfth grade (7-12). These are NYS Teaching Certification age level categories and determine course sequences at SUNY Orange.

Then, students must choose an educational concentration:

• English (available in B-2 or 1-6 or 7-12) OR

• History (available in B-2 or 1-6 or 7-12) OR

• Spanish (available in B-2 or 1-6 or 7-12) OR

• Biology (available in 1-6 or 7-12) OR

• Math (available in 1-6 or 7-12)

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- acquire a broad base of knowledge in liberal arts.

- acquire and develop technological skills and/or laboratory skills.

- demonstrate an understanding of the scientific method: observation, hypothesis development, measurement and data collection, evaluation of data, mathematical analysis of data, and the ability to draw conclusions.

- acquire a broad base of knowledge in the academic area of concentration.

- demonstrate developmentally appropriate practices in teaching methodology.

- understand, welcome and integrate an unbiased appreciation of a classroom population that is diverse in appearance, performance, ability and culture.

- plan effective, relevant, innovative lesson plans adhering to New York State Learning Standards.

- grow in professional and ethical standards, collaborative teamwork, self-confidence, confidentiality and personal achievement.

Career Opportunities

- public school classroom teacher (pre-K through grade 12)
- related education positons, such as school psychologist, special education teacher, and guidance counselor

Transfer Opportunities

JRTEP is specifically designed to transfer seamlessly to SUNY New Paltz. Other SUNY and non-SUNY schools with teaching preparatory programs may accept all or a large percentage of credits (see transfer criteria below left).

When JRTEP students successfully complete the A.A. or A.S. at SUNY Orange, they may apply for transfer to SUNY New Paltz to complete the bachelor's degree. JRTEP applicants are given priority review, and the highly academically prepared student will be accepted first.

Transfer Criteria:

To transfer, SUNY Orange JRTEP students must:

- meet all entry criteria for SUNY Orange.

- declare their intent to be in JRTEP at or prior to registration for proper advice/courses.

- complete the courses outlined in their academic concentration.

- complete SUNY-mandated General Education Requirements.

- maintain a minimum cumulative GPA of 2.75 (some courses have higher GPA requirements); SUNY New Paltz recommends a GPA of 3.25.

- complete the A.A. or A.S. degree.

- complete separate application and/or procedures for SUNY New Paltz.

- show evidence of completion of fingerprinting through NYS Department of Education.

Note: Because teacher education programs and the New York State Education Department certification regulations are precisely defined, it is essential that JRTEP students work closely with both their SUNY Orange advisor and their New Paltz advisor, who is on the SUNY Orange campus by appointment.

Contact Information

Education
Department Chair
(845) 341-4482
Admissions Office
(845) 341-4030

Jointly Registered Teacher Education Program (JRTEP)

Degree Awarded: Associate in Science

JRTEP A.S. — 1-6 Math

First Semester		Credits
ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
GEO 101	Physical Geography	3
PSY 101	General Psychology 1	3
MAT 205	Calculus 1	4
_____	SUNY Foreign Language (GE 9)<	3

Second Semester		
ENG 102	Freshman English 2#	3
PSY 221	Child Psychology	3
MAT 206	Calculus 2	4
_____	SUNY Foreign Language (GE 9)<	3
EDU 103	Introduction to Early Childhood/ Childhood Education++>@	3
PES 100	Concepts of Physical Wellness	1

Third Semester		
PHY 101	General Physics 1	4
MAT 120	Introduction to Statistics	3
CSC 101	Computer Science 1	4
_____	Restricted SUNY Elective*	3
_____	Restricted SUNY Elective*	3
PES ____	Physical Education	1

Fourth Semester		
_____	Restricted SUNY Elective*	3
_____	Restricted SUNY Elective*	3
PHY 102	General Physics 2	4
CSC 102	Computer Science 2 **or**	
CSC 130	Computers and Computing	3/4
MAT 111	Foundations of Elementary School Mathematics	3

Total Credits: 70-71

* *Students must take one course from each of the following SUNY General Education Requirements: American History (GE 4); Western Civilization (GE 5); Other/World Civilizations (GE 6); Arts (GE 8)*
< *If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language . If completed Intermediate Language 1, no other language need be taken.*
++*Local observations beyond college classroom required.*
> *Evidence of completion of fingerprinting through NYS Dept. of Education is required.*
@ *B- or higher required for JRTEP*
# *Must earn grade of B or higher*

JRTEP A.S. —7-12 Biology

First Semester		Credits
ENG 101	Freshman English 1#	3
_____	Restricted SUNY Gen Ed Elective*	3
PSY 101	General Psychology 1	3
BIO 101	General Biology 1	4
MAT 205	Calculus 1	4
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2#	3
_____	Restricted SUNY Gen Ed Elective*	3
PSY 222	Psychology of Adolescence	3
BIO 102	General Biology 2	4
CHM 105	General Chemistry 1	4
EDU 107	Mandated Training	1

Third Semester		
_____	Restricted SUNY Gen Ed Elective*	3
BIO 201	Genetics	4
CHM 106	General Chemistry 2	4
_____	SUNY Foreign Language (GE 9)<	3
EDU 207	Social and Philosophical Foundations of Education++>	3

Fourth Semester		
COM 101	Foundations of Communication	3
BIO 202	Comparative Vertebrate Anatomy **or**	
BIO 204	General Botany	4
MAT 120	Introduction to Statistics	3
_____	SUNY Foreign Language (GE 9)	3
PES ____	Physical Education	1
_____	SUNY Arts (GE 8)	3

Total Credits: 70

* *Students must take one course from each of the following SUNY General Education Requirements: American History (GE 4); Western Civilization (GE 5); Other/World Civilizations (GE 6)*
< *If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.*
++*Local observations beyond college classroom required*
Must earn grade of B or higher
> *Evidence of completion of fingerprinting through NYS Dept. of Education is required .*

Jointly Registered Teacher Education Program (JRTEP)

JRTEP A.S. — 7-12 Math

First Semester

ENG 101	Freshman English 1#	3
COM 101	Foundations of Communication	3
PSY 101	General Psychology 1	3
MAT 205	Calculus 1	4
_____	SUNY Foreign Language (GE 9)	3
EDU 107	Mandated Training	1

Second Semester

ENG 102	Freshman English 2#	3
PSY 222	Psychology of Adolescence	3
MAT 206	Calculus 2	4
_____	SUNY Foreign Language (GE 9)<	3
EDU 207	Social and Philosophical Foundations of Education++>	3
PES 100	Concepts of Physical Wellness	1

Third Semester

_____	Restricted SUNY Gen Ed Elective*	3
PHY 105	General Physics 1 with Calculus	4
MAT 211	Linear Algebra	3
MAT 207	Calculus 3	4
_____	SUNY Arts (GE 8)	3

Fourth Semester

MAT____	MAT 134 or MAT 136	3
_____	Restricted SUNY Gen Ed Elective*	3
_____	Restricted SUNY Gen Ed Elective*	3
PHY 106	General Physics 2 with Calculus	4
CSC 130	Computers and Computing	3
PES ____	Physical Education	1

Total Credits: 68

* *Students must take one course from each of the following SUNY General Education Requirements: American History (GE 4); Western Civilization (GE 5); Other/World Civilizations (GE 6)*

< *If completed Elementary Language 1, must also complete Elementary Language 2 of the same language. If completed Elementary Language 2, must also complete Intermediate Language 1 of the same language. If completed Intermediate Language 1, no other language need be taken.*

++*Local observations beyond college classroom required*

Must earn grade of B or higher

> *Evidence of completion of fingerprinting through NYS Dept. of Education is required*

Law Enforcement/Security

Degree Awarded: Certificate

Recommended Course Sequence

First Semester	Credits
CRJ 101 Criminal Justice	3
CRJ 211 Criminal Law	3
CRJ 106 Patrol Administration	3
CRJ 107 Industrial & Private Security	3
CRJ 215 Criminal Investigation 1	3
Second Semester	
POL 102 U. S. Gov't-State & Local	3
SOC 120 Social Problems	3
CRJ 105 Police-Community Relations	3
CRJ 111 Criminology	3
CRJ 216 Criminal Investigation 2	3

Total Credits: 30

Program Description

The Law Enforcement/Security certificate program is designed for students who are interested in a career in law enforcement or industrial security. The program provides an analysis of the close relationship between the public and private sector and their importance in providing a secure and safe environment for our citizens. The program emphasizes the methods, procedures and techniques that are utilized in the area of private security and current security-related issues such as loss prevention, disaster preparation, business continuity and homeland security. The program provides the student with an in-depth knowledge of police-related issues such as criminal law, patrol operations and criminal investigations.

Students who complete this program will be certified to seek employment as security officers with local or state security agencies.

Admissions Requirements

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Degree Awarded: Certificate

Student Learning Outcomes

Students will:

- identify and assess current issues in security and security management.

- be able to identify relevant issues of constitutional, procedural, and substantive law and their impact on security systems.

- be able to understand the importance of crime scene protection and be able to demonstrate the proper methods of gathering and presenting evidence properly.

- provide specific courses which meet New York State requirements for certification as a security officer.

Career Opportunities

- uniformed security officer
- plainclothes security officer
- loss prevention analyst
- risk analyst
- hotel security
- industrial security
- executive protection

Transfer Opportunities

Although this is a certificate program designed for immediate entry into the workplace, credits can be applied to further college study.

Consult a department advisor for more information.

Contact Information

Criminal Justice
Department Chair
(845) 341-4355
Admissions Office
(845) 341-4030

Liberal Arts: Humanities and Social Science

Degree Awarded: Associate in Arts

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	SUNY Math (GE 1)	3/4
_____	Social Science (Cat. A)*	3
COM 101	Foundations of Communication	3
_____	Liberal Arts Elective	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
_____	SUNY Natural Science (GE 2)	3/4
_____	Social Science (Cat. B)	3
_____	Restricted SUNY Elective**	3
_____	Liberal Arts elective	3
PES ____	Physical Education	1

Third Semester		
ENG __	200-level Advanced English	3
_____	Math/Liberal Arts Science***	3/4
_____	Social Science (Cat. C)	3
_____	Liberal Arts elective	3
_____	SUNY Arts (GE 8)	3

Fourth Semester		
ENG___	200-level Advanced English	3
_____	Social Science (Cat D)	3
_____	Elective	3
_____	Elective	3
_____	Elective	3

Total Credits: 62-65

*Categories A-D must include a SUNY History (GE 4, GE 5 or GE 6) and a SUNY Social Science (GE 3).
**SUNY Humanities (GE 7) list or SUNY Foreign Language (GE 9) list-Elementary 2 level or above.
*** MAT 102 or higher. Lab science not required.

This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

At Orange County Community College, areas of study under the Associate in Arts degree span a wide range of academic interests. Typically, these areas include specific studies in the social sciences, humanities, communication, education, the arts, and criminal justice. For more specific information, consult the individual Associate in Arts program descriptions within this catalog. Students should also meet regularly with their advisors to determine the best course of study for their particular area of interest.

In addition to taking courses in their particular area of interest, students are required to successfully complete a number of General Education courses as mandated by the State University of New York. These General Education areas include: math, natural sciences, social sciences, American history, western civilization, world civilizations, humanities, the arts, foreign language and communication.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Liberal Arts: Humanities and Social Science

Degree Awarded: Associate in Arts

Student Learning Outcomes

Students will:

- develop a foundation of essential knowledge about the cultural, social, and natural worlds, and individual well-being.
- understand the commonalities and diversity of the human experience, values and opinions.
- understand the forms of artistic expression and their inherent creative processes.
- think critically, apply systematic reasoning and develop information management quantitative skills.
- communicate effectively.
- be prepared to transfer to, and succeed, at an upper-level institution.

Career Opportunities

The Associate in Arts degree program serves as a foundation for students who will complete their bachelor's degree at a four- year institution. They may then pursue careers in a number of areas, including:

- the social sciences
- the arts
- the humanities
- education and communication

In addition, successful completion of a bachelor's degree can also lead to continued study on the graduate level. For a more complete list of career opportunities, consult the individual Associate in Arts program descriptions in this catalog.

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- four-year institutions in the State University of New York (SUNY) system
- private NYS and national four-year institutions

To provide for a smooth transfer, students should consult with both their academic advisors and the potential transfer institutions for academic course selection and guidance as soon as possible.

Contact Information

Advising and Counseling Center
(845) 341-4070
Admissions Office
(845) 341-4030

Liberal Arts: Individual Studies

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	Restricted SUNY Elective*	3
MAT ___	Found. of Elementary School Math (MAT 111) or Higher	3
_____	Restricted SUNY History**	3
COM 101	Foundations of Communication	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
_____	SUNY Humanities (GE 7)	3
_____	SUNY Natural Science (GE 2)	3/4
_____	SUNY Social Science (GE 3)	3
_____	Concentration	3
_____	Physical Education	1

Third Semester		
_____	Math/Science Elective***	3/4
_____	SUNY Social Science (GE 3)	3
_____	Concentration	3
_____	Concentration	3
_____	Concentration	3

Fourth Semester		
_____	Concentration	3
_____	Concentration	3
_____	Restricted SUNY Elective****	3
_____	Elective	3
_____	Elective	3

Total: 62-64

*SUNY Humanities (GE 7), SUNY Arts (GE 8), or SUNY Foreign Language (GE 9)
** HIS 101, HIS 102, HIS 121, HIS 122, HIS 130, HIS 131, HIS 132, or HIS 133
*** Math must be MAT 113 or higher, or any liberal arts science
****SUNY Arts (GE 8) or SUNY Foreign Language (GE 9) Elementary 2 or higher

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This program can be completed in its entirety at either the Middletown campus or the Newburgh campus.

Program Description

The Associate in Science degree program in Individual Studies is a transfer degree program designed for those students whose goals are not adequately addressed by one of the College's other programs. Its purpose is to allow students to shape a program to meet their individual needs.

The program is divided into three components: core requirements, concentration area and electives. Core requirements are intended to provide students with a firm general education foundation through exposure to the three traditional areas of liberal arts study–humanities, social science and sciences–and development of communication and computational skills. The concentration area is comprised of course work reflecting the individual's educational objectives. The elective component provides the student with the flexibility to build upon the special area of study.

Admission Criteria

Prior to the sophomore year (30 credits), the student is required to submit an Individual Studies Program Plan. This form, available in the Advising and Counseling Center, requires a 250 word statement of the student's educational, transfer and career objectives. Based on these objectives, the student and advisor will select the courses to fulfill the concentration and elective component of the degree. The Program Plan will then be submitted to the appropriate Associate Vice President in Academic Affairs. On approval of the plan, a faculty advisor whose academic background is appropriate to the student's area of concentration will be assigned to assist in the next phase of study.

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- demonstrate their broad base of knowledge in the liberal arts and sciences by evoking critical thinking skills in drawing reasonable conclusions from evaluated data.

- develop a foundation of essential knowledge about the cultural, social and natural worlds, and individual well-being.

- demonstrate a mastery of communication skills, both written and oral.

- understand the commonalities and diversity of the human experience, values and opinions.

- apply systematic reasoning and develop information management quantitative skills.

- be prepared to transfer to an upper-level institution.

Career Opportunities

The Individual Studies degree program serves as a base for students who plan to continue their education at a four-year institution.

Because of the flexibility of the degree, students have the option of developing a career path of their choice early in their educational experience.

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These institutions include:

- four year institutions in the State University of New York (SUNY) system

- private state and national four-year institutions

Contact Information

Advising and Counseling Center
(845) 341-4070
Admissions Office
(845) 341-4030

Liberal Arts and Sciences: Mathematics and Natural Science

Degree Awarded: Associate in Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	SUNY Social Science (GE 3)	3
_____	SUNY Natural Science (GE 2)	3/4
_____	MAT 111 or higher or Computer Science or Liberal Arts Science	3/4
_____	SUNY Math (GE 1) - MAT 121 or higher	3/4
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
HIS____	Restricted History Elective*	3
_____	SUNY Natural Science (GE 2)	3/4
_____	MAT 111 or higher **or** Computer Science **or** Liberal Arts Science	3/4
MAT ___	MAT 122 or higher	3/4
PES ____	Physical Education	1

Third Semester		
COM 101	Foundations of Communication	3
_____	MAT 111or higher **or** Computer Science **or** Liberal Arts Science	3/4
_____	MAT 111or higher **or** Computer Science **or** Liberal Arts Science	3/4
_____	Restricted SUNY Elective**	3
_____	Elective	3

Fourth Semester		
_____	MAT 111 or higher **or** Computer Science **or** Liberal Arts Science	3/4
_____	MAT 111or higher **or** Computer Science **or** Liberal Arts Science	3/4
_____	Elective	3
_____	Elective	3
_____	Elective	3

Total Credits: 62-72

*SUNY American History (GE 4) or Western Civilization (GE 5) or Other/World Civilization (GE 6) lists
**SUNY Arts (GE 8)or Foreign Language (GE 9)lists

A minimum of 30 credits of math and science combined is required for this degree. At least 6 credits of math must be College Algebra (MAT 121) or higher, at least 3 credits of which must be a SUNY Math and at least 6 credits of science must be from the SUNY Natural Science list.

Program Description

The Associate in Science degree program in Liberal Arts and Sciences with a Mathematics and Science emphasis is designed specifically for students to transfer, with junior status, to the appropriate upper-level college or university of their choice, where they can complete the B.S./B.A. degree in their chosen field of study. As such, the program provides core courses and general education requirements that would be included in the first two years of study at four-year institutions. This degree gives mathematics/science students the flexibility to match a program to their individual goals, backgrounds and talents. The various curricula provide the opportunity to pursue a variety of academic and career interests in mathematics and in the natural/physical sciences.

The course distribution in mathematics and science is designed to provide a solid foundation in the basics of natural and physical sciences/mathematics: future advanced coursework will build on this foundation. The general education elective credits round out the curriculum in this degree program. Students should consult the appropriate department chairperson and faculty for specific advice about pursuing a particular discipline within this area. Only such consultation will guarantee the correct level of course choice and rigor required to match the student's transfer plans as they work toward a bachelor's degree.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Before initiating study for this A.S. degree a student must have achieved a mathematical proficiency which includes intermediate level algebra. At SUNY Orange, this means that a student must have tested beyond Intermediate Algebra (MAT 102) to begin progress toward this degree. If this is not the case the student must speak with an advisor in order to choose the proper preparatory courses.

Liberal Arts and Sciences: Mathematics and Natural Science

Degree Awarded: Associate in Science

Student Learning Outcomes

Students will:

- demonstrate an understanding of the scientific method through their ability to integrate the observation, measurement, collection, reduction and evaluation of scientific data.

- demonstrate their broad base of knowledge in the liberal arts and sciences by evoking critical thinking skills in drawing reasonable conclusions from evaluated data.

- demonstrate a mastery of communication skills, both written and oral, especially as related to the analytic methods of natural science.

- perform mathematically at a level commensurate with their chosen field of study.

- plan, organize and implement laboratory experiments and demonstrate the requisite technical/laboratory skills.

- transfer to a four-year institution to earn a baccalaureate degree in either mathematics or the natural/physical sciences.

Career Opportunities

- professional degrees or working in private sector firms in the various fields
- R&D or laboratory opportunities in private and public sector
- positions in education on primary or secondary level
- excellent background for other fields requiring mathematics/science proficiency, including:
  - biology
    - pre-professional training for medicine, dentistry, veterinary science, pharmacy, etc.
    - environmental sciences
    - Teaching or research
  - chemistry
  - geology
  - mathematics
  - physics/astronomy

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer. Students regularly transfer with junior status to colleges and universities in the State University of New York System as well as to private and state colleges and universities across the country.

Contact Information

Biology Department Chair
(845) 341-4124
Mathematics Department Chair
(845) 341-4566
Science, Engineering and Architecture Department Chair
(845) 341-4571
Admissions Office
845) 341-4030

Marketing

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	Any Social Science	3
_____	Math or Liberal Arts Science	3
BUS 101	Business Math	3
BUS 103	Introduction to Business	3
OFT 106	Keyboarding**	1

Second Semester		
ENG 102	Freshman English 2	3
_____	Any Social Science	3
_____	Math or Liberal Arts Science	3
BUS 105	Business and Society	3
MKT 101	Principles of Marketing	3
PES 100	Concepts of Physical Wellness	1

Third Semester		
BUS 111	E-Business Principles **or**	
MKT 202	Salesmanship	3
ACC 101	Accounting 1	4
BUS 201	Business Law 1	3
MKT 203	Marketing Management	3
BUS 203	Business Communications	3
PES ____	Physical Education	1

Fourth Semester		
MKT 201	Advertising	3
BUS 161	Computer Applications for Business***	3
MKT 204	Problems in Marketing	3
_____	Business Elective*	3
_____	Liberal Arts Elective	3

Total Credits: 64

It is strongly recommended that students with at least a 2.50 CQPA register for MGT 220. Approval of the department chair is required to register for this course.
**Students with sufficient keyboarding ability who pass the keyboarding waiver exam will fulfill this requirement; they do not need to replace the 1 credit.*
***formerly CIT 101 Microcomputer Applications*

Program Description

The Associate in Applied Science degree program in Marketing prepares graduates for immediate entry into positions ranging from entry level to marketing management. Students develop interpersonal and conceptual skills such as communication, decision making and problem solving.

The primary focus of the curriculum is on marketing strategy, selling techniques, advertising procedures and international marketing. This well-balanced program includes a marketing core, accounting, computer information systems, law and liberal arts courses. Students will be involved in developing marketing plans, creating advertising, presenting sales presentations, and participating in both group and individual projects designed to enhance their skills.

Business Department faculty are well-trained and experienced in their areas of expertise, and highly motivated to work with students, helping them to succeed in their quest for a job. Many students complete this degree and transfer to four-year colleges to earn a bachelor's degree; however, students who have this objective are advised that they may suffer transfer credit losses due to the concentration of business courses.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students are required to complete most developmental classes before attempting the courses in this program. See Developmental Course List on page 47.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- demonstrate knowledge of marketing principles and applications.
- demonstrate the ability to identify, analyze, and evaluate market segments and strategies.
- express business information effectively in both oral and in written forms.

Career Opportunities

- advertising
- marketing and manufacturing
- marketing service
- marketing research
- public relations
- sales
- customer service

Transfer Opportunities

While the A.A.S. is a degree leading to immediate job placement upon graduation, SUNY Orange has special relationships with Franklin University for transfer to a B.S. degree in marketing, business administration or human resource management .

Other transfer opportunities exist with:

- Franklin University
- Mount St. Mary College
- Ramapo College
- SUNY Empire State
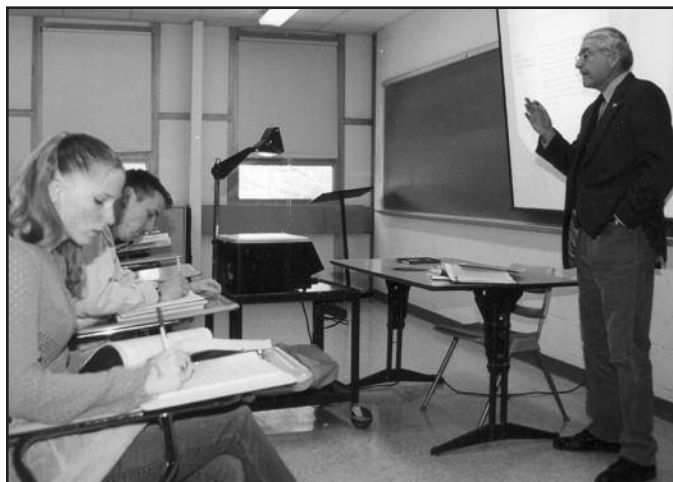
Contact Information

Business Department Chair
(845) 341-4411
Admissions Office
(845) 341-4030

Medical Laboratory Technology

Degree Awarded: Associate in Applied Science

Accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N. River Road, Suite 720, Rosemont, IL 60018-5119

Recommended Course Sequence

First Semester	Credits
ENG 101 Freshman English 1	3
CHM 103 Applied Chemistry 1	3
MAT ___ Math (Elementary Algebra or Higher)	3
MLT 101 Fundamentals of Medical Physiology	4
MLT 103 Immunology	3
MLT 105 Intro to Lab Science	2

Second Semester	
ENG 102 Freshman English 2	3
_____ Social Science Elective	3
CHM 104 Applied Chemistry 2	3
MLT 102 Urinalysis and Body Fluids	3
MLT 104 Hematology	4
_____ Elective	3

Third Semester	
_____ Social Science Elective	3
MLT 203 Immunohematology	3
MLT 207 Clinical Chemistry 1	3
MLT 209 General Microbiology	4
MLT 251 Clinical Training 1	2
PES 100 Concepts of Wellness	1

Fourth Semester	
MLT 208 Clinical Chemistry 2	3
MLT 212 Clinical Microbiology	3
MLT 252 Clinical Training 2	5
PES ___ Physical Education	1
_____ Elective	3
MLT 200 Clinical Applications and Review	2
Total Credits:	70

Program Description

The Associate in Applied Science degree program in Medical Laboratory Technology prepares students to become certified and licensed as medical laboratory technicians.

A medical laboratory technician is a healthcare professional who performs general testing on biological specimens such as blood, urine, various body fluids and tissues in the medical laboratory. The results of these analyses are utilized to determine the presence, absence, progress and causes of disease. A medical laboratory technician, also known as a clinical laboratory technician, enjoys science, problem solving and investigation, and performs his/her work accurately, efficiently and responsibly. The medical laboratory technician must be able to perform several duties simultaneously, work well in a fast-paced laboratory and be self-motivated.

The Medical Laboratory Technology Program curriculum corresponds to the program's mission: it provides each student with educational experiences and knowledge to develop the critical thinking, technical and interpersonal skills required to be a successful clinical laboratory scientist. The program will integrate knowledge gained from general education, biological science and clinical laboratory science so that the future laboratory professional will exercise good judgment, ethics and appropriate decision-making abilities to serve the needs of the community and the profession.

Students will take courses in the following disciplines: medical physiology, clinical chemistry, hematology, urinalysis, immunology, immunohematology and microbiology. Students study laboratory safety, microscopy and clinical instrumentation and apply the principles in the laboratory. As part of the program, a clinical rotation is assigned at one of the clinical affiliates.

The program begins in the fall semester of each year and the courses must be taken in the sequence in which they are offered. A grade of C (2.00) or better is required in all MLT courses for progression in the program and graduation with an A.A.S. degree in Medical Laboratory Technology. Once you begin taking MLT courses, the degree must be completed within three years.

Students who are considering this program must provide their own transportation to and from the college and clinical sites. They must also have a yearly physical examination and tuberculin skin test (TST). Upon admission to the program, students will need to successfully complete a urine drug screen as well as a criminal background check. The Hepatitis B vaccine is strongly recommended. An individual who has charges pending or has ever been convicted of a felony or misdemeanor and/or has been found guilty of professional misconduct or negligence may not be eligible for licensure. Contact the Office of Professional Discipline, New York State Education Department prior to applying to this program.

Medical Laboratory Technology

Degree Awarded: Associate in Applied Science

Admission Criteria

Academic Requirements

- High school diploma or GED
- Eligible to take Freshman English I (ENG 101)
- Eligible to take Elementary Algebra (MAT 101) or have successfully completed Developmental Algebra (MAT 020)
- Students must attain a minimum cumulative GPA of 2.0

Department-Specific Requirements:

- Attendance at a pre-admission orientation. At this orientation, students will receive and sign off on information pertaining to health forms, drug testing, and criminal record policies.

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CQPA and credits completed towards the degree, Orange County residency and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

Student Learning Outcomes

Students will:

- properly collect, process and analyze biological specimens.
- safely and accurately perform analytical procedures, recognize factors affecting results and take the appropriate action.
- Be eligible for national certification as a Medical Laboratory Technician by successfully completing the examination given by the American Society for Clinical Pathology Board of Certification.
- be eligible to sit for the NYS Certified Clinical Laboratory Technician Licensing Examination.

Note: Several essential movement, observational, communication, intellectual and behavioral functions are required to complete the objectives of the courses in the program and to perform the necessary duties required of a medical laboratory technician. A detailed listing of these essential functions is included in the MLT admissions packet and is discussed at the pre-admission orientation session.

Career Opportunities

- hospitals
- doctors' offices
- reference laboratories
- food/cosmetic industries
- pharmaceuticals
- veterinary laboratories
- research
- sales and marketing

Transfer Opportunities

This degree program prepares students for immediate entry into the workplace. Consult the department for more information regarding further educational opportunities in this profession.

Contact Information

Clinical Laboratory Science
Department Chair
(845) 341-4136
Admissions Office
(845) 341-4030

Medical Office Assistant

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	Math or Liberal Arts Science	3
OFT 103	Medical Coding	3
OFT 108	Intermediate Computer Keyboarding*	3
BUS 103	Introduction to Business	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
_____	Social Science Elective	3
OFT 109	Advanced Computer Keyboarding**	3
ACC 101	Accounting Principles 1	4
RAD 219	Medical Terminology	1
_____	Elective+	1

Third Semester		
_____	Social Science Elective	3
BUS 203	Business Communications	3
OFT 209	Microsoft Word and PowerPoint	3
OFT 207	Transcription Skills** or	
OFT 211	Medical Transcription	3
MGT 205	Human Resource Management	3
PES ____	Physical Education	1

Fourth Semester		
MLT 110	Fundamentals of Medical Physiology	3
_____	Liberal Arts Elective	3
OFT 220	Office Internship	3
OFT 201	Records/Information Management	3
OFT 214	Excel and Access**	3

Total Credits: 62

* *Students without sufficient keyboarding ability will be required to take OFT 107 Elementary Keyboarding. Students with sufficient keyboarding ability to pass the waiver for OFT 108 fulfill this requirement with a business elective.*
** *Special medical projects are provided in OFT 109, OFT 207, and OFT 214 for students in this program.*
+ *Another course must be added to complete the degree such as CPR, First Aid, Stress Management or a business elective. Please see the department chair for other suggestions.*

Program Description

The Associate in Applied Science degree program in Medical Office Assistant prepares graduates to begin their careers in medical organizations. Emphasis is placed on developing office skills and knowledge of medical terms.

The medical office assistant provides office support to medical facilities including records management, medical report production, patient interface, insurance and billing responsibilities, telephone interaction, and confidentially.

Students take a sequence of office skill courses including various levels of Keyboarding, Microsoft Word and PowerPoint, Excel and Access, Transcription Skills, Medical Terminology, Physiology, and Medical Coding. Students learn to use modern office equipment and are exposed to realistic office situations through internships. Special medical projects are provided in Advanced Computer Keyboarding, Transcription Skills and Excel and Access.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students without sufficient keyboarding ability will be required to take Elementary Computer Keyboarding. Students with sufficient keyboarding ability to pass the waiver for Intermediate Computer Keyboarding fulfill this requirement with a business elective.

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Medical Office Assistant

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- demonstrate the ability to keyboard in correct form medical correspondence, which includes letters, memos, forms, reports, tables and statements.

- demonstrate the ability to keyboard straight copy for five minutes with a maximum of three errors.

- effectively communicate both orally and in written documents.

- understand and apply proper medical codes.

- learn critical thinking skills through an analytical business report project.

Career Opportunities

Medical office assistant positions exist in the following fields:
- hospitals
- long-term care
- community agencies
- health maintenance organizations
- government and industry
- physicians' offices
- outpatient services
- military-medical services
- medical laboratories
- imaging centers

Transfer Opportunities

While the A.A.S. is a degree leading to immediate job placement upon graduation, SUNY Orange has a special relationship for transfer to a B.S. degree in Applied Management with Franklin University.

Other transfer of courses exist with:

- Franklin University (to another related degree)

- Mount St. Mary College

- Ramapo College

- SUNY Empire State College

Contact Information

Business Department Chair
341-4411
Admissions Office
(845) 341-4030

Nursing

Degree Awarded: Associate in Applied Science

Accredited by the National League for Nursing Accrediting Commission

3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326. Phone: (404) 975-5000, Fax: (404) 975-5020, www.nlnac.org

Recommended Course Sequence for Full-Time Study

First Semester		Credits
ENG 101	Freshman English 1	3
BIO 111	Anatomy and Physiology 1	4
MLT 106	Microbiology for Health Prof.	3
NUR 101	Nursing 1: Fundamentals	7

Second Semester		
ENG 102	Freshman English 2	3
BIO 112	Anatomy & Physiology 2	4
NUR 102	Nursing 2: Fundamentals	10

Third Semester		
PSY 101	General Psychology	3
NUR 205	Pharmacology & The Human Body	3
NUR 201	Nursing 3: Caring for the Growing Family	7
_____	Elective	3
PES 100	Concepts of Physical Wellness	1

Fourth Semester		
_____	Social Science Elective*	3
NUR 202	Nursing 4: Physical and Mental Illness	9
NUR 203	Nursing 5: Transition to Practice	1
_____	Elective	3
PES ___	Physical Education	1

Total Credits: 68

* Refer to Guide for Social Science Requirement and select from group A, C or D.

Program Description

The Associate in Applied Science degree program in Nursing prepares students to become registered nurses. It provides for the development of those competencies expected of registered nurses in general nursing practice at the technical level. Emphasis is on direct client care within a career in nursing.

Through study in the humanities, biological and social sciences, and the experience of academic life, the student gains an understanding of the value of the individual and his/her contribution to society. This curriculum combines general education courses and nursing courses with laboratory and clinical experiences, during which students have the opportunity to care for clients in a variety of healthcare settings. Due to limited availability of clinical experience in some areas, students may be assigned to evening and/or weekend clinical experiences. Student may also be assigned to attend a day clinical. Students' personal schedules will have to be adjusted to allow for these required opportunities. Students gain clinical experience in long-term care, medical-surgical, maternal/child and mental health nursing. A variety of teaching methods is employed to integrate the classroom with the clinical experience.

Student Learning Outcomes

- Students will utilize the nursing process reflecting sound nursing judgment and critical thinking skills to resolve clinical and professional problems
- Students will demonstrate effective use of interpersonal skills and informatics to ensure effective communication with patient/families and the members of the health care team.
- Students will apply evidence based standards of nursing practice to provide safe quality care to a diverse population across a multitude of settings.
- Students will demonstrate responsibility and accountability for self-growth with a commitment to the profession, exhibiting a spirit of inquiry and a passion for excellence.

Program Outcomes

- The NCLEX passing rate will exceed or be equal to the mean for New York State and the Nation.
- 100% of the graduates surveyed will value lifelong learning as evidenced by their stated intention to be enrolled in a BSN program at the time of graduation.
- 100% of employers surveyed will rate the graduate performance as satisfactory or above.
- Program completion rate will be 60% within 3 years of admission into the nursing program.
- 100% of the graduates surveyed with licensure seeking employment will be able to find employment in nursing within 12 months after graduation.
- 100% of the graduates surveyed will report satisfaction with the nursing program.

Admission Criteria

Academic Requirements:

- High school diploma or GED

- Eligible to take Freshman English I (ENG 101)

- Eligible to take Intermediate Algebra (MAT 102), or have completed Elementary Algebra (MAT 101) or equivalent with a 2.0 or higher

- Eligible to take Anatomy and Physiology I (BIO 111) – may be met by successful completion of one of the following: Intro to Biology (BIO 110), Anatomy & Physiology I (BIO 111), or Anatomy & Physiology II (BIO 112), with a 2.0 or higher; or High School AP Biology (score of 3, 4, or 5); or a passing grade on the Biology CLEP examination.

- Students must attain a minimum cumulative GPA of 2.75

Department-Specific Requirements:

- Attendance at a pre-admission orientation. At this orientation, student will receive and sign off on information pertaining to health forms, program standards, CPR certification, and criminal record & drug screening policies. All students must submit to a criminal background check and urine drug screening. Orientation dates are available online at www.sunyorange.edu/admissions/healthforms.shtml.

- Applicants for the Nursing program will be required to take the Test of Essential Academic Skills (TEAS). A score of BASIC is required for admission consideration. A score of PROFICIENT or higher is recommended. Visit www.sunyorange.edu/testing/ services.shtml for test information, and scheduling.

- The Nursing Department will review transcripts of those students who have been enrolled in a health professions program at SUNY Orange or another college.

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of GPA, TEAS score and credits completed towards the degree, and seat availability.

All requirements must be completed and a program application form must be submitted to the Admissions Office before February 1 for the fall semester at the Middletown Campus and October 1st for the spring semester at the Newburgh campus.

The admissions criteria for the program will require the successful completion of High School Regents Chemistry, or its equivalent with a grade of 75 or higher; or High School AP Chemistry (score 3, 4 or 5); Elements of Chemistry & Physics (CHM 120); or college Chemistry course (with lab) with a grade of 2.0 or higher; or passing grade on the Chemistry 1 CLEP examination within 10 years of application deadline. *(Please note: SUNY Orange does not offer credit for the Chemistry CLEP, but it can be submitted as evidence of meeting this criteria).

Career Opportunities

- hospitals
- long-term care settings
- community agencies
- health maintenance organizations
- government
- physicians' offices
- industry
- military
- education
- nursing specialties

Transfer Opportunities

Many of our graduates transfer to upper-level colleges and universities to pursue advanced degrees in the nursing profession. Successful transfer depends on the courses taken and the student's grade point average. SUNY Orange has special relationships with a number of colleges and universities.

- Adelphi University
- SUNY Binghamton
- Mercy College
- Mount St. Mary College
- Pace University
- Russell Sage College

Contact Information

Nursing Department
(845)-341-4107
Admissions Office
(845) 341-4030

Nursing

Degree Awarded: Associate in Applied Science

Recommended Course Sequence for Part-Time Study

First Semester		Credits
ENG 101	Freshman English 1	3
BIO 111	Anatomy and Physiology 1	4

Second Semester		
ENG 102	Freshman English 2	3
BIO 112	Anatomy & Physiology 2	4

Third Semester		
MLT 106	Microbiology for Health Prof.	3
PSY 101	General Psychology	3
PES 100	Concepts of Physical Wellness	1

Fourth Semester		
NUR 205	Pharmacology & The Human Body	3
_____	Elective	3
PES ___	Physical Education	1

Fifth Semester		
NUR 101	Nursing 1: Fundamentals	7
_____	Elective*	3

Sixth Semester		
NUR 102	Nursing 2: Fundamentals	10

Seventh Semester		
NUR 201	Nursing 3: Caring for the Growing Family	7
_____	Social Science Elective	3

Eighth Semester		
NUR 202	Nursing 4: Physical and Mental Illness	9
NUR 203	Nursing 5: Transition to Practice	1

Total Credits: 68

* *Refer to Guide for Social Science Requirement and select from group A, C or D.*

Guidelines for Advanced Placement for Licensed Practical Nurses

- **Transfer from a Practical Nursing Program through the SUNY Orange Articulation Agreement with OU BOCES and Ulster BOCES School of Practical Nursing.**

Graduates of these program may transfer into NUR 102 – Nursing 2: Fundamentals based on the following criteria:

o Meet the college and nursing program admission criteria

o Attainment of an overall GPA of 85% in the LPN program

o Graduation within the previous five years

o Have a letter of recommendation from an OU BOCES or Ulster BOCES practical nursing program instructor

o Pass the NYS Licensed Practical Nurse Examination

o Successful completion of Nursing Bridge Course 1 (N3029)

- **Advance Standing into the Second Semester through the Excelsior College Examination**

Licensed Practical Nurses who do not meet the transfer requirements from an articulation agreement, may apply for admission to NUR 102 – Nursing 2: Fundamentals. The application will be reviewed when the individual has met the college and nursing program admission criteria and the following has been achieved:

o Successful completion of an NLN accredited and/or state registered LPN program

o A minimum score of B on the Excelsior College Examination for Fundamentals of Nursing. (score may not be more than three years old). Information is available at www.excelsior.edu

o Successful completion of Nursing Bridge Course 1 (N3029)

- **Advance Standing into the Fourth Semester**

Licensed Practical Nurses, who have successfully completed NUR 102 – Nursing 2: Fundamentals, may be considered for advanced standing into NUR 202 – Nursing 4: Physical and Mental Illness after completing the following requirements:

o PN transcript review demonstrates a minimum of 70 clinical hours in Maternal and Child Nursing

o A Minimum Score of B on the Excelsior College Examination in Maternal and Child Nursing (baccalaureate) (Official transcripts must be submitted to the Records and Registration Office)

Credit for Nursing 1 will be granted after successful completion of Nursing 2 with a grade of C (2.0) or higher. Credit for Nursing 3 will be granted after successful completion of Nursing 4 and 5 with a grade of C (2.0) or higher. Minimum passing grade in all core nursing courses is 75. Nursing 2 and 4 are offered in the Spring semesters on the Middletown campus and in the fall on the Newburgh campus. The offering of these courses out of sequence is never guaranteed & at the discretion of the nursing department based on enrollment & clinical placement availability.

Degree Awarded: Associate in Applied Science

Students will be considered for acceptance into the Nursing Program based on the admission criteria in effect at the time of the request. Please be advised that certain general education requirements are co-requisites with nursing courses. A&P 2 must be taken with or prior to Nursing 2. General Psychology 1 must be taken prior to Nursing 4.

LPN to RN program application forms are to be submitted by October 1st. To be considered for acceptance into the program for the spring semester in Middletown, and June 1st for admission consideration for the fall semester on the Newburgh campus.

fall semester, a program application must be submitted by June 1st.

Progression Through The Program

A minimum grade of 75% (C) in each nursing course is required for progress in and graduation in nursing. A minimum grade of C is required in all laboratory science courses for progression in the nursing program. Nursing students must complete Freshman English 1 & 2 prior to enrollment in Nursing 3. Required nursing courses must be taken in the prescribed sequence. A student may repeat only one required nursing course one time. Once students are enrolled in the core nursing courses, they are to complete the program in three years. Students interested in admission to the evening nursing program are advised that this is a part-time program limited to 11.5 credits each semester. In order to meet this requirement; all non-clinical courses should be completed prior to starting this part-time program.The day program is two academic years in length if pursued on a full time basis. Because of the intense nature of the Nursing Program, the student may find that part-time study is more appropriate.

Nursing Readmission

Students who withdraw from, fail or receive a grade below "C" in any one of the required nursing courses may apply for readmission to the Nursing program. A student is only allowed to do this one time. Additionally the program is to be completed within three years from the start of the first nursing course. A student seeking readmission must meet the program requirements in effect at the date of re-entry. Readmission is neither guaranteed nor is it an automatic process. Students requesting to be considered for readmission to Nursing 1 are to do so through the admissions office of the college. Students requesting to be considered for readmission to Nursing 2, 3, 4 or 5 must inform the nursing department chairperson in writing. Written requests must be submitted by May 15th for the Fall semester and September 15th for the Spring semester. Prior to readmission, students are required to successfully complete a special bridge course. To be considered for re-admission a student must have a minimum cumulative GPA of 2.75.

Licensure

Graduates of the nursing program are eligible to apply for the National Council Licensing Examination for Registered Nurses (NCLEX). Completion of the Nursing program does not assure admittance to attempt the RN licensure exam. When submitting an application for licensure and first registration, the applicant is required to report any history of a felony or misdemeanor. The state boards of nursing will review all applicant information submitted and determine if the applicant is eligible for licensure.

Career Opportunities

- hospitals
- long-term care settings
- community agencies
- health maintenance organizations
- government
- physicians' offices
- industry
- military
- education
- nursing specialties

Transfer Opportunities

Many of our graduates transfer to upper-level colleges and universities to pursue advanced degrees in the nursing profession. Successful transfer depends on the courses taken and the student's grade point average. SUNY Orange has special relationships with a number of colleges and universities.

- Adelphi University
- SUNY Binghamton
- Mount St. Mary College
- Pace University
- Russell Sage College
- Mercy College

Contact Information

Nursing Department
(845)-341-4107
Admissions Office
(845) 341-4030

Occupational Therapy Assistant

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449, 301/652-AOTA; www.acoteonline.org

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
ENG 160	Technical Writing Module	1.5
PSY 101	General Psychology 1	3
BIO 111	Anatomy & Physiology 1	4
OTA 101	Fund. of Occupational Therapy 1	3
OTA 103	Occupational Performance 1	1
OTA 107	Principles of OT in Geriatrics & Gerontology	2
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
PSY 220	Developmental Psychology	3
BIO 112	Anatomy & Physiology 2	4
OTA 102	Fund. of Occupational Therapy 2	3
OTA 104	Occupational Performance 2	1
OTA 106	Medical Conditions	3
PES ____	Physical Education	1

Third Semester		Credits
COM 101	Foundations of Communication	3
PSY 230	Abnormal Psychology	3
SOC____	Sociology Elective	3
OTA 201	Principles of OT in Pediatrics & Developmental Disabilities	3
OTA 203	Clinical Reasoning Skills	1
OTA 205	Principles of Occupational Therapy in Mental Health	3
OTA 207	Principles of Occupational Therapy in Physical Disabilities	3
OTA 209	Documentation in Occupational Therapy	1.5

Fourth Semester		
OTA 217	Clinical Practice 1	7.5
OTA 218	Clinical Practice 2	7.5

Total Credits: 72

Program Description

The Associate in Applied Science degree program in Occupational Therapy Assistant prepares graduates to obtain New York State certification and to take the National Certification Board for Occupational Therapy exam* to become Certified Occupational Therapy Assistants (COTA). Certified Occupational Therapy Assistants work under the supervision of, and in collaboration with, Registered Occupational Therapists (OTR). Occupational therapy practitioners provide service to children, adults and seniors whose abilities to engage in their occupations (tasks) of living are impaired by physical injury or illness, developmental delays, the aging process or psychological and social disability.

The COTA's responsibilities include providing purposeful and meaningful activity to restore lost or impaired physical, cognitive and psychological skills; development and use of assistive technology; adapting home, play and work environments and activities to ensure successful and safe performance. The COTA may design adapted toys and games for a child with physical limitations; provide handwriting adaptations for students within a school setting to enhance their learning process; evaluate and design home adaptations to enhance independence in self-care activities such as feeding, bathing, shaving, cooking and dressing; encourage the elderly client to participate in leisure activities and to maintain personal independence.

The primary focus of the curriculum is on the development of critical thinking and clinical problem-solving skills, and on essential elements in designing and applying therapeutic interventions for the clients served by COTAs. The program includes classroom instruction, laboratory and community-based fieldwork rotations. Occupational therapy assistant courses are offered once each year. Courses must be taken in the sequence in which they are offered. A minimum grade of C is required in all occupational therapy assistant courses. The course of study may be pursued on a part-time basis. All program requirements must be completed within six consecutive semesters from the time of enrollment in the first OTA course. Individualized part-time schedules can be developed between the student and the OTA faculty advisor.

* **Note**: Graduates of the OTA program are required to apply for NBCOT® certification. Candidates applying for the Certification Examination must notify the NBCOT's Qualifications Review Committee (QRC) if they have ever been charged with or convicted of a felony. A felony conviction may prevent the candidate from taking the examination. Please consult the department chair if this may be an issue in successfully pursuing a career in occupational therapy.

Occupational Therapy Assistant

Degree Awarded: Associate in Applied Science

Admission Criteria

Academic Requirements:

- High school diploma or GED
- Eligible to take Freshman English I (ENG 101)
- Eligible to take Elementary Algebra (MAT 101) or have successfully completed Developmental Algebra (MAT 020)
- Completed High School AP Biology (score of 3, 4, or 5) or a passing grade in the Biology CLEP examination; or introduction to Biology or Anatomy & Physiology 1 with a grade of 2.0 or better (within 5 years of program entry)
- Students must attain a minimum cumulative GPA of 2.4

Department-Specific Requirements:

- A minimum of 15 hours of observation in three different occupational therapy service settings. A minimum of five hours are required in each of the major treatment areas: pediatrics, adult rehab and mental health.
- A 2-3 page essay addressing personal impressions and awareness of the scope of occupational therapy practice.
- Attendance at a pre-admission orientation (includes interview, problem solving activity and discussion). At this orientation, students will receive and sign off on information pertaining to health forms, drug testing, and criminal record policies. Dates for pre-admission orientation are posted on Admissions and OTA Dept. websites.
- Interview with Dept. Chair and Academic Fieldwork Coordinator

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CQPA and credits completed towards the degree, and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

Student Learning Outcomes

Students will:

- learn problem-solving and clinical reasoning.
- build on knowledge, practice skills, theory and critical thinking applications.
- apply these multiple skills and insights to adapt to and cope in this novel and diverse world.
- think and act with flexibility, to think "outside the box."
- welcome change and growth in themselves, their clients and the organizations they serve.

Career Opportunities

- hospitals, inpatient and outpatient mental health facilities
- rehabilitation centers and skilled nursing facilities
- schools, developmental disabilities service sites
- home and community health agencies
- accessibility and home modification specialists
- assistive technology specialists
- health and wellness centers
- advancement to OTR

Transfer Opportunities

While the A.A.S. is a degree leading to immediate job placement upon graduation and successful completion of the National Certification exam, SUNY Orange has special relationships with weekend college programs for transfer to a B.S./M.S. degree at:

- Dominican College
- Mercy College

Contact Information

Occupational Therapy Assistant Department Chair
341-4323
Admissions Office
(845) 341-4030

Office Technologies

Degree Awarded: Associate in Applied Science

Accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420, Overland Park, KS, 66211

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
	Math/Liberal Arts Science	3
OFT 108	Intermed. Computer Keyboarding*	3
BUS 103	Introduction to Business	3
	Emphasis Credits	3
PES 100	Concepts of Physical Wellness	1
Second Semester		
ENG 102	Freshman English 2	3
	Social Science Elective	3
ACC 101	Accounting Principles 1	4
OFT 201	Records/Information Management	3
	Emphasis Credits	3
Third Semester		
BUS 203	Business Communications	3
OFT 209	Microsoft Word	3
MGT 205	Human Resource Management	3
	Emphasis Credits	3
	Emphasis Credits	3-4
Fourth Semester		
OFT 220	Office Internship	3
OFT 214	Excel and Access**	3
	Emphasis Credits	3
	Emphasis Credits	3
	Liberal Arts Elective	2-3
PES ____	Physical Education	1

Total Credits: 62-64

* *Students without sufficient keyboarding ability will be required to take OFT 107 Elementary Keyboarding. Students with sufficient keyboarding ability to pass the waiver for OFT 108 fulfill this requirement with a business elective.*
** *Special legal/medical projects are provided in OFT 109, OFT 207 and OFT 214 for students in these programs.*

Emphasis Areas:

Legal Office Assistant (18 credits)

First Semester	Credits
BUS 201 Business Law 1	3
Second Semester	
BUS 202 Business Law 2	3
Third Semester	
POL 102 U.S. Government-State & Local	3
OFT 207 Transcription Skills**	3
Fourth Semester	
Math or Liberal Arts Science	3
OFT 110 Legal Documents & Terminology or	3
OFT 109 Advanced Computer Keyboarding**	

Office Management (19 credits)

First Semester	Credits
BUS 101 Business Math	3
Second Semester	**3**
Math or Liberal Arts Science	3
Third Semester	
ACC 102 Accounting Principles 2	4
BUS 201 Business Law 1	3
Fourth Semester	
Social Science Elective	3
MGT 201 Principles of Management	3

Secretarial/Word Processing (18 credits)

First Semester	Credits
BUS 101 Business Math	3
Second Semester	
OFT 109 Advanced Computer Keyboarding**	3
Third Semester	
Math or Liberal Arts Science	3
OFT 207 Transcription Skills**	3
Fourth Semester	
Social Science Elective	3
Business Elective	3

This degree has been approved by ACBSP and SUNY NYS Education Department for online distance learning delivery. This does not mean that SUNY Orange offers every course in the program online; however, many are offered in this format. Please check the current credit course schedule for online DL virtual course listings offered each semester.

Office Technologies

Degree Awarded: Associate in Applied Science

Program Description

The Associate in Applied Science degree program in Office Technologies prepares graduates to begin their careers as office assistants. Three special emphasis areas are provided: legal office assistant, office manager, and secretary/information processor. Specialized courses combine with the common core courses to prepare graduates to enter the office support staff.

The office assistant provides office support to employers in a wide variety of settings. This support includes document production, computer software capability, records management, telephone interaction, customer service, keyboarding and data entry.

Students learn to use modern office equipment and, through internships, are exposed to realistic office situations. The internship experience includes 90 hours of office work with a cooperating employer along with weekly meetings with the College instructor. Topics for these meetings include: minute-taking instruction, telephone techniques, human relations issues, problem solving, the resume and interview, and the creation of a professional portfolio.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Students without sufficient keyboarding ability will be required to take Elementary Computer Keyboarding. Students with sufficient keyboarding ability to pass the waiver for Intermediate Computer Keyboarding fulfill this requirement with a business elective.

Student Learning Outcomes

Students will:

- demonstrate the ability to keyboard in correct form business correspondence, which includes letters, interoffice memos, forms, reports, tables, legal documents and financial statements.

- demonstrate the ability to keyboard straight copy for five minutes with a maximum of three errors.

- effectively communicate both orally and in written documents.

- understand the concepts of current information and word processing functions through the successful completion of learning exercises, application problems and exams at a microcomputer workstation.

- learn critical thinking skills through an analytical business report project.

Career Opportunities

- service
- education
- travel
- entertainment
- manufacturing
- legal and medical
- insurance
- industrial
- media/advertising

Transfer Opportunities

While the A.A.S. is a degree leading to immediate job placement upon graduation, SUNY Orange has a special relationship for transfer to a B.S. degree in Applied Management with Franklin University.

Other transfer opportunities exist with:

- Franklin University (to another related degree)
- Mount St. Mary College
- Ramapo College
- SUNY Empire State College

Contact Information

Business Department Chair
(845) 341-4411
Admissions Office
(845) 341-4030

Performing Arts: Music

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
MAT ___	Math	3
MUS 123	Basic Musicianship 1	5
MUS ___	Piano	2
PES 100	Concepts of Physical Wellness.	1
_____	Emphasis Credits	3-5

Second Semester		
ENG 102	Freshman English 2	3
PHY 108	Acoustics	3
MUS 124	Basic Musicianship 2	5
MUS___	Piano	2
PES ____	Physical Education	1
_____	Emphasis Credits	2-4

Third Semester		
MUS 223	Advanced Musicianship 1	4
MUS___	Piano	2
MUS 1__	Ensemble*	1
MUS 109	Music Business	3
MUS 10_	Music History**	3
_____	Emphasis Credits	3-6

Fourth Semester		
MUS 224	Advanced Musicianship 2	4
MUS___	Piano	2
MUS 1__	Ensemble*	1
_____	Social Science Elective	3
MUS 10_	Music History	3
_____	Emphasis Credits	1-6

Total Credits: 67-71

* *Must be MUS 161 Jazz Ensemble if in Jazz/Commercial Music emphasis.*
** *Must be MUS 105 History of Jazz if in Jazz/Commerical Music emphasis.*

Students in the program take a common core of 54 credits and select one of three degree emphasis areas: Music Performance (total of 67 credits), Jazz and Commercial Music (total of 70 credits) or Music Business (total of 71 credits).

Emphasis Areas:

Music (13 cr.)

First Semester		Credits
MUS 141	Group Voice 1	2
MUS 1__	Ensemble	1
MUS 1__	Private Instruction	1

Second Semester		
MUS 142	Group Voice 2	2
MUS 1__	Ensemble	1
MUS 1__	Private Instruction	1

Third Semester		
_____	Social Science Elective	3
MUS 1__	Private Instruction	1

Fourth Semester		
MUS 1_	Private Instruction	1

Music Business (17 cr.)

First Semester		
BUS 103	Intro to Business	3

Second Semester		
ECO 202	Micro Economics	3

Third Semester		
MKT 101	Marketing	3
BUS 201	Business Law 1	3

Fourth Semester		
OFT 106	Keyboarding	1
ACC 153	Financial Accounting	4

Jazz/Commercial (16 cr.)

First Semester		
_____	Social Science Elective	3
MUS 161	Jazz Ensemble	1
MUS 1__	Private Instruction	1

Second Semester		
MUS 161	Jazz Ensemble	1
MUS 1__	Private Instruction	1

Third Semester		
MUS 163	Jazz Improvisation 1	2
MUS 1__	Private Instruction	1

Fourth Semester		
MUS 164	Jazz Improvisation 2	2
MUS 226	Elements of Arranging	3
MUS 1__	Private Instruction	1

Performing Arts: Music

Degree Awarded: Associate in Applied Science

Program Description

The Associate in Applied Science degree program in Performing Arts: Music prepares graduates for employment in a field connected with music or possible transfer to a bachelor's degree music program. Students select one of three emphasis areas: Music Performance, Jazz and Commercial Music or Music Business. For those seeking such a transfer, an articulation with SUNY Purchase has been established giving students the opportunity for seamless transition to a four-year program. Students interested in the transfer program should schedule a conference with the department chair.

The program includes core courses in music history, theory and related musicianship skills, piano, instrumental or vocal performance, acoustics, and music business. Performing ensembles enable students to learn in active, collaborative settings and offer ongoing service and enrichment to the College and community through a variety of musical performances. Courses in arranging and improvisation are required for students choosing the Jazz and Commercial option. Students selecting the Music Performance or Jazz and Commercial options must complete four credits of private music instruction with a department-approved teacher and are responsible for the private instructor's fee. Courses not required to complete the degree but also available include songwriting, jazz keyboard harmony, jazz/commercial guitar, jazz/commercial drumming, and audio engineering and design for the arts.

An ongoing visiting artist series enables students to learn directly from some of the best contemporary performing artists in workshops featuring musicians such as Cindy Blackman (drummer for Lenny Kravitz), Randy Brecker, Bob Mintzer and Kenny Barron. Many of the courses required in the program fulfill New York State general education requirements and thus are easily transferable within the SUNY system.

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Note: Although this is an open admissions program, music placement assessment is required for registration into certain courses. Consult with Arts and Communication Department music faculty.

Student Learning Outcomes

Students will:
- demonstrate proficiency in music theory, notation, harmony and part-writing.
- apply their knowledge of music theory, notation and harmony at the keyboard.
- demonstrate proficiency in sight reading on their instrument and sight singing.
- notate musical materials from dictation.
- demonstrate proficiency on the piano through the performance of standard repertory.
- perform in an instrumental or vocal ensemble.
- demonstrate knowledge of music history, musical styles, genres and composers.
- demonstrate fundamental understanding of music business.
- demonstrate fundamental understanding of acoustics.
- pursue a career in the field of music and/or transfer to a baccalaureate music program.

Career Opportunities

- performing/recording artist
- record production
- music composition
- music education
- media careers
- music retail/wholesale
- music publishing
- music law
- music management/ promotion
- publicity
- facility/concert management
- music therapy
- journalism
- music library science
- instrument construction/ repair

Note: Some careers require training beyond the two-year degree.

Transfer Opportunities

Although the A.A.S. is designed primarily as a professional degree, many graduates do transfer to baccalaureate programs at other colleges. The program prepares students for successful results on theory placement assessments and auditions leading to acceptance into such programs. SUNY Orange enjoys an articulation agreement with SUNY Purchase guaranteeing acceptance and transfer of all SUNY Orange credits assuming basic entrance criteria are met.

Contact Information

Arts and Communication
Department Chair
(845) 341-4787
Admissions Office
(845) 341-4030

Physical Therapist Assistant

Degree Awarded: Associate in Applied Science

The Physical Therapist Assistant Program at SUNY Orange is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: www.capteonline.org.

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
BIO 111	Anatomy & Physiology 1	4
PTA 101	PTA 1	4
PTA 103	Introduction to Physical Therapy	2
PTA 105	Medical Conditions for the PTA	3
PES 100	Concepts of Physical Wellness	1
Second Semester		
ENG 102	Freshman English 2	3
BIO 112	Anatomy & Physiology 2	4
PTA 102	PTA 2	4
PTA 104	Kinesiology	4
MAT 101	Elementary Algebra	3
Third Semester		
PSY 101	General Psychology 1	3
PED 202	Basic Exercise Physiology	3
PTA 201	PTA 3	4
PTA 205	Clinical Education 1	3
PTA 207	Tests and Measurement Skills for the PTA	4
Fourth Semester		
COM 101	Foundations of Communication	3
PSY 220	Developmental Psychology	3
PTA 202	PTA 4	4
PTA 206	Clinical Education 2	3
PTA 208	Contemp. Practice for the PTA	3
PES ____	Physical Education	1
Summer Clinical		
PTA 220	Clinical Education 3	3

Total: 72

Licensure

Graduates of the Physical Therapist Assistant program are eligible to apply for certification in the state where they plan to practice. This process includes providing a history of possible existing criminal convictions and/or professional misconduct. Criteria for determination of good moral character varies from state to state, therefore, completion of the program does not guarantee acceptance by that state's regulatory entity to become certified or licensed.

Program Description

The Associate in Applied Science degree program in Physical Therapist Assistant (PTA) is designed to provide students with both the academic knowledge and clinical skills to become certified/licensed PTAs. The field of Physical Therapy is demanding. Graduates are required to meet all program requirements which are guided by the Commission on Accreditation in Physical Therapy Education. Many states, including New York, also require that students pass the national licensing examination as part of the certification/licensure process.

The PTA works with, and under the direction and supervision of the physical therapist who plans the patient care program; the PTA then helps to carry out this program. Duties of the PTA include monitoring of vital signs, lifting of patients and equipment, training of patients in therapeutic exercises and activities of daily living, wound care, use of whirlpool and electrical stimulation during treatment procedures, application of heat and cold modalities, patient and family education, wheelchair activities, use of walkers and crutches, assisting the physical therapist in performing patient assessments and complex treatment procedures. The PTA also monitors the patient's responses to treatment, documents relevant aspects of patient care and maintains ongoing communication with the patient, family, supervising physical therapist and other health care professionals.

The primary focus of the curriculum is to develop a strong clinician who possesses critical thinking and problem-solving skills. To accomplish this, the program provides the clinical training as well as a broad general education background. Courses include both core classes and non-core classes (general education courses). The core Physical Therapist Assistant courses are offered once each year beginning in the fall semester.

All program requirements must be completed within six consecutive semesters from the time of enrollment in the first PTA course. These courses must be taken in the sequence in which they are offered. The curriculum includes classroom instruction, laboratory time and clinical experiences. However, general education courses may be taken on a part-time basis during the day or evening, and may be completed over a longer period of time than the four semesters. But they must be completed no later than the semester in which they fall into sequence with the core courses.

A minimum grade of C is required in all PTA courses and a minimum grade of C is required in each of the following courses: Anatomy and Physiology 1, Anatomy and Physiology 2, and Basic Exercise Physiology.

Physical Therapist Assistant

Degree Awarded: Associate in Applied Science

Admission Criteria

Academic Requirements:

- High school diploma or GED
- Eligible to take Freshman English I (ENG 101)
- Eligible to take Elementary Algebra (MAT 101) or equivalent with a 2.0 or higher or have completed Developmental Algebra (MAT 020)
- Completed High School AP Biology (score of 3, 4, or 5) or a passing grade in the Biology CLEP examination; or introduction to Biology or Anatomy & Physiology 1 with a grade of 2.0 or better (within 5 years of program entry)
- Minimum cumulative GPA of 2.0

Department-Specific Requirements:

- Submit Physical Therapy practitioner observation form with essay (16 hour min. with documentation).
- View the Pre-Admission Orientation Power Point located on the program website and complete the survey. Once completed you will be directed to a Certificate of Completion" which must be printed and signed.
- Schedule and attend an interview with the Department Chair. At this interview students will receive and sign off on information pertaining to health forms, drug testing, and criminal records policies. The Certificate of Completion of the Pre-Admission Orientation must be brought to the interview.

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CQPA and credits completed towards the degree, Orange County residency and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester. If seats remain available after February 1, students will be assessed as they apply.

Student Learning Outcomes

Students will:

- possess entry-level skills as determined by the Commission on Accreditation in Physical Therapy Education.
- be able to work under the direction and supervision of a licensed physical therapist in an ethical, legal, safe, and effective manner becoming an integral member of the healthcare team.
- demonstrate appropriate critical thinking and problem-solving skills in their role as a Physical Therapist Assistant.
- demonstrate an understanding of the New York State Education Law as it relates to the provision of Physical Therapy services.
- demonstrate an awareness of the existence of varying practice laws from state to state.
- successfully complete the National Physical Therapy Exam for PTAs.
- develop the skills necessary to pursue lifelong learning needed for personal and professional growth.
- be aware of their responsibility to promote the profession through membership in the APTA, attending local and national meetings and conferences, and participation in community events.

Career Opportunities

- hospitals, nursing homes
- private offices
- rehabilitation centers
- schools
- fitness centers
- home care settings

Transfer Opportunities

The A.A.S. degree is primarily intended to prepare students for immediate employment: however, transfer opportunities exist in some areas.

If a student plans to pursue a Physical Therapy doctorate program, he or she should see the department chair or a faculty advisor as soon as possible.

Contact Information

Physical Therapist Assistant
Department Chair
(845) 341-4290
Admissions Office
(845) 341-4030

Radiologic Technology

Degree Awarded: Associate in Applied Science

Accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) 20 N. Wacker Drive, Chicago, IL 60606-2901 (312) 704-5300 in cooperation with the NYS Board of Health

Recommended Course Sequence

First Semester		Credits
BIO 111	Anatomy & Physiology 1	4
EET 110	Computer Applications and Graphics	3
RAD 101	Principles of Radiographic Exposure 1	4
RAD 103	Introduction to Radiography	1
RAD 105	Radiographic Positioning 1	4
RAD 107	Methods of Patient Care 1	2

Second Semester		
BIO 112	Anatomy & Physiology 2	4
ENG 101	Freshman English 1	3
RAD 102	Principles of Radiographic Exposure 2	4
RAD 104	Radiation Protection	1
RAD 106	Radiographic Positioning 2	4
RAD 108	Methods of Patient Care 2	1
RAD 111	Clinical Practicum 1	1

First Summer Clinical		
RAD 112	Clinical Practicum 2	2

Third Semester		
ENG 102	Freshman English 2	3
PES 100	Concepts of Physical Wellness	1
PSY 101	General Psychology 1	3
RAD 209	Radiographic Physics	4
RAD 213	Clinical Practicum 3	1.5
RAD 217	Radiographic Positioning 3	2
RAD 221	Radiographic Pathology	3

Fourth Semester		
PES ____	Physical Education	1
PSY 102	General Psychology 2	3
RAD 210	Quality Assurance	1
RAD 214	Clinical Practicum 4	1.5
RAD 216	Advanced Imaging Modalities	3
RAD 218	Radiation Biology	2
RAD 219	Medical Terminology	1

Second Summer Clinical		
RAD 215	Clinical Practicum 5	2

Total Credits: 70

Program Description

The Associate in Applied Science degree program in Radiologic Technology prepares students to apply to take the Registry exam offered by the American Registry of Radiologic Technologists to become a radiographer. An essential member of the healthcare team, the radiographer positions body parts accurately and manipulates radiographic equipment to produce a quality diagnostic image with the least amount of radiation necessary.

The Radiologic Technology program is dedicated to providing each student with the educational activities necessary to develop the required critical thinking and technical and interpersonal skills of the radiographer. The highly skilled radiographer is educated in properly caring for the patient's needs during the radiographic examination, manipulates radiographic and computerized equipment, as well as adheres to protocols in bedside, CT and operating room areas, selects technical factors and diagnostic parameters, instructs and assists the patient in order to obtain the necessary positioning, demonstrates appropriate application of radiation safety principles of "time, distance and shielding," in order to protect the patient, self and others, exhibits care and accuracy in the administration, preparation and disposal of drugs and contrast agents.

Note: The Radiologic Technology program, as well as the field of radiologic technology, is a rigorous one. Program standards are not altered for disabled students. The College will make every effort to provide reasonable accommodations to students with disabling conditions.

Admission Criteria

Academic Requirements:

- High school diploma or GED

- Eligible to take Freshman English I (ENG 101)

- Eligible to take College Algebra (MAT 121), or have completed Intermediate Algebra (MAT 102) or equivalent with a 2.0 or higher

- Completed High School AP Biology (score of 3, 4, or 5) or a passing grade in the Biology CLEP examination; or introduction to Biology or Anatomy & Physiology 1 with a grade of 2.0 or better (within 5 years of program entry)

- Minimum cumulative GPA of 2.5

Radiologic Technology

Department-Specific Requirements:

- Attendance at a pre-admission orientation. At this orientation, students will receive and sign off on information pertaining to technical standards, health forms, and criminal record policies.

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CQPA and credits completed towards the degree, Orange County residency and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

At the time prospective students submit their applications to the American Registry of Radiologic Technologists and the New York State Department of Health, they must make a statement about their conviction record, if any. If they would have to answer "yes" to a question about a felony conviction, they should contact the NYS Department of Health (518) 402-7580 AND The American Registry of Radiologic Technologist (651) 687-0048. Both of these agencies MUST be contacted to determine if students will be eligible to sit for the certification exam and/or to be licensed.

Student Learning Outcomes

Students will:

- demonstrate the ability to think critically when performing radiographic procedures.

- demonstrate the technical skills necessary to create quality radiographic images while applying radiation protection practices.

- effectively interact and communicate with the public, patients and members of the healthcare team.

- demonstrate the ability to properly care for patients.

- with speed and accuracy, meet these following technical standards:

  - place the patient in position, set the controls of the x-ray machine and evaluate the quality of the radiographic image.

  - provide patient instructions and respond to questions and requests in both routine and emergency situations.

  - transport and assist the patient, and to move the x-ray machine and image receptor to the desired position, including operation of equipment in the surgical suite and at the patient's bedside.

Career Opportunities

- hospitals, clinics, medical imaging centers, doctors' offices, educational facilities and equipment manufacturers as:
- radiographers and special procedures technologists
- mammographers, CT technologists and MRI technologists
- nuclear medicine technologists, PET/CT technologists
- radiation therapists
- sales personnel, educators, clinical instructors and hospital administrators

Transfer Opportunities

The A.A.S. degree is primarily intended to prepare students for immediate employment: however, some graduates have gone on to further study in radiation therapy, nuclear medicine, cardiac catheterization and education.

Contact Information

Diagnostic Imaging
Department Chair
(845) 341-4277
Admissions Office
(845) 341-4030

Teaching Assistant

Degree Awarded: Certificate

Meeting only the educational requirements for NYSED Teaching Assistant Certification. See the NYSED website for the requirements for NYS Teaching Assistant Certification.

Recommended Course Sequence

Program Requirements		Credits
ENG 101	Freshman English 1	3
PSY 101	General Psychology 1	3
PSY 221	Child Psychology	3
EDU 103	Intro to Early Childhood/ Childhood Education++>	3
COM 101	Foundations of Communication	3
EDU 107	Mandated Training	1
_____	Restricted Elective	3
_____	Restricted Elective	3
_____	Restricted Elective	3

Total: 25

Restricted Elective Options

This program has been developed to include options matching the New York State Teaching Certifications.

Option 1: For students who do not wish to follow a particular grade range.

_____	SUNY General Education course*	3
_____	SUNY General Education course*	3
_____	SUNY General Education course*	3

Option 2: Birth to 2nd Grades (Choose 3)

EDU 201	Observation and Assessment++	3
MAT 111	Foundations of Elementary School Mathematics	3
GEO 101	Elements of Physical Geography	3
HIS ____	SUNY GenEd (Category 4, 5, or 6)	3

Option 3: 1st to 6th Grades (Choose 3)

GEO 101	Elements of Physical Geography	3
MAT 111	Foundations of Elementary School Math	3
_____	SUNY General Ed. Course*	3
_____	SUNY General Ed. Course*	3

Option 4: 7th to 12th Grades

EDU 103	Omit	
PSY 222	Psychology of Adolescence (Replaces PSY 221)	3
GEO 101	Elements of Physical Geography	3
_____	SUNY General Education course*	3
_____	SUNY General Education course*	3
_____	SUNY General Education course*	3

++*Local daytime observations beyond college classroom are required. Students will be placed according to their employment/school needs.*

* *Each elective must be chosen from the following SUNY General Education categories: Mathematics (GE1), Natural Sciences (GE2), American History (GE4), Western Civilization (GE5), Other World Civilizations (GE6), Humanities (GE7), Arts (GE8), or Foreign Languages (GE9), with at least ONE from either Category 4, 5, or 6. Do not take more than one elective from the same category.*

>*Evidence of completion of fingerprinting through NYS Department of Education is required.*

Program Description

The Teaching Assistant certificate program is designed to prepare teacher assistants and paraprofessionals at all public school levels. Students will develop career skills in preparation for New York State Teacher Assistant Licensure and Certification. They will be introduced to career aptitudes and skills necessary for educational and behavioral assistance in New York State classrooms from preschool to high school. The program will supply a basic educational foundation comprised of at least three SUNY General Education topics and at least one area of liberal arts and sciences, as well as specific educational courses which meet Federal and/or New York State requirements for Teaching Assistants. Educational courses may include Introduction to Education, Mandated Training, and Foundations of Elementary School Mathematics. All courses are applicable toward an associate's degree AND the Jointly Registered Teacher Education Program (JRTEP).

Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (GEDs). If students are not high school graduates, they may be eligible for admission to the College's 24 Credit Hour Program. If students are home schooled, they may be eligible for admission. (See pages 7 through 13 for more details on the admission process for all applicants.)

Teaching Assistant

Certification Requirements

New York State Requirements

- See New York State Education Department website for the requirements for NYS Teaching Assistant Certification.

Student Learning Outcomes

Students will:

- exhibit critical thinking and problem solving skills.

- acquire a broad base knowledge in at least one area of liberal arts and sciences, and at least three SUNY General Education topics.

- understand the fundamentals of child development theories and their classroom applications.

- demonstrate relevant, creative, developmentally appropriate teaching techniques.

- communicate effectively in oral and written forms.

Career Opportunities

Entry-level teaching assistant or paraprofessional in:
- birth to second grade
- first to sixth grade
- seventh to twelfth grade

Transfer Opportunities

All of the courses in the Teaching Assistant Certificate are applicable toward an Associate in Arts and Associate in Sciences degree AND the Jointly Registered Teacher Education Program.

Contact Information

Education
Department Chair
(845) 341-4482
Admissions Office
(845) 341-4030

Visual Communications Technology: Graphic Arts/Printing

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
_____	Math or Liberal Arts Science	3
ART 103	Drawing 1	2
ART 107	Design 1	3
ART 123	Vis. Com. & Graphic Design 1	3
EET 110	Computer Applications and Graphics	3
PES 100	Concepts of Physical Wellness	1

Second Semester		
ENG 102	Freshman English 2	3
ART 124	Vis. Com. & Graphic Design 2	3
ART 104	Drawing 2	2
ART 108	Design 2	3
ART 128	History of Art 2	3
ART 111	Color	2

Third Semester		
_____	Social Science Elective	3
ART 223	Vis. Com. & Graphic Design 3	3
ART 113	Painting 1 **or**	
ART 117	Figure Drawing 1 **or**	
ART 119	Photography 1 **or**	
ART 121	Digital Photography 1 **or**	
ART 225	Web Design 1	3/4
ART 203	Modern Art: The 20th Century	3
_____	Restricted Elective*	3
ART 230	Arts & Communication Practicum	2

Fourth Semester		
_____	Social Science Elective	3
_____	Math or Liberal Arts Science	3
ART 224	Vis. Com. & Graphic Design 4	2
ART 114	Painting 2 **or**	
ART 118	Figure Drawing 2 **or**	
ART 120	Photography 2 **or**	
ART 122	Digital Photography 2 **or**	
ART 226	Web Design 2	3
_____	Restricted Elective*	3
PES ___	Physical Education	1

Total Credits 66-67

Students must complete a two-course sequence in Painting, Figure Drawing, Photography or Digital Photography for degree

* *Students select appropriate restricted electives based on their career goals after consultation with their academic advisor. Restricted Electives: ARC 101, ART 113, ART 114, ART 117, ART 118, ART 119, ART 120, ART 121, ART 122, ART 127, ART 201, ART 205,ART 207, ART 213, ART 214, ART 215, ART 225, ART 226, CAD 101, CIT 111, COM 101, COM 107, MKT 101, MKT 201*

Program Description

The Associate in Applied Science degree program in Visual Communications Technology: Graphic Arts/Printing prepares graduates in all aspects of visual communications and graphic design. These include layout, production, typography, commercial print processes, illustration and computer graphics for entry level positions in graphic design, printing, publishing, desktop publishing, advertising, marketing, presentation graphics, game design, animation, multimedia and communications. As a result, the program prepares students for successful portfolio reviews leading to acceptance into B.A. or B.F.A. programs

Beginning with Visual Communications 1, students are introduced to Visual Communications theories, graphic design principles, elements, typography, influential persons and contemporary digital media. The curriculum offers sequential Visual Communications and Graphic Design courses, complemented by a broad offering of studio art and art history courses. After taking core courses in the first year, the student selects a concentration area in either Photography, Painting, Figure Drawing, or Web Design in the second year. Concurrently, the student completes the Visual Communications course sequence culminating with Viscom 4, the portfolio development course. Our Practicum course offers the Viscom student the opportunity to experience an internship with local businesses or departments within the College.

Through an articulation agreement, qualified BOCES candidates can enter the A.A.S. degree program, and receive credit for certain first-year courses. After completing the program, students may either enter the workforce or transfer into a bachelor's degree program (see next page). Detailed course descriptions appear in the course description section of this catalog.

Please note that not all courses are offered in the evening.

Visual Communications Technology: Graphic Arts/Printing

Degree Awarded: Associate in Applied Science

Student Learning Outcomes

Students will:

- be prepared for entry level positions in visual communications and/or placement in upper-level programs of study.
- know fundamental concepts and processes of visual communications and graphic design.
- have a basic understanding of the visual communications industry and career opportunities in the field of visual communications.
- be proficient in industry standard technology including hardware and page layout, digital imaging, vector drawing, presentation and web design software.
- produce a portfolio appropriate for entry level roles in visual communications and/or continuing education in upper-level programs.

Career Opportunities

- graphic design, advertising design and marketing
- publishing, desktop publishing and printing
- game design, web design, animation and multimedia
- art direction, illustration, digital photography and color correction

Transfer Opportunities

Although the Associate in Applied Science degree is designed primarily as a professional degree, many students do transfer to baccalaureate programs at other colleges. Many of the courses in the program fulfill New York State general education requirements and thus are easily transferable within the State University of New York system. Presently SUNY Orange has an articulation agreement with Cazenovia College.

Many other students have successfully transferred to

- Fashion Institute of Technology
- Parsons The New School for Deisgn
- SUNY Albany
- SUNY New Paltz
- SUNY Oneonta
- SUNY Purchase
- School of Visual Arts

Contact Information

Arts and Communication
Department Chair
(845) 341-4787
Admissions Office
(845) 341-4030

SUNY General Education Course Listing

Any graduate of an A.A. or A.S. program (except A.S. Engineering Science) transferring to a SUNY institution must fulfill 7 of the following 10 categories.

GE 1. MATHEMATICS
MAT 102	Intermediate Algebra
MAT 111	Foundations of Elementary School Math
MAT 113	Math for the Liberal Arts
MAT 114	Contemporary Math
MAT 120	Introduction to Statistics
MAT 121	College Algebra
MAT 122	College Trigonometry
MAT 131	Pre-Calculus
MAT 205	Calculus 1

GE 2. NATURAL SCIENCES

Biology
BIO 101	General Biology 1
BIO 102	General Biology 2
BIO 110	Introduction to Biology
BIO 141	Diversity of Life
BIO 143	Field Biology
BIO 148	Environmental Conservation
BIO 201	Genetics
BIO 204	General Botany
BIO 205	General Ecology
BIO 210	Study of Biological Habitats

Laboratory Technology
MLT 209	General Microbiology

Chemistry
CHM 103	Applied Chemistry 1
CHM 104	Applied Chemistry 2
CHM 105	General Chemistry 1
CHM 106	General Chemistry 2
CHM 201	Organic Chemistry 1
CHM 202	Organic Chemistry 2

Physical Sciences
AST 120	Astronomy
CHM 120	Elements of Chemistry & Physics
GLG 110	Physical Geology
GLG 112	Historical Geology
PSC 125	Physical Science/Physical World
PSC 140	Physical Science/The Environment

Physics
PHY 101	General Physics 1
PHY 102	General Physics 2
PHY 103	Physics for Science & Engineering 1
PHY 104	Physics for Science & Engineering 2
PHY 105	General Physics & Calculus 1
PHY 106	General Physics & Calculus 2
PHY 108	Acoustic
PHY 111	Applied Physics 1
PHY 112	Applied Physics 2
PHY 203	Physics for Science & Engineering 3
PHY 204	Physics for Science & Engineering 4

GE 3. SOCIAL SCIENCES
ANT 101	Cultural Anthropology
ANT 102	Human Evolution
ANT 103	Archeology and Prehistory
ECO 201	Macro - Economics
ECO 202	Micro - Economics
GEO 102	Human Geography
POL 101	Introduction to Political Science
POL 102	U.S. Government–State & Local
POL 220	Comparative Governments
POL 221	International Relations
PSY 101	General Psychology 1
SOC 101	Introduction to Sociology
SOC 202	American Society: Order & Change

GE 4. AMERICAN HISTORY
HIS 101	U.S. History to 1865
HIS 102	U.S. History since 1865
HIS 103	History of African Americans*

only for students scoring 85 or above on NYS American History Regents
POL 103	U.S. Government - National

GE 5. WESTERN CIVILIZATION
HIS 130	The Greek & Roman World
HIS 131	Medieval & Renaissance Europe
HIS 132	The Age of Revolutions
HIS 133	Modern Europe

GE 6. OTHER/WORLD CIVILIZATIONS
HIS 121	World History to 1500
HIS 122	World History since 1500
HIS 123	Latin American Heritage & Hist.
HIS 124	Africa: Past & Present
HIS 220	Modern China & Japan
HIS 221	Modern India & Southeast Asia
HIS 222	The Middle East

GE 7. HUMANITIES
ENG 102	Freshman English 2
ENG 120	Introduction to Mythology
ENG 203	World Literature: Ancient through Renaissance
ENG 204	World Literature:Enlightenment through Modern Age
ENG 205	Drama: Ibsen-O'Neill
ENG 206	Drama: Contemporary
ENG 207	English Literature:14th-18th Centuries
ENG 208	English Literature: 19th-20th Centuries
ENG 209	American Literature: To the Civil War
ENG 210	American Literature: 1865 to the Present
ENG 213	Journalism: Survey of Mass Media
ENG 215	Shakespeare
ENG 216	Children's Literature
ENG 217	Film & Literature
ENG 220	Women Writers
ENG 221	Contemporary Short Story
ENG 222	Contemporary Novel
ENG 223	Contemporary Poetry
ENG 225	International Literature: Non-European
ENG 226	Fantasy Fiction
ENG 230	African - American Literature
ENG 297	Special Studies in Literature: Science Fiction

ART 127	History of Western Art 1
ART 128	History of Western Art 2
ART 201	American Art 1700 - 1945
ART 203	Modern Art - the 20th Century
ART 205	Women in Art History
ART 207	Non-Western Art History
HUM 201	Intro to Humanities 1: Ancient to Medieval
HUM 202	Intro to Humanities 2: Rensaissance to Contemporary
MUS 103	History of Western Music to 1750
MUS 104	History of Western Music from 1750
MUS 105	History of Jazz
MUS 107	History of Rock Music
PHL 111	Hebrew Bible (Old Testament)
PHL 112	New Testament
PHL 210	Philosophy
PHL 220	Ethics
PHL 230	Religious Concepts

GE 8. ARTS

ART 101	Introduction to Art
ART 103	Drawing 1
ART 104	Drawing 2
ART 107	Design 1
ART 108	Design 2
ART 111	Color
ART 113	Painting 1
ART 114	Painting 2
ART 117	Figure Drawing 1
ART 118	Figure Drawing 2
ART 119	Photography 1
ART 120	Photography 2
ART 121	Digital Photography 1
ART 122	Digital Photography 2
ART 123	VisCom & Graphic Design 1
ART 124	VisCom & Graphic Design 2
ART 125	Sequential Art: Comics Illustration
ART 213	Painting 3
ART 214	Painting 4
ART 215	Portrait Painting
ART 223	VisCom & Graphic Design 3
ART 224	VisCom & Graphic Design 4
ART 230	Arts and Communication Practicum
COM 103	Speaking Voice
COM 107	Intro to Video Production
COM 108	Digital Video Post-Production
COM 201	Oral Interpretation
COM 209	Debate
DNC 101	Modern Dance 1
DNC 102	Modern Dance 2
DNC 201	Advanced Dance 1
DNC 202	Advanced Dance 2
ENG 211	Creative Writing: Fiction
ENG 212	Creative Writing: Poetry
MUS 101	Introduction to Music
MUS 113	Introduction to Orchestra
MUS 121	Fundamentals of Music
MUS 123	Basic Musicianship 1
MUS 124	Basic Musicianship 2
MUS 131	Elementary Piano 1

MUS 132	Elementary Piano 2
MUS 141	Group Voice 1
MUS 142	Group Voice 2
MUS 151	Chorus
MUS 153	Madrigal Singers
MUS 155	Orchestra
MUS 157	Chamber Ensemble
MUS 159	Band
MUS 161	Jazz Ensemble
MUS 163	Jazz Improvisation 1
MUS 164	Jazz Improvisation 2
MUS 170-77	Private Instruction
MUS 223	Advanced Musicianship 1
MUS 224	Advanced Musicianship 2
MUS 226	Elements of Arranging
MUS 231	Intermediate Piano 1
MUS 232	Intermediate Piano 2
MUS 233	Advanced Piano 1
MUS 234	Advanced Piano 2
THE 101	Introduction to Theater
THE 103	Acting 1: Fundamentals
THE 107	Theater Workshop
THE 109	Stage Make-Up
THE 111	Stage Movement
THE 113	Intro to Technical Production
THE 115	Performing Arts Seminar
THE 117	Puppetry/Object Performance Theater

Note: Arts courses must be combined with other one and two credit courses for a total of three.

GE 9. FOREIGN LANGUAGE

CHN 101	Chinese 1
CHN 102	Chinese 2
FRE 101	Elementary French 1
FRE 102	Elementary French 2
FRE 201	Intermediate French 1
FRE 202	Intermediate French 2
FRE 203	Advanced French 1
FRE 204	Advanced French 2
GER 101	Elementary German 1
GER 102	Elementary German 2
ITA 101	Elementary Italian 1
ITA 102	Elementary Italian 2
SPN 101	Elementary Spanish 1
SPN 102	Elementary Spanish 2
SPN 201	Intermediate Spanish 1
SPN 202	Intermediate Spanish 2
SPN 203	Spanish Conversation & Comp.
SPN 204	Introduction to Spanish Lit.

GE 10. BASIC COMMUNICATIONS

ENG 101	Freshman English 1 **and**
COM 101	Foundations of Communication

Note: Courses that are a part of the College's General Education requirement and which are followed by an H are Honors sections of regular courses. As such, they are enriched versions of courses that already meet the SUNY General Education requirement.

Guide for Social Science Requirement

GUIDE FOR SOCIAL SCIENCE REQUIREMENT

12 Credits of Social Science - select one course from group A, B, C and D

Categories A - D must include at least one SUNY Social Science (GE3) and one SUNY History (GE4, GE5, or GE6) course.

A. Economics, United States History, or United States Government

ECO 201	Macro-Economics (GE3)	HIS 103	History of African Americans (GE4*)
ECO 202	Micro-Economics (GE3)	POL 102	U.S. Government-State & Local (GE3)
ECO 203	Economic Development+	POL 103	U.S. Government- National (GE4)
HIS 101	U.S. History to 1865 (GE4)		
HIS 102	U.S. History Since 1865 (GE4)		

B. Psychology

PSY 100	Psych. of Adjustment	PSY 222	Psychology of Adolescence+
PSY 101	General Psychology 1 (GE3)	PSY 223	Psych. of Adulthood & Aging+
PSY 102	General Psychology 2+	PSY 230	Abnormal Psychology+
PSY 220	Developmental Psychology+	PSY 240	Social Psychology+
PSY 221	Child Psychology+		

C. Anthropology, Criminal Justice, Human Geography, or Sociology

ANT 101	Cultural & Social Anthropology (GE3)	CRJ 111	Criminology
ANT 102	Human Evolution (GE3)	GEO 102	Human Geography (GE3)
ANT 103	Archaeology & Prehistory (GE3)	SOC 101	Introduction to Sociology (GE3)
CRJ 101	Criminal Justice	SOC 120	Social Problems
CRJ 103	Understand. Juvenile Offender	SOC 231	The Family+
CRJ 105	Policy-Community Relations		

D. History other than U.S., Comparative Government, or International Relations

HIS 105	Science, Technology & Society	HIS 133	Modern Europe (GE5)
HIS 121	World History to 1500AD (GE6)	HIS 220	Modern China & Japan (GE6)
HIS 122	World History since 1500AD (GE6)	HIS 221	Modern India & Southeast Asia (GE6)
HIS 123	Latin American Heritage/History (GE6)	HIS 222	The Middle East (GE6)
HIS 124	Africa: Past and Present (GE6)	POL 101	Intro to Political Science (GE3)
HIS 130	The Greek & Roman World (GE5)	POL 220	Comparative Government (GE3)
HIS 131	Medieval & Renaissance Europe (GE5)	POL 221	International Relations (GE3)
HIS 132	The Age of Revolution (GE5)		

Only for students scoring 85 or above on NYS American History Regents

+ *these courses have a prerequisite*

The following list is intended to provide guidance in selecting courses that must fall within specific categories to meet degree requirements. This list is not to be confused with degree requirements that state a specific SUNY General Education course must be taken. For example, if your degree requires you to take a SUNY Math, SUNY Social Science, etc., you must follow the SUNY General Education course listing.

Also, if you are pursuing the A.A. Liberal Arts degree, the Social Science requirements are restricted to those courses listed within specific (A-D) categories.

Note: When just a department is noted as meeting the requirement (for example ACC) and there is no number after this designation, this means that all course numbers preceded by ACC meet the requirement.

Social Science Elective

ANT (except ANT 220), CRJ 101, CRJ 103, CRJ 105, CRJ 109, CRJ 111, ECO, GEO 102, HIS (except HIS 104), POL, PSY, SOC

Math Elective

Any MAT or CSC courses.

Business Elective

ACC, BUS, MGT, MKT, OFT

Liberal Arts Science

AST, BIO, CHM, GEO 101, GLG, MLT 101, MLT 110, MLT 209, PHY, PSC

Liberal Arts Elective

ANT (Except ANT 220), ARC 215, ARC 216, ART, AST, BIO, BUS 105, CHM, CCS 100, CCS 101, CIT 100, COM, CSC, CRJ 101, CRJ 103, CRJ 105, CRJ 109, CRJ 111, ECO, EDU 207, ENG, FLD, FRE, GEO, GLG, HIS, HON, HMS 101, ITA, MAT, MLT 101, MLT 110, MLT 209, MUS, PHL, PED 111, PED 112, PSC, PHY, POL, PSY, SOC, SPN, THE

General Elective

Any course except PES courses.

Developmental courses are not applicable toward any degree program.