Performing Arts

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
Karen Bals Zimmerman (Chair and Coordinator of Music), Thomas Hischak (Coordinator of Theatre), Ralph Dudgeon, Cynthia Halpin, Kevin Halpin, Howard Lindh, Preston Marye, Manuel Medeiros, Edward Moore, David Neal, Lois Pfister, Stephen Wilson

PROGRAM OFFERED
Bachelor of Arts in Musical Theatre

MAJOR OFFERED
Musical Theatre

MINORS OFFERED
American Musical Theatre
Music
Theatre

DESCRIPTION
The Performing Arts Department includes programs in music and theatre, each offering a minor in addition to an interdisciplinary minor in American musical theatre and a concentration in music for elementary education majors. The department offers a wide range of intellectual and performance opportunities in music, theatre and dance, which are open to beginning through advanced students from all disciplines in the College. Theoretical study is balanced with practical work to allow students to explore the creative, aesthetic and intellectual aspects of these arts. Applied music (private study), music ensembles, dramatic productions and musical theatre productions highlight the skills developed in the classroom, studio and stage.

SPECIAL FEATURES
• Newly renovated facilities including a 477-seat theatre, recital hall, lab theatre, dozens of practice rooms, choral and instrumental rehearsal halls, and dance studio
• Instruments provided by the department to participants in ensembles
• Music and Listening Library
• Production of a main-stage musical each semester
• Individual attention from a world-class faculty in a liberal arts setting
• Scholarship support in theatre and music
• Alpha Psi Omega, national dramatic society
• Touring musical and dramatic groups

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to the following majors.
2. Liberal Arts Requirements: B.A. - 90 credit hours

Major in Musical Theatre [MUTH]
The Bachelor of Arts in Musical Theatre provides comprehensive training in musical theatre while maintaining a firm grounding in the liberal arts. Our goal is to foster flexibility and versatility in our students to enable them to participate in musical theatre on a number of levels. The program’s objectives are far reaching. Students will leave the program with the knowledge and confidence to participate in educational, professional or semiprofessional productions with competence and skill. Our graduates are active in community and regional theatre organizations, assist and provide leadership in primary and secondary school productions and often continue their education in musical theatre in a M.F.A. or M.A. in music, theatre or musical theatre.

CAREER POTENTIAL
• Actor/singer
• Director
• Choreographer
• Theatre technician

Students must audition for admittance to the program. In addition to the College-wide requirements in writing, Quantitative Skills, foreign language and General Education, the B.A. in Musical Theatre requirements will be met by successful completion of the following courses and portfolio or project assessment:

A. Music Courses: 17 credit hours
MUS 111: Introduction to Music Theory
MUS 201: Music Theory I (by advisement)
MUS 164: Applied Voice (two semesters)
MUS 264: Applied Voice (two semesters)
MUS 180: Class Piano
MUS 160: Applied Piano (by advisement)
MUS 222: Music History II
MUS 249: College Singers
MUS 240: Choral Union

B. Theatre Courses: 13 credit hours
THT 120: Acting I
THT 162: Theatre History II
THT 220: Acting II
THT 240: Technical Theatre
THT 399: Participation in Theatre (two semesters)

C. Dance Courses: Eight credit hours
Students must complete four semesters of ballet (DNC 101, 201, 301, 401); each course may, by advisement, be repeated once. The additional Dance courses listed below must also be taken:
DNC 102: Jazz I
DNC 103: Tap I
DNC 202: Jazz II
DNC 203: Tap II

D. Musical Theatre Courses: 11 credit hours
THT 261: Introduction to American Musical Theatre
THT 461: Seminar in Musical Theatre
MUS/THT 331: Musical Theatre Performance I
MUS/THT 430: Musical Theatre Performance II
DNC 423: Dance for the Theatre I
DNC 424: Dance for the Theatre II
Minor in American Musical Theatre [AMTH]

The American theatre minor creates the opportunity for students to approach the art form from an integrated perspective. The program is designed to provide a quality experience in musical theatre in a liberal arts context. The Performing Arts Department produces a main stage musical each semester in addition to cabaret showcases and recitals which feature musical theatre repertoire.

**CAREER POTENTIAL**

- Actor/singer
- Dancer
- Director
- Theatre technician
- Arts manager

**Required Courses: 22 credit hours**

- THT 100: Introduction to Theatre Arts
- MUS 111: Introduction to Music Theory
- THT 120: Acting I
- THT 121: Stage Movement
- MUS 184: Voice Class I or MUS 185: Voice Class II
- THT 261: Introduction to American Musical Theatre
- MUS 240: Choral Union or
- MUS 249: College Singers
- THT 399: Participation in Theatre
- THT 461: Seminar in American Musical Theatre

**TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 22**

Minor in Music [MUS]

Note: This is a self-supporting minor and is not directly associated with the musical theatre major.

**CAREER POTENTIAL**

- Performer
- Graduate study
- Private music teacher

**A. Required Courses: 19 credit hours**

- MUS 201: Music Theory I
- MUS 202: Music Theory II
- Music History: Six credit hours
  - Choose from MUS 221, 222 or 223
- Ensembles: Three credit hours
  - Choose from MUS 240, 249, 256, 259
- Applied Music: Four credit hours of applied and/or class lessons

**B. Elective Courses: Three credit hours**

- Choose from MUS 332, 380 or 470, or MUS 221, 222 or 223 if not selected in Part A.

Enrollment in a music ensemble and applied music is recommended each semester. Class lessons are available in piano and/or voice. Individual lessons in piano, voice and instruments may be arranged.

**TOTAL CREDIT HOURS REQUIRED FOR MINOR: 22**

Minor in Theatre [THT]

Note: This is a self-supporting minor and is not directly associated with the musical theatre major.

SUNY Cortland’s theatre program offers a solid foundation for students interested in theatre as a career or as broadening college experience. In exploring the theoretical and practical aspects of theatre, students can obtain experience in the mounting of major stage productions as well as in smaller, more innovative theatre activities. Acting, directing, technical theatre, arts management, musical theatre, theatre history and criticism are areas that students can examine.

**CAREER POTENTIAL**

- Actor
- Director
- Theatre technician
- Arts manager

**A. Required Courses: 12 credit hours**

- THT 100: Introduction to Theatre Arts
- THT 120: Acting I
- THT 240: Technical Theatre I plus
- THT 220: Acting II or
- THT 341: Technical Theatre II

**B. Elective courses: Six credit hours from:**

- THT 161: Theatre History I
- THT 162: Theatre History II
- THT 330: Literature in Performance
- THT 470: Theatre Management

**TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18**
Example of the undergraduate degree in Musical Theatre over four years

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**Music Courses**

Note: Up to eight credit hours of ensemble credit may be counted toward graduation. Enrollment in a music ensemble is recommended for music minors and music concentrations.

- **MUS 100: Music in Western Society**
  (A) Significant historical periods of music covering styles, forms, composers, representative compositions, Gregorian chant through contemporary. (3 cr. hr.)

- **MUS 101: World Music**
  (B) Study of music cultures of the world's indigenous peoples. Shared musical ideas, social organization, common repertoires and material culture. (3 cr. hr.)

- **MUS 110: Survey of African American Music**
  (B) A general survey of African American music tracing the origin from colonial music of the 17th century to rap music of the 20th Century. Also listed as AAS 110. (3 cr. hr.)

- **MUS 111: Introduction to Music Theory**
  (A) Basic theory: experiences in melodic, rhythmic, harmonic expressions. (3 cr. hr.)
MUS 129, 229, 329, 429, 529: Special Topics in Music
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for credit and academic level of credit. (1-4 cr. hr.)

Note: The following applied music courses are for qualified students with the consent of the department. All students taking applied music must be enrolled concurrently in at least one performing ensemble.

MUS 160, 260, 360, 460: Applied Piano
(A) Private lessons in piano. Each level may be repeated once. (2 cr. hr.) ■

MUS 162, 262, 362, 462: Applied Percussion
(A) Private lessons in percussion. Each level may be repeated once. (2 cr. hr.) ■

MUS 163, 263, 363, 463: Applied Strings
(A) Private lessons in string instruments. Each level may be repeated once. (2 cr. hr.) ■

MUS 164, 264, 364, 464: Applied Voice
(A) Private lessons in voice. Each level may be repeated once. (2 cr. hr.) ■

MUS 165, 265, 365, 465: Applied Woodwinds
(A) Private lessons in woodwind instruments. Each level may be repeated once. (2 cr. hr.) ■

MUS 166, 266, 366, 466: Applied Brass
(A) Private lessons in brass instruments. Each level may be repeated once. (2 cr. hr.) ■

MUS 180: Piano Class I
(A) Fundamental piano technique, playing of solo pieces and duets. Only students without prior piano experience admitted. Consent of instructor required. (2 cr. hr.) ■

MUS 181: Piano Class II
(S) Prerequisite: MUS 180. (2 cr. hr.) ■

MUS 184: Voice Class I
(F) Fundamental voice training; a standard repertoire of songs. Class, individual performance. Consent of instructor required. (2 cr. hr.) ■

MUS 185: Voice Class II
(S) Prerequisites: MUS 184, consent of instructor. (2 cr. hr.) ■

MUS 201: Music Theory I
(F) For music majors or students with prior musical experience. Written theory: scales through basic harmonizations; applied theory: ear-training through keyboard harmony. Prerequisite: Consent of department. (3 cr. hr.) ■

MUS 202: Music Theory II
(S) Continuation of MUS 201: employment of fundamental chords, progressions in harmonizing given melodies. Keyboard experience, ear-training and analysis. Prerequisite: MUS 201. (3 cr. hr.) ■

MUS 221: Music History I
(C) The earliest examples of notated music in Western culture through musical stylistic transformations in the Middle Ages and Renaissance Period (AD -1600). Prerequisite: Consent of department. (3 cr. hr.) ■

MUS 222: Music History II
(C) A survey of the Baroque and Classical periods of music (1600-1825). Prerequisite: Consent of department. (3 cr. hr.) ■

MUS 223: Music History III
(F-C) Music of the 19th and 20th centuries. (3 cr. hr.) ■

MUS 240: Choral Union
(A) College-Community mixed choral group that performs major choral works. Repertoire ranges from Baroque to contemporary works. (1 cr. hr.)

MUS 249: College Singers
(A) College-Campus mixed choral group open to qualified students. Repertoire ranges from Renaissance to 20th century, vocal training, concert tours. Consent of instructor required. (1 cr. hr.)

MUS 250: Chamber Arts Ensemble
(O) Select vocal-instrumental ensemble which performs chamber literature from all periods. Solo performance opportunities. Consent of instructor required. (1 cr. hr.)

MUS 254: Ensemble
(A) Small vocal or instrumental groups which perform wide range of ensemble literature. Consent of instructor required. (1 cr. hr.)

MUS 256: College-Community Orchestra
(A) Symphonic organization; performs wide range of orchestral literature. Consent of instructor required. (3 cr. hr.)

MUS 259: Wind Ensemble
(A) Symphonic ensemble which performs wide range of wind ensemble, concert band literature. Concert tours. Consent of instructor required. (1 cr. hr.)

MUS 301: Music Theory III
(O) Continuation of MUS 202; seventh chords, secondary dominants and borrowed chords in harmonization and analysis; ear-training. Prerequisite: MUS 202. (3 cr. hr.) ■

MUS 331: Musical Theatre Performance I
(F) Synthesis of voice, acting, dance and history courses into a cohesive approach to musical theatre. Focus on song analysis, audition techniques and physical expression. Prerequisites: MUS 111, 164 or 184, DNC 201, THT 220 and 261. Also listed as THT 331. (1 cr. hr.)

MUS 332: Jazz
(O) The history of jazz in the United States, styles and structure as well as the place of this music in our culture. Prerequisite: MUS 100, 221, 222, or 223. Also listed as AAS 332. (3 cr. hr.) ■

MUS 333: Piano Literature
(O) Detailed study of style, structure, performance of important piano literature. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.) ■

MUS 335: Music and the Film
(O) Style, historical significance, contribution of selected film composers through a study of their musical techniques and viewing of representative films. Relationship of music to dramatic and psychological elements of film. Prerequisite: MUS 100 or 221 or 222. Also listed as CIN 335. (3 cr. hr.) ■

MUS 337: The Music Industry
(O) Overview of music profession and its alternative career opportunities in publishing, recording, media, etc. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.)

MUS 380: Conducting
(O) Basic, stylistic technique in conducting; score reading, interpretation. Opportunities for conducting vocal, instrumental groups provided. Prerequisite: MUS 201 and 202. May be taken in conjunction with Theory III. (3 cr. hr.) ■

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
MUS 434: Contemporary Music
(O) Development of awareness and understanding of the styles common to contemporary expression. Prerequisite: MUS 100 or 221 or 222. (3 cr. hr.)

MUS 470: Music and the Child
(C) Role of music in development of child through use of singing, rhythm, listening, instrumental, creative improvisations and music reading experiences. Prerequisite: MUS 111 or 201. Open only to juniors and seniors. (3 cr. hr.)

MUS 490, 491, 590, 591: Independent Study
(A) Individual study culminating in advanced performance or substantial project. Consent of department required. (2-8 cr. hr.)

MUS 521: Music in Western Civilization
(O) Historical perspective from Ancient Greece to modern times; relationship to other fine arts and interpreted within framework of cultural, intellectual history. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.)

MUS 522: Music in the United States
(O) Pilgrim times to present, emphasizing development of distinctive American tradition in music. Prerequisite: MUS 100, 221, 222, or 223. (3 cr. hr.)

MUS 523: Traditions and Trends in African American Music
(O) A general survey of African American music, tracing the origin from colonial music of the 17th century to rap music of the present. (3 cr. hr.)

Theatre Courses

THT 100: Introduction to Theatre Arts
(A) Survey of the arts, the crafts and the organization of theatre. Theory, application and practicum. Two lectures, one two-hour lab. (3 cr. hr.)

THT 120: Acting I
(A) Introduction to acting techniques through exploration of stage movement, voice and diction, basic makeup, improvisation and theatre games. Practicum. (3 cr. hr.)

THT 121: Stage Movement
(F-C) Theatre blocking, mime, dance and stage combat. (3 cr. hr.)

THT 129, 229, 329, 429, 529: Special Topics in Theatre
Selected topics. May be taken more than once a subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

THT 161: Theatre History I
(F) History of Western theatre from ancient times through Renaissance. (3 cr. hr.)

THT 162: Theatre History II
(S) History of Western Theatre from the Renaissance to present. (3 cr. hr.)

THT 212: Stage Movement
(C) Theatre blocking, mime, dance and stage combat. (3 cr. hr.)

THT 220: Acting II
(S-C) Continued study of acting techniques through stage movement and dance, voice and diction, character makeup and character study, Practicum. Prerequisite: THT 120. (3 cr. hr.)

THT 240: Technical Theatre I
(F-C) Basic scenic construction, stage structure and rigging, basic lighting, production. Practicum. (3 cr. hr.)

THT 241: Technical Theatre II
(S-C) Continuation of scenic construction, stage structure and rigging, lighting, production; introduction to sound and special effects. Practicum. Prerequisite: THT 220 and 261. Also listed as MUS 331. (1 cr. hr.)

THT 331: Musical Theatre Performance I
(F) Synthesis of voice, acting, dance and history courses into a cohesive approach to musical theatre. Focus on song analysis, audition techniques and physical expression. Prerequisites: MUS 111, 164 or 184, DNC 201, THT 220 and 261. Also listed as MUS 331. (1 cr. hr.)

THT 341: Technical Theatre II
(S-C) Continuation of scenic construction, stage structure and rigging, lighting, production; introduction to sound and special effects. Practicum. Prerequisite: THT 240. (3 cr. hr.)

THT 399: Participation in Theatre
(A) Participation in cast or crew of a major production. For elective credit only. S, U grades assigned. (.5 cr. hr.)

THT 430: Musical Theatre Performance II
(S) Performance and scene study continuing the exploration of musical theatre techniques. Prerequisites: DNC 203, 401 and THT 331. For majors only, must have junior status. (2 cr. hr.)

THT 432: Directing I
(S-C) Techniques of play direction: script analysis, casting, rehearsing, staging. (3 cr. hr.)

THT 440: Independent Study, Theatre
(A) Prerequisite: Consent of department (1-4 cr. hr.)

THT 461: Seminar in Musical Theatre
(S-C) Focused study of specific composers and lyricists. Prerequisite: THT 261. (3 cr. hr.)

THT 470: Theatre Management
(F-C) Theoretical and practical aspects of theatre management including organizations, productions, audience development, budgeting and business practices. Practicum. Prerequisite: Consent of department. (3 cr. hr.)

THT 542: Puppetry for Educators
(C-M) A survey of the history and techniques of puppet performance which emphasizes the cross cultural relevance of puppets and the status of puppetry as a performing art, as well as its relationship to various narrative traditions. Individual (graduate level) research projects will examine puppetry within a pedagogical frame that targets specific content areas and suggests strategies for using puppets in a variety of ways with particular grade levels. Practicum. (3 cr. hr.)
Philosophy

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
Kathryn Russell (Chair), Lawrence Ashley, Andrew Fitz-Gibbon, Mechthild Nagel

PROGRAMS OFFERED
Bachelor of Arts in Social Philosophy

MAJORS OFFERED
Social Philosophy

MINORS OFFERED
Social Philosophy

DESCRIPTION
Philosophy is essentially an activity, rather than a fixed set of teachings. Philosophy cultivates the capacities and appetite for self-expression and reflection, for debate and exchange of ideas, and for reflecting on and puzzling over problems of living, being human and being part of a community. Philosophy prepares one for the tasks of citizenship, for participation in political and community affairs and for responsible and intelligent engagement in public life. This department's unique major (and minor) in social philosophy is meant to instill these skills. As such, it is a valuable tool and indeed the very paradigm of a liberal arts education major.

SPECIAL FEATURES
- Unique program in social philosophy — the only one in the SUNY system
- Chance for internship in senior year
- Small department allows close interaction with faculty
- Philosophy majors frequently top all other majors in the Law School Admissions Tests (LSAT)
- Cortland students who have graduated with a philosophy degree have gone on to widely varied careers — law school, human services, journalism, graduate study in philosophy, etc.
- Philosophy majors do better than the average liberal arts students at obtaining jobs after graduation — a surprise to many people who think of philosophy as impractical.

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to the major.

2. Liberal Arts Requirements: 90 credit hours

Major in Social Philosophy [SPHI]

CAREER POTENTIAL
- Government
- Law
- Social Activism
- Human Services
- Journalism

A. Required Courses: 15 credit hours
   At least one course from the PHI 100 level
   PHI 201: Ancient Social Philosophy
   PHI 202: Introduction to Modern Philosophy
   PHI 203: Social Ethics
   PHI 499: Independent Studies** (internship or paper expected)

B. Additional Hours in Philosophy: 18 credit hours
   At least nine hours must be in courses numbered 300-level and above.

C. Courses in related areas
   Nine hours selected in consultation with an advisor

D. Other courses
   May include a minor of 15-21 credit hours

**CPV 400: Cooperative Education: An Internship in Social Justice may be substituted for PHI 400 with the approval of the department chair.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Minor in Social Philosophy [SPHI]
The following courses are required for the minor in social philosophy:

Required courses: 18 credit hours
   At least one course from the PHI 100 level
   PHI 201: Ancient Social Philosophy or PHI 202: Introduction to Modern Philosophy
   At least 12 more hours in philosophy at the 200 level and above

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18
Example of the B.A. in Social Philosophy over four years
This is just a model and does not reflect our expectations for all students.

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<td>PHI 202</td>
<td>PHI 272</td>
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<td>Elective*</td>
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<tr>
<td>or elective</td>
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* The generous number of electives here allows for the student to easily adopt a dual major with philosophy

### Philosophy Course Descriptions

**PHI 100: Introduction to Philosophy**
(B) Introduction to subject matter and methods of philosophy. Readings include classical and contemporary writers on a range of philosophical topics including social and political philosophy, philosophy of religion, questions of metaphysics and epistemology, ethics and basic characteristics of rational inquiry. (3 cr. hr.) ■

**PHI 110: Critical Thinking and Argumentation**
(O) Exercises and principles designed to enhance critical thinking and evaluation of arguments. In addition to a focus on philosophical inquiry, classes also concentrate on daily situations such as ordinary conversations, reading newspapers and advertising. Not open to students with credit for COM 241. (3 cr. hr.) ■

**PHI 111: Symbolic Logic**
(O) Principles of Symbolic Logic used in determining validity or invalidity of arguments. (3 cr. hr.) ■

**PHI 129, 229, 329, 429, 529: Special Topics in Philosophy**
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.) ■

**PHI 201: Ancient Social Philosophy**
(S-C) Western philosophy from its origins in Greece, emphasizing Plato and Aristotle. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.) ■

**PHI 202: Introduction to Modern Philosophy**
(F-C) Modern western philosophy from Descartes to Kant. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.) ■

**PHI 203: Social Ethics**
(C) Basic theories of ethics and their application to the problems of social justice. Theorists studied will include: Kant, J. S. Mill, Rawls, Nozick. Issues to be discussed may include affirmative action, political liberty and civil disobedience, and equality. (3 cr. hr.) ■

**PHI 205: Prisons and Punishment**
(B) A consideration of theoretical issues surrounding the concept and justification of punishment from traditional sources (Kant, Bentham, Mill) to modern critiques (Foucault). A number of special issues surrounding prison policy and practice (race, supermax, prisons, youthful offenders) are also analyzed. (3 cr. hr.) ■

**PHI 235: Aesthetics and Film**
(O) Theoretical issues surrounding film, including the nature of film and judgments about film, comparison of film theories and theories of film criticism, genres. Prerequisite: Three hours of philosophy or consent of instructor. Also listed as CIN 225. (3 cr. hr.) ■

**PHI 240: Social and Political Philosophy**
(C) Focus on the relationship between the individual and the state, and opposing conceptions of democracy, freedom and a just society. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.) ■
PHI 250: American Philosophy
(O) Survey of main movements, figures in history of philosophy in North America, including Puritanism, the American Enlightenment, Transcendentalism, Pragmatism and Naturalism. Writers include Jonathan Edwards, Franklin, Jefferson, Madison, Thoreau, Emerson, Peirce, James and Dewey. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 270: Race and Racism
(C) An examination of political and philosophical issues stemming from relations of power based on “race” in the U.S. Subjects will include how the concept of “race” has been used to classify humans, designating them as inferior or superior; the notions of racial identity or race consciousness; and political philosophies addressing the problem of racial oppression. Also listed as AAS 270. (3 cr. hr.)

PHI 271: Philosophy of Human Nature
(B) Discussion of various existential approaches to the problem and meaning of human existence. Focus on existentialist themes such as self-consciousness, freedom, absurdity, responsibility, being and nothingness. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 272: Utopias
(C) An investigation of the concept of ideal societies. The course will investigate the literary expressions of utopian sentiment, historical attempts at founding utopian communities and the philosophical implications of utopian thought. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 300: Philosophical Issues
(O) Detailed study of one philosophical problem or comparative study of two or more philosophers. May be repeated as subtitle changes. Prerequisite: 200-level course in philosophy or consent of instructor. (3 cr. hr.)

PHI 320: Environmental Ethics
(C) A consideration of ethical issues as they arise in human interaction with the environment. Topics will include environmental racism, “speciesism,” the Gaia hypothesis and the impact of population growth on ecology. Prerequisite: Three hours of philosophy or three hours of environmental studies or consent of instructor. (3 cr. hr.)

PHI 321: Medical Ethics
(C) Consideration of ethical issues as they arise in contemporary medical practice and related health-care professions. Readings from philosophy, law and medicine. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 340: Philosophy of Law
(O) Nature of law with special attention to relation of law to morality. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 375: Science, Truth and Bias
(O) Examines accounts of scientific methods and the influence of social values or human interests on scientific reasoning. Contemporary challenges to the idea of objectivity will be looked at to understand knowledge claims in the natural and social sciences. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 380: Feminist Social Thought
(C) Discussion of various philosophical approaches to problems of women’s oppression, like sex role stereotyping, economic discrimination and treatment in family. Comparison of political theories and strategy. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 382: Marxist Philosophy
(O) Karl Marx’s thought and its implications for today. Topics will include political economic theory, alienation, sexism, racism and imperialism. Prerequisite: Three hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 390: Contemporary Philosophical Approaches
(O) In-depth study of 20th century trends in philosophy, e.g. logical positivism, phenomenology, ordinary language philosophy, analytic philosophy, pragmatism, naturalism, postmodernism. May be repeated as subject area changes. Prerequisite: 200-level course in philosophy or consent of instructor. (3 cr. hr.)

PHI 400: Seminar in a Major Philosopher
(C) Detailed study of one philosopher’s works. May be repeated as subtitle changes. Prerequisite: Nine hours of philosophy or consent of instructor. (3 cr. hr.)

PHI 401: Topics in Contemporary Social Philosophy
(O) Examination of twentieth-century responses to ethical and social problems. Possible topics include democracy vs. anarchy, justice, rights, liberty, equality, oppression. Course may be taken more than once under different titles. Prerequisite: 300-level philosophy course or consent of instructor. (3 cr. hr.)

PHI 499: Independent Studies
(Not required) Directed research culminating in substantial paper. For majors and minors only. Prerequisite: Consent of department. (3 cr. hr.)

Values Courses
Note: VAL 335 may be counted as three hours of philosophy toward the major and minor requirements.

VAL 140: Prejudice, Discrimination and Morality
(A) Freedom, justice and equality are examined in connection with racism and sexism. (3 cr. hr.)

VAL 335: Philosophical Approaches to Contemporary Moral Problems
(A) Exploration of moral issues found in our daily lives and our special disciplines. Includes problems such as: racial and sexual discrimination; abortion; capital punishment; civil disobedience; war; problems in bioethics. (3 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Physical Education

DEPARTMENT

SCHOOL
Professional Studies

FACULTY
Jerry Casciani (Chair), JoEllen Bailey, Colleen Buchanan, Joy Buffan, Shirley Cahill, Diane Craft, Tim Davis, Tom Fuchs, Kath Howarth, Mike Kniffin, Eric Malmberg, Suzanne Parker, Steve Patrick, Tom Quinn, Tom Steele, Jeff Walkuski

MAJORS OFFERED
Bachelor of Science in Education in Physical Education

CONCENTRATIONS OFFERED
Effective Fall 2004, the concentrations in physical education are no longer offered.

DESCRIPTION
The purpose of the B.S.Ed. program is teacher preparation for elementary and secondary schools. Concentrations are available for students who already have an interest in a specific aspect of physical education. The program includes theory, activity courses and student teaching experiences.

SPECIAL FEATURES
• Study abroad, including study in Germany and University of Ballarat in Australia
• Student teaching at The University of the Sunshine Coast, Australia
• Coaching certification for non-physical education majors
  New York State coaching certification for non-physical education majors is offered as a Web-based program, non-credit, through the Center for Educational Exchange, Van Hoesen Hall, Room A-11, (607) 753-4214.
  Courses offered include:
  1. Philosophy, Principles and Organization of Athletics
  2. Health Sciences Applied to Coaching (Responding to Emergencies/First Aid must be taken on-site elsewhere)
  3. Theory and Techniques of Coaching

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog.
2. Liberal Arts Requirements: 60 credit hours.
3. In order to enter and continue to move through the professional block sequence, students must have and must maintain as 2.5 grade point average.

Major in Physical Education [PEC]
Upon satisfactory completion of the four-year program in physical education and upon submitting evidence of having achieved a level of performance satisfactory to the Commissioner of Education on the New York State Teacher Certificate Examination, graduates receive the Bachelor of Science in Education and initial New York State teaching certification in the special field of physical education for grades K-12.

A. General Education and Liberal Arts minimum of 60 credit hours
  CPN 100 or 102: Academic Writing I
  CPN 101 or 103: Academic Writing II
  PSY 101: General Psychology
  BIO 301: Anatomy and Physiology I
  BIO 302: Anatomy and Physiology II
  COM 210: Fundamentals of Public Speaking
  PSY 332: Educational Psychology
  General Education Courses (21 cr. hr.)
  Liberal Arts Electives (11 cr. hr.)

B. Professional Block: 28 credit hours
  (2.5 grade point average required)**
  PED 201: Motor Development
  EDU 255: Basics of Effective Instruction in Physical Education
  EDU 256: Seminar for Field Experience
  EDU 355: The Physical Education Curriculum: Planning and Practice
  PED 356: Adapted Physical Education and Sport
  EDU 455: Student Teaching Seminar in Physical Education
  EDU 456: Student Teaching in Physical Education

C. Professional Education: Eight credit hours
  H LH 110: Personal and Community Health
  H LH 120: Responding to Emergencies
  EDU 470: Foundations and Organization of Modern Education

D. Physical Education Theory: 21 credit hours
  EXS 197: History and Philosophy of Physical Education +
  EXS 287: Social Psychological Aspects of Physical Activity +
  EXS 297: Motor Behavior +
  EXS 387: Biomechanics +
  EXS 397: Exercise Physiology I +
  PED 308: Outdoor Adventure Education for Teachers
  PED 434: Statistics and Assessment in Physical Education

E. Physical Education Activities: 13 credit hours
  PED 181: Adventure Activities
  PED 182: Health-Related Physical Fitness
  PED 187: Track and Field
  PED 189: Aquatics
  PED 283: Racquet Activities
  PED 284: Self-Defense and Martial Arts
  PED 285: Gymnastics Activities
  PED 288: Rhythms and Dance
  PED 366: Basketball
  PED 368: Football
  PED 371: Soccer
  PED 372: Softball
  PED 380: Skill Acquisition Concepts of Team Sports
  PED 381: Tactical Concepts of Team Sports
  Activity Electives (1 cr. hr.)
Physical Education

COURSE DESCRIPTIONS

General Courses for Non-Majors
Courses listed hereafter are open to students majoring in subjects other than physical education. Four credits of physical education may be applied toward graduation. Courses usually are quarter courses offered seasonally and carry one-half credit with the exception of those marked with an asterisk (*). Asterisked courses carry one credit. A $2 fee is charged for all activities using expendable supplies.

PED 106: Basic Swimming
PED 137: Skating
PED 138: Ice Hockey
* PED 232: Scuba Level I
* PED 245: Activities for Children
* PED 300: Lifeguard Training
** PED 301: Water Safety Instructors
PED 332: Scuba Level II

Activity Program for Majors
Courses in the following list usually are quarter courses offered seasonally and carry one-half credit except those marked with an asterisk (*). Asterisked courses carry one credit.

PED 150: Introduction to Archery (1)
PED 152: Introduction to Bowling (2)
PED 154: Introduction to Golf
PED 158: Introduction to Nordic Skiing
PED 159: Introduction to Squash
PED 162: Introduction to Wrestling
PED 163: Introduction to Racquetball
PED 164: Introduction to Skating
PED 167: Introduction to Field Hockey
PED 168: Introduction to Lacrosse
PED 170: Introduction to Squash
PED 173: Introduction to Volleyball
PED 174: Introduction to Ice Hockey
* PED 181: Adventure Activities
* PED 182: Health-Related Physical Fitness
* PED 187: Track and Field
* PED 189: Aquatics
PED 191: Aerobic Dance
PED 201: P.E. Activity 285
PED 281: Project Adventure II
PED 283: Racquet Activities
PED 284: Self Defense and Martial Arts
PED 285: Gymnastics Activities
PED 288: Rhythms and Dance
PED 293: Diving
* PED 295: Lifeguard Training
* PED 296: Scuba Level I
** PED 302: Sports and Games for Individuals with Disabilities
** PED 303: Fitness for Individuals with Disabilities
** PED 304: Perceptual-Motor Activities for Individuals with Disabilities
** PED 305: Dance for Individuals with Disabilities
** PED 306: Adapted Aquatics
** PED 307: Outdoor Education for Individuals with Disabilities
PED 310: Scuba Level III
PED 311: Water Safety Instructors
PED 312: Scuba Level IV

Example of the B.S.Ed. in Physical Education over four years

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F. Free Electives: 0-9 credit hours
A minimum of 36 hours of PED/EXS prefixes are required for graduation.
Note: Specific information regarding requirements (state examinations, identification and reporting of child abuse and maltreatment, alcohol and drug abuse education, school antiviolence education and foreign language requirements) for New York State teaching certification can be found on pages 45-46 of this catalog.

** To be accepted into the B.S.Ed. program, students must process an application portfolio and maintain a 2.5 grade point average.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128

**This course is two credits.

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
**Physical Education Courses**

**THEORY COURSES**

**PED 129, 229, 329, 429, 529: Special Topics in Physical Education**
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

**PED 201: Motor Development**
(A) Learn and apply basic motor development principles as observed in young children and adolescents. Introduce the terminology, principles and concepts common to motor development and introduce the concept of developmentally appropriate practice as applied to young children in physical education. Prerequisite 2.5 cumulative grade point average. (3 cr. hr.)

**PED 230: Foundations of Coaching: Principles and Theories**
(B) The purpose of this course is to provide the prospective athletic coach with the basic underlying philosophies, theories and techniques for planning, organizing and managing athletic programs. In addition, knowledge of teaching skills and techniques which influence coaching effectiveness and improve performance will be emphasized. (3 cr. hr.)

**PED 308: Outdoor Adventure Education for Teachers**
(M) A theory based pedagogy course designed to provide an in-depth outdoor adventure education experience for undergraduate physical education majors seeking teaching certification. A required on-campus meeting is followed by a resident outdoor experience at Cortland’s Outdoor Education Center at Raquette Lake. (3 cr. hr.)

**PED 315: Officiating**
(O) Rules, mechanics, procedures, practice in officiating required. Prerequisite: Level one activity course or proficiency in specific activity. (2 cr. hr.)

**PED 321: Movement Education**
(A) Opportunity to assist with managing and/or teaching physical education to young children in physical education. Prerequisite: 2.5 cumulative grade point average. (3 cr. hr.)

**PED 323: Adapted Physical Education and Sport**
(A) Seeks to provide students with the theoretical and practical knowledge to plan and implement appropriate physical education programs for students with disabilities in integrated settings. Emphasizes the adaptation of physical education to needs of children with physical, intellectual, emotional, or sensory disabilities. Strategies for program planning and implementation include writing IEPs, activity/equipment adaptation and techniques of teaching. Prerequisite: EDU 300 or EDU 255 and 256. (3 cr. hr.)

**Activity Program Clinics**
Primarily for teachers requiring knowledge, practical application of recent, advanced teaching techniques, analysis of individual and group activity. See Course Schedule for when clinics are offered. (2 cr. hr.)

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**Course codes:** A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
PED 434: Statistics and Assessment in Physical Education
(A) Course will present statistical concepts, assessment techniques and other evaluation applications to prepare teachers, researchers and physical activity specialists to evaluate student performance in physical education instructional programs and other physical activity programs. Prerequisite: EDU 255, which may be taken concurrently. (3 cr. hr.)

PED 444: Lab Assistant
(A) Student may assist with the lab portion of one of several physical education classes. Responsibilities may include attending and assisting with a lab section, holding office hours, assisting with collecting research data and/or completing other tasks as assigned by the instructor. Students will enhance their knowledge and understanding of concepts covered in the associated theory course, learn additional lab techniques as well as gain valuable leadership experience. Prerequisite: Consent of instructor. Also listed as EXS 444. (1 cr. hr.)

PED 446: Inclusion of Individuals with Disabilities in Physical Education
(B) Overview of adapted physical education as an evolving specialization and service delivery system. Embedded in this course is a presentation of definitions, scope of services, assessment, behavior management, effective teaching techniques, program planning that may affect the discipline. Prerequisite: PED 336 or 356. (3 cr. hr.)

PED 447: Adapted Physical Activity and Individual Differences
(B) Specific types of disabilities that are commonly encountered in public school settings are described in detail. Each condition is defined, characteristics are given, means of testing are suggested, and specific programming and teaching techniques are detailed. Prerequisite: PED 336 or 356. (3 cr. hr.)

PED 460: Physical Education Curriculum
(O) Principles, procedures governing development, conduct, evaluation of physical education program in elementary, secondary schools. Interpretation, articulation of state curricula; adaptations to meet local and pupil needs. Prerequisites: EDU 385, student teaching. (3 cr. hr.)

PED 499: Special Study in Physical Education
(A) Independent study/research on selected topics. Topics may include in-depth study of a particular subject area. Student will work with faculty member (project director) whose own special interests and expertise coincide most closely with chosen topic. Students must follow suggested guidelines available in department chair's office. Prerequisite: Consent of department chair and instructor. Also listed as EXS 499. (1-3 cr. hr.)

PED 500: Project Adventure Workshop
(O) Project Adventure Workshop designed for individuals interested in developing and implementing innovative program in physical education or recreation. Participants experience such Project Adventure activities as: games, initiatives, low and high ropes course activities. (2 cr. hr.)

PED 530: Introduction to Adapted Physical Education
(F) Designed to aid educators in developing a knowledge base in many issues related to individuals with disabilities, with an emphasis on early intervention and a wellness approach to adapted physical education. Additional topics to be addressed include: laws and collaborating with an interdisciplinary team and families of individuals with disabilities. An overview of the more common disabilities is presented, as are the resource skills to acquire information on rare disabilities. Prerequisite: PED 336 or 356 or permission of instructor. (3 cr. hr.)

PED 531: Inclusive Outdoor Education
(B) This course is designed to address issues, models and strategies pertaining to the development of inclusive outdoor education programs that address all ability levels including those with physical and developmental disabilities. Not open to students who have taken REC 531. Also listed as REC 531. (3 cr. hr.)

Related Education Courses

EDU 255: Basics of Effective Instruction in Physical Education
(A) This is an introductory course in physical education teaching methodology. The main purpose is for the student to study, practice and acquire basic teaching skills applicable to K-12 physical education instruction. The course prepares the student for required NYS field experiences and also introduces the learner to NYS standards-based instruction, curriculum and assessment. Prerequisites: PED 201 and cumulative 2.5 grade point average. (3 cr. hr.)

EDU 256: Seminar for Field Experience
(A) This course will prepare students for the 10-day post-semester field experience. S, U, grades assigned. Prerequisites: PED 201 and cumulative 2.5 grade point average. Corequisite: EDU 255. (1 cr. hr.)

EDU 355: The Physical Education Curriculum: Planning and Practice
(A) To aid students in gaining understanding, knowledge and experience in the philosophy, principles, teaching strategies and evaluative procedures with K-12 infusion. Prerequisites: EDU 255, 256, successful completion of EDU 256 field experience/presentation to faculty and cumulative grade point average of 2.5. (3 cr. hr.)

EDU 455: Student Teaching Seminar in Physical Education
(A) Current debates relevant to national, district and specific school issues will form the basis of each meeting. Information about student teaching, professional portfolio preparation and career planning will be provided. Prerequisites: EDU 255, 256, 355, PED 356, cumulative grade point average of 2.5, portfolio acceptance; concurrent enrollment in EDU 456. (1 cr. hr.)

EDU 456: Student Teaching in Physical Education
(A) Full semester of supervised teaching in grades K-12. Prerequisites: EDU 255, 256, 355, PED 356, cumulative grade point average of 2.5, portfolio acceptance; concurrent enrollment in EDU 455. (14 cr. hr.)

EDU 470: Foundations and Organization of Modern Education
(A) Principles, practices in education, physical education viewed from historical and philosophical point of view. Administration, organization of schools at federal, state, local levels; teacher rights and responsibilities. Prerequisite: EDU 300 or 255 and 256. (3 cr. hr.)
School of Arts and Sciences

Faculty
Richard M. Wheeler (Chair), Ram P. Chaturvedi, Yolanda J. Kime, Joseph S. Onello

Programs Offered
Bachelor of Arts in Physics
Bachelor of Science in Physics
Bachelor of Science in Adolescence Education: Physics (7-12)
Bachelor of Science in Adolescence Education: Physics and Mathematics (7-12)

Majors Offered
Physics
Physics leading to the 3+2 Engineering Program
Adolescence Education: Physics (7-12)
Adolescence Education: Physics and Mathematics (7-12)

Concentrations Offered
Environmental Science
Geophysics

Minor Offered
Physics

Description
Physics programs at SUNY Cortland provide a versatile background in the principles of physics, applied mathematics, computer skills and electronic equipment. This background is useful in many areas of technology, engineering, business, industry, government and the teaching of physics at all levels. The laws of physics are central to all branches of science, and students with physics training may readily enter such related fields as astronomy, biophysics, chemical physics, engineering, geophysics, medicine, meteorology, molecular biology and radiology.

Special Features
- Physics and Engineering Club
- Undergraduate teaching experiences
- Internships
- Physics Honor Society - Sigma Pi Sigma

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to the following majors.
2. Liberal Arts Requirements: B.A. - 90 credit hours; B.S. - 75 credit hours
3. Physics majors may not take additional physics course work unless they earn a 2.0 grade point average in PHY 201 and PHY 202.

Major in Physics [PHY]
The concentration in physics is the traditional physics major found at institutions worldwide. Study includes a wide range of courses in physics and mathematics plus chemistry. This degree is necessary for those wishing to go on to graduate school and is also useful for those wishing to do technical work in a variety of disciplines.

Career Potential
- Graduate study in physics
- Industrial or governmental work
- Technical support services
- Scientific advisor
- Research

A. Required Courses in Physics: 39 credit hours
   PHY 201, 202, 203: Principles of Physics I, II and III
   PHY 325: Programming
   PHY 357: Intermediate Physics Laboratory
   PHY 410: Modern Physics
   PHY 420: Classical Mechanics
   PHY 440: Electronics
   PHY 450: Electricity and Magnetism
   Three Physics electives taken at the 400 level or above

B. Required Related Courses: 26 credit hours
   CHE 221-222: General Chemistry I and II
   MAT 125, 126 and 227: Calculus I, II and III
   MAT 425: Methods of Applied Mathematics
   MAT 430: Differential Equations
   MAT 272: Linear Algebra or
   MAT 446: Probability and Statistics

Total Credit Hours Required for Graduation: 124

Major in Physics with a concentration in Environmental Science [PHY/ENVS]
This concentration provides depth and a diversity of study in the sciences for students with a special interest in the environment. Cortland’s resources for teaching and research in this area are extensive. Special facilities at Hoxie Gorge, the Outdoor Education Center and Brauer Field Station play a role in the program.

Career Potential
- Environmental research
- Graduate study in environmental science
- Environmental science policy analyst
- Environmental protection specialist

A. Required Courses in Physics: 30 credit hours
   PHY 201, 202, 203: Principles of Physics I, II and III
   PHY 325: Programming
   PHY 357: Intermediate Physics Laboratory
   PHY 410: Modern Physics
   PHY 420: Classical Mechanics
   PHY 440: Electronics
   PHY 450: Electricity and Magnetism
Major in Physics leading to the 3+2 Engineering Program [PEN]

This concentration is designed for those students wishing to go on in an engineering discipline. The student spends three years at Cortland taking all requirements for the degree in physics, then transfers to an engineering school for two years to complete the requirements for a degree in engineering. Students have transferred to such schools as SUNY College of Ceramics at Alfred,* Binghamton University, SUNY Buffalo, Clarkson University and SUNY Stony Brook.**

CAREER POTENTIAL
- Graduate work in engineering
- Professional engineer
- Technical specialist
- Construction industry

A. Required Courses in Physics: 36 credit hours
- PHY 201, 202, 203: Principles of Physics I, II and III
- PHY 325: Programming
- PHY 410: Modern Physics
- PHY 420: Classical Mechanics
- PHY 440: Electronics*
- PHY 450: Electricity and Magnetism
- Two Physics electives taken at the 400 level or above*

B. Required Related Courses: 23 credit hours
- CHE 221-222: General Chemistry I and II
- MAT 125, 126, 227: Calculus I, II and III
- MAT 430: Differential Equations

C. Transfer courses approved by Cortland: Typically 30 credit hours
- For those interested in the program at SUNY College of Ceramics at Alfred, the two physics electives should be PHY 431 and 432: Physical Chemistry I and II.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Physics with a concentration in Geophysics [PHY/GEOP]

The study of geophysics includes a knowledge of the physical laws that govern the earth and a range of geology topics such as the earth's interior, crustal movements, soil composition, mineral and fossil fuel resources. Crucial to these topics are the mathematical tools needed to describe them.

CAREER POTENTIAL
- Graduate work in geophysics
- Energy exploration
- Technical specialist
- Government

A. Required Courses in Physics and Geology: 42 credit hours
- PHY 201, 202, 203: Principles of Physics I, II and III
- PHY 325: Programming
- PHY 410: Modern Physics
- PHY 420: Classical Mechanics
- PHY 450: Electricity and Magnetism
- PHY 367: Geomorphology
- PHY 371: Meteorology
- PHY 396: Aqueous Geochemistry
- PHY 422: Applied Mechanics
- PHY 440: Electronics
- PHY 565: Solid State Physics
- PHY 595: Geophysical Methods

B. Required Related Courses: 23 credit hours
- CHE 221-222: General Chemistry I and II
- MAT 125, 126, 227: Calculus I, II and III
- MAT 425: Methods of Applied Mathematics
- MAT 430: Differential Equations

C. Required Elective Courses: 12 credit hours — six in physics and six in geology from the following:
- PHY 422: Applied Mechanics
- PHY 440: Electronics
- PHY 565: Solid State Physics
- PHY 595: Geophysical Methods

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Adolescence Education: Physics (7-12) [APH]

This major leads to New York State certification to teach physics in grades 7-12.

CAREER POTENTIAL
- High school teacher
- Graduated study in higher education
- Public school administration
- Technical specialist

ACCEPTANCE TO THE PROGRAM

Students will be accepted to the program after 45 credit hours have been completed. At that time students must have an overall grade point average of 2.5 and a grade point average of 2.5 in physics, in related areas, and in the professional core courses.

A. Required Courses in Physics: 30 credit hours
- PHY 150: Astronomy
- PHY 201, 202, 203: Principles of Physics I, II and III
- PHY 325: Programming
- PHY 357: Intermediate Physics Laboratory
- PHY 410: Modern Physics
- PHY 420: Classical Mechanics
- PHY 450: Electricity and Magnetism
**B. Required Courses in Related Areas of Science and Mathematics:**
27 credit hours
MAT 125, 126, 227: Calculus I, II and III
MAT 430: Differential Equations
CHE 221-222: General Chemistry I and II
BIO 201-202: Biological Sciences I and II or
GLY 261-262: Physical Geology and Historical Geology

**C. Required Professional Courses:** 38 credit hours
PSY 101: General Psychology I
PSY 232: Adolescent Psychology
AED 391: Introduction to Adolescence Education
AED 442: Methods I: Teaching the Sciences in the Middle and Secondary Schools
AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
AED 444: Laboratory Practicum
AED 445: Student Teaching: Adolescence Education — Science
HLH 199: Critical School Health Issues
SHH 300: Normal Language Development or
PSY 350: Psychology of Language
LIT 449: Literacy in the Middle and Secondary School

**D. Additional Requirements for the B.S.:** 29-34 credit hours
Composition and General Education Courses: 27 credit hours
Foreign Language Courses: 0-7 credit hours
Free Elective Courses: 0-2 credit hours

**E. Admission to the Major**
Completion of 45 credit hours with at least a 2.5 grade point average overall and at least a 2.5 grade point average in each of areas A, B and C above

**F. Eligibility for Student Teaching**
To be eligible for AED 445: Student Teaching: Adolescence Education - Science, a minimum overall grade point average of 2.5 is required. Additionally, a minimum grade point average of 2.5 is required in each of areas A, B and C above. A student must complete all program requirements before student teaching can begin with the exception of those courses allowed by the Physics Department and the adolescence education-science coordinator. Additionally, each teacher candidate will be required to submit a professional portfolio.

**G. Other Requirements**
Specific information regarding requirements (for example, state examinations and reporting of child abuse and maltreatment) for New York State teaching certification can be found on pages 45-46 of this catalog.

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION:** 124-129

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**Major in Adolescence Education: Physics and Mathematics (7-12) [APM]**

This major leads to New York State certification to teach both physics and mathematics in grades 7-12.

**Career Potential**
- High school teacher
- Public school administration
- Technical specialist
- Graduate study in higher education
- 

**Acceptance to the Program**
Students will be accepted to the program after 45 credit hours have been completed. At that time students must have an overall grade point average of 2.5 and a grade point average of 2.5 in physics, related areas, and in the professional core courses.

**A. Required Courses in Physics:** 30 credit hours
PHY 150: Astronomy
PHY 201, 202, 203: Principles of Physics I, II and III
PHY 325: Programming
PHY 357: Intermediate Physics Laboratory
PHY 410: Modern Physics
PHY 420: Classical Mechanics
PHY 450: Electricity and Magnetism

**B. Required Courses in Mathematics:** 30 credit hours
MAT 125, 126, 227: Calculus I, II and III
MAT 224: Discrete Mathematics
MAT 272: Linear Algebra
MAT 370: Algebraic Structures I
MAT 375: Geometry I
MAT 430: Differential Equations
MAT 446: Introduction to Probability and Statistics
MAT 480: History of Mathematics

**C. Required Courses in Related Areas of Science:** Eight credit hours
CHE 221-222: General Chemistry I and II

**D. Required Professional Courses:** 38 credit hours
AED 391: Introduction to Adolescence Education
AED 392: Methods I: Teaching Adolescence Mathematics
AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
AED 444: Laboratory Practicum
AED 445: Student Teaching: Adolescence Education — Science
HLH 199: Critical School Health Issues
LIT 449: Literacy in the Middle and Secondary School
PSY 101: General Psychology
PSY 232: Adolescent Psychology
PSY 350: Psychology of Language or
SHH 300: Normal Language Development

E. Additionally, each teacher candidate will be required to submit a professional portfolio.

*To be eligible for AED 445: Student Teaching, a minimum grade point average of 2.5 is required overall and in physics, related and professional areas. A student must complete all program requirements before student teaching can begin with the exception of those courses allowed by the Physics Department, the Mathematics Department and the secondary science coordinator.

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION:**
B.A.: 133-146; B.S.: 133-140
Minor in Physics [PHY]
A. Required courses:
   PHY 201, 202, 203: Principles of Physics I, II and III
   PHY 410: Modern Physics
   PHY 420: Classical Mechanics
   PHY 450: Electricity and Magnetism

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 21

Example of the bachelor's degree in Physics over four years

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<th>First Year</th>
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Physics

COURSE DESCRIPTIONS

PHY 100: Conceptual Foundations of Physics
(O) A non-laboratory examination of the physical and philosophical assumptions which undergird physics, their historical evolution, limitations, and relevance to current issues. (3 cr. hr.)

PHY 105: Elementary Mechanics and Heat
(F) An algebra-based introduction to mechanics and heat. The methods of science and applications to diverse fields are stressed. Three lectures and one two-hour laboratory. (4 cr. hr.)

PHY 106: Elementary Electricity, Light and Sound
(S) An algebra-based introduction to electricity, light and sound. The methods of science and applications to diverse fields are stressed. Prerequisite: PHY 105. Three lectures and one two-hour laboratory. (4 cr. hr.)

PHY 129, 229, 329, 429, 529: Special Topics In Physics
A selected topics course which may be taken more than once as the subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

PHY 150: Astronomy
(C) A survey of modern astronomy. Topics include the moon and planets, the sun and other stars, stellar structure and evolution, neutron stars, pulsars, black holes, galaxies, quasars and cosmology. Some elementary algebra is used. Several evening observing sessions using telescopes may be scheduled depending on seeing conditions. (3 cr. hr.)

PHY 201: Principles of Physics I
(F) Fundamental principles of motion and dynamics using methods of calculus. Topics include motion in one, two, and three dimensions, mechanical equilibrium, momentum, energy, rotational motion and dynamics, periodic motion, gravitation, and conservation laws. Three lectures, one two-hour laboratory, and one recitation. Prerequisite: MAT 121 or 125, which may be taken concurrently. (4 cr. hr.)

PHY 202: Principles of Physics II
(S) Fundamental principles of electricity and magnetism using methods of calculus. Topics include static electricity, currents and simple circuits, electric and magnetic fields, energy, and magnetic materials. Three lectures, one two-hour laboratory, and one recitation. Prerequisites: PHY 201 and MAT 122 or 126. MAT 122 or 126 may be taken concurrently. (4 cr. hr.)

PHY 203: Principles of Physics III
(F) Fundamental principles of thermodynamics, optics, and sound using methods of calculus. Topics include heat, work, and energy of thermodynamics systems, wave motion, geometrical and physical optics, and sound. Three lectures. Prerequisite: PHY 201. (3 cr. hr.)

PHY 325: Programming
(F) A first course in computer programming. Topics include algorithm development, I/O, logical decisions, arrays, subroutines, program coding and syntax, debugging, and documentation. Program examples are taken from many disciplines. Three lectures including terminal time. (3 cr. hr.)
PHY 357: Intermediate Physics Laboratory
(S) A laboratory experience stressing precise experimental measurement using a variety of instruments and covering various branches of physics. Two three-hour laboratories. Prerequisite: Consent of department. (3 cr. hr.) ■

PHY 358: Digital Logic Systems
(O) The design of digital logic circuits using small- and medium-scale logic elements. Topics include integrated circuitry, Boolean algebra, Karnaugh mapping, flip-flops, shift registers, and memory elements. Two three-hour laboratories. Prerequisite: Consent of department. Also listed as CAP 358. (3 cr. hr.) ■

PHY 410: Modern Physics
(F) A study of modern theories of the atom and their experimental bases. Topics include the special theory of relativity, origins of quantum theory, the nuclear atom of Rutherford and Bohr, the electron as a fundamental particle, quantum aspects of radiation, the wave-particle duality, atomic spectra, and x-rays. Prerequisite: PHY 202. (3 cr. hr.)

PHY 420: Classical Mechanics
(F) The study of the motion of physical bodies at the macroscopic level. Topics include the dynamics of a particle, the harmonic oscillator, motion in three dimensions, central forces, systems of particles, and rigid bodies. Prerequisites: PHY 202, MAT 430. (3 cr. hr.) ■

PHY 422: Applied Mechanics
(S-C) The study of statics and dynamics of rigid bodies. Topics include simple equilibrium, structural analysis, inertia tensors, centroids, energy and momentum, and strength of materials. Prerequisites: PHY 201 and MAT 227. M AT 227 may be taken concurrently. (3 cr. hr.) ■

PHY 425: Methods of Applied Mathematics
(S-C) Mathematics needed for the study of the sciences. Topics include vector analysis, matrix operations, differential equations, functions of a complex variable, Fourier series, and integral transforms. Prerequisites: MAT 227, PHY 202. Also listed as MAT 445. (3 cr. hr.) ■

PHY 431: Physical Chemistry I
(F) Kinetic theory of gases, thermodynamics, introductory quantum chemistry, chemical bonding. Molecular spectroscopy. Prerequisites: CHE 222, MAT 126, and PHY 202. Also listed as CHE 431. (3 cr. hr.) ■

PHY 432: Physical Chemistry II
(S) Chemical kinetics, solid and liquid states, phase equilibria, properties of solutions and surface chemistry. Prerequisite: PHY 431. Also listed as CHE 432. (3 cr. hr.) ■

PHY 440: Electronics
(S-C) A survey of D.C. and A.C. circuits, semiconductor devices, and electronic test equipment. Two lectures, one three-hour laboratory. Prerequisite: PHY 202. (3 cr. hr.) ■

PHY 450: Electricity and Magnetism
(S) A study of electromagnetic theory leading to Maxwell’s equations. Topics include electrostatics and Gauss’ Law, magnetostatics, and Ampere’s Law, fields in material media, time-dependent phenomena and Faraday’s Law, and Maxwell’s equations. Prerequisites: PHY 202, MAT 227. (4 cr. hr.) ■

PHY 460: Optics
(O) A study of geometrical and physical optics. Topics include the propagation and vectorial nature of light, reflection and diffraction, lenses and aberration, coherence and interference phenomena, polarization, dispersion, the optics of solids, and lasers. Prerequisite: PHY 450. (3 cr. hr.) ■

PHY 495: Independent Study in Physics
(A) Directed study or independent research in a special topic. Prerequisites: PHY 202 or consent of department. (1-3 cr. hr.)

PHY 530: Statistical and Thermal Physics
(F) A study of the thermal properties of matter from macroscopic and molecular points of view. Topics include heat, temperature, entropy, the laws of thermodynamics, kinetic theory, ensembles and distribution functions, and classical and quantum statistics. Prerequisites: M AT 227, PHY 420. PHY 420 may be taken concurrently. (3 cr. hr.) ■

PHY 557: Advanced Physics Laboratory
(A) The development of additional techniques and skills in a special area of physics. May be repeated to perform different experiments. Prerequisites: PHY 202 or consent of department. (3 cr. hr.)

PHY 565: Solid State Physics
(S-C) The properties of solids. Topics include crystal structure, electronic and structural properties, the free-electron model, band theory, metals, semiconductors, superconductivity, and magnetism. Prerequisites: PHY 410, MAT 430. MAT 430 may be taken concurrently. (3 cr. hr.) ■

PHY 570: Nuclear Physics
(O) A study of elementary nuclear theory. Topics include the properties of nuclei, radioactivity, and transmutation. Prerequisite: PHY 410 and 450. (3 cr. hr.) ■

PHY 575: Introduction to Quantum Mechanics
(S-C) The study of the physical laws underlying microscopic systems. Topics include the wavelike properties of matter, the motion of wave packets, Schrodinger’s equation, the solution of Schrodinger’s equation in one and three dimensions, operators, expectation values, the Heisenberg uncertainty principle, the quantum harmonic oscillator, the hydrogen atom, and approximation methods. Prerequisite: MAT 430 and PHY 420. (3 cr. hr.) ■

PHY 595: Geophysical Methods
(O) Principles and instrumentation of geophysical methods used to collect and interpret data from the Earth’s interior. Two lectures, one three-hour laboratory. Prerequisites: GLY 261 and either PHY 105 and 106 or 201 and 202. Also listed as GLY 595. (3 cr. hr.)

Related Education Courses

AED 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation, and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)
AED 442: Methods I: Teaching the Sciences in the Middle and Secondary Schools
(F) This course begins with an examination of the history and foundations of education, with an emphasis on the history of science education. It then examines disciplinary models and strategies for classroom management. Students will develop tools for measurement and evaluation of performance and achievement for students with diverse abilities and interests. Students will participate in short and long-range lesson planning and curriculum development. Federal and state laws, policies and procedures for dealing with students with disabilities will be examined. Strategies for collaborating with administrators, faculty/staff, parents/guardians, and community members will be discussed. Includes 25 hours of field experience in middle and secondary schools. Prerequisites: PSY 232 and AED 391. (3 cr. hr.)

AED 443: Methods II: Teaching the Sciences in the Middle and Secondary Schools
(F) Introduction to aspects of teaching laboratory-based science to a diverse population of students through the development of a course syllabus, a comprehensive plan for laboratory safety, and lesson plans aligned with state and national learning standards and state science core curriculum guides. Twenty-five hours of field experience in middle and secondary schools. Prerequisite: AED 442. Corequisite: AED 444. (3 cr. hr.)

AED 444: Laboratory Practicum
(F) Opportunity to work with an experienced teacher in the planning, preparation, and implementation of laboratory exercises in an introductory, college-level lab course through one-on-one and small group activities. Fulfills 25 hours of field experience requirement. Corequisite: AED 443. (1 cr. hr.)

AED 445: Student Teaching: Adolescence Education — Science
(A) Full-time supervised student teaching in two public school placements: one, eight-week placement at the seventh or eighth grade level and one, eight-week placement at the ninth, tenth, eleventh, or twelfth grade level. A discipline-specific student teaching seminar is held on campus once during the semester. Prerequisites: PSY 232; AED 443 and 444. See major department for eligibility criteria. S, U grades are assigned. (14 cr. hr.)

LIT 449: Literacy in the Middle and Secondary School
(F) Methods, materials and assessment for fostering literacy at the middle and secondary levels. (3 cr. hr.)

Political Science

DEPARTMENT

SCHOOL
Arts and Sciences

FACULTY
Jerome O’Callaghan (Chair), Seth Asumah, Judith Best, Julio Fernandez, Brian Loy, Mary McGuire, Tom Pasquardlo, David Reed, Robert Spitzer, Henry Steck, Doris Wolfgramm

PROGRAMS OFFERED
Bachelor of Arts in Political Science
Bachelor of Arts in Adolescence Education: Social Studies and Political Science (7-12)

MAJORS OFFERED
Political Science
Adolescence Education: Social Studies and Political Science (7-12)

CONCENTRATIONS OFFERED
Law and Justice, Environmental Policy, Comparative and International Politics, Public Administration and Public Policy

MINORS OFFERED
Political Science, Public Administration and Public Policy

DESCRIPTION
The Political Science Department offers a wide range of programs for students interested in understanding the political world, pursuing careers, and seeking graduate education in politics, law, policy or public administration. A political science background leads to careers in law, business, government, politics, teaching and journalism. Majors participate in special and individualized programs, including a semester in Albany or Washington, D.C. Prelaw and public administration internships are offered in cooperation with nonprofit organizations, and various state and local government offices. Our majors also pursue careers in elementary or adolescence education.

SPECIAL FEATURES
• Prelaw Advising - advice on LSAT, law school selection, academic preparation and alumni speakers from the legal profession
• Internships – local and distant, e.g., Washington, Albany, London, Belize
• International opportunities – visit Europe with the Model European Union, or study politics/government/policy abroad, e.g., the British Parliament, the Irish Parliament, Belize
• Advance to an M.P.A. at Binghamton University — by special arrangement with BU’s Public Administration Department
• Campus Practicum Experience, e.g., participation in the Judicial Review Board, or Student Government Association
• Adolescence Education: Social Studies — a degree in political science can be the beginning of a career in high school teaching
• Retreat at the Outdoor Education Center at Raquette Lake in the Adirondacks
• Distinguished, award-winning faculty

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to the following majors.
2. Liberal Arts Requirements: 90 credit hours

Old Main, Room 207
(607) 753-4105
E-mail: poldept@cortland.edu
www.cortland.edu/polsci/home.html

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Major in Political Science [POL]

This major examines the broad range of concerns surrounding people and the power of government; it provides a strong grounding in American government, comparative/international politics and political theory.

CAREER POTENTIAL

- State or federal legislative aide
- Campaign manager
- Journalist/reporter

A. Required Courses: Nine credit hours
   - POL 100: Introduction to American Government and Politics (GE 1)
   - POL 101: Introduction to World Politics (GE 3)
   - POL 270: Introduction to Political Theory (GE 5)

B. Other: 27 credit hours
   - Three credit hours of comparative politics or international relations
   - Three credit hours of American government or political theory
   - 21 credit hours of political science courses
     - At least 15 credit hours of political science credit must be numbered 300 or above.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Political Science with a concentration in Law and Justice [POL/LAJU]

This concentration examines the place of law and justice in government, with a focus on the American system. An ideal beginning for a career in law.

CAREER POTENTIAL

- Attorney
- Law enforcement
- Judge
- Representative (federal, state or local)

A. Required Courses (political science base): Nine credit hours
   - POL 100: Introduction to American Government and Politics (GE 1)
   - POL 101: Introduction to World Politics (GE 3)
   - POL 112: Introduction to Political Research
   - POL 270: Introduction to Political Theory (GE 5)

B. Core in Law and Justice: Nine credit hours
   - POL 202: Introduction to Law and the Judicial Process
   - POL 304: Constitutional Law
   - POL 404: Civil Liberties
   - POL 450: International Law
   - POL 470: Justice and Society: Theory and Practice

C. Elective Courses (POL): 12 credit hours
   - POL 315: Evaluation Research
   - POL 341: Current Issues in Public Policy
   - POL 342: Environmental Policy and Biodiversity
   - POL 441: Comparative Public Policy
   - POL 450: International Law
   - POL 450: Internship +

Thirty-three POL credit hours required: minimum of 15 credit hours at 300 level or above

+ Students may fulfill this option up to 6 credit hours with POL 483 by advisement only. Students are encouraged to explore internships at the state (POL 482, New York State Legislative Internship) national (Cortland's Washington Internship — POL 480), or international (e.g., Belize fieldwork internship) level. Students may also wish to design an internship with an appropriate government agency or environmental not-for-profit group elsewhere.

C. Courses in Related Areas: 15 credit hours

1. Required Courses: Six credit hours
   - EST 100: Introduction to Environmental Studies
   - ENV 486: Seminar in Environmental Science

2. Environmental Electives: Nine hours total with a minimum of three hours in each of the following categories:
   - a) Environmental Sciences
      - BIO 102: Ecology and Human Environment
      - GLY 160: Geology and Human Environment
      - CHE 125: Chemistry and the Environment
C. Courses in Related Areas: Six credit hours *
- AAS 395: International Race Relations
- ANT 201: World Cultures
- ANT 310: Peoples of South and Southeast Asia
- ANT 312: Peoples of the Middle East
- ANT 314: Peoples of Latin America
- ECO 304: Comparative Economic Systems
- ECO 311: Economic Development
- ECO 312: Economic Development of Latin America
- ECO 313: Economic Development of Asia
- GRY 270: Geopolitics
- HIS 321: Africa, Human Origins to 1800
- HIS 334: Russia since 1894
- HIS 348: Europe since 1914
- HIS 384: Modern China
- HIS 430: The Vietnam War
- HIS 435: Sino-American Relations
- SOC 366: Sociology of International Conflict

* Other courses may be added with permission of advisor.

D. Foreign Language: 0-13 credit hours
Students must complete the regular College language requirement of 0-13 credit hours of college-level language study or equivalent. In addition, students must demonstrate proficiency in one of the following ways:
1. Successfully completing 12 credit hours of course work in the student's initial foreign language at the 300-level or above.
2. Successfully completing one semester of study abroad in the student's target language (at least 12 credit hours). Courses taught in English during study abroad will not be accepted to fulfill this requirement.
3. Satisfy the College language requirement (0-13 credit hours or its equivalent) in a second foreign language. (Students whose native language is not English may be exempt from the language proficiency requirement.)
4. Earning a rating of Intermediate High on the American Council of Teachers of Foreign Language/Educational Testing Service (ACTFL/ETS) academic scale, as determined by an oral examination by a qualified tester. Students should contact the International Communications and Culture Department for additional details.

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Political Science with a concentration in Public Administration and Public Policy [POL/PADM]

This concentration focuses on public agencies (their character, organization, role) and public policies (their development, implementation and evaluation). An ideal start for anyone interested in graduate school or civil service work.

Career Potential

- City manager
- Government official
- Administrator for nonprofit organization
- Pollster

A. Required Courses: 18 credit hours
   POL 100: Introduction to American Government and Politics
   POL 112: Introduction to Political Research
   POL 240: Introduction to Public Administration and Public Policy
   POL 270: Introduction to Political Theory
   POL 312: Methods of Political Analysis
   POL 341: Current Issues in Public Policy

B. Internships: 3 credit hours from
   POL 480: Washington Semester
   POL 482: New York State Legislative Internship
   POL 483: Public Administration and Policy Internship
   POL 485: Field Study in Political Science

C. Elective Courses: 15 credit hours from
   POL 242: Environmental Policy
   POL 304: Constitutional Law
   POL 308: Environmental Law
   POL 315: Evaluation Research
   POL 320: The Legislative Process
   POL 326: State and Local Government
   POL 329: Special Topics in Political Science (by advisement)
   POL 372: American Political Thought
   POL 405: Discrimination Law
   POL 420: The American Presidency
   POL 441: Comparative Public Policy
   POL 480: Washington Semester
   POL 482: New York State Legislative Internship
   POL 483: Public Administration and Policy Internship
   POL 485: Field Study in Political Science

* For additional three hours beyond requirement, by advisement only with consent of the department.

Total Credit Hours Required for Graduation: 124

Dual major in Adolescence Education: Social Studies and Political Science (7-12) [SST and POL]

This program is currently in the process of being reviewed by SUNY and the State Education Department.

This program allows students who major in political science to qualify for certification to teach adolescence education in social studies (grades 7-12). It combines a major in political science with 47-68 credit hours in additional course work and professional teacher preparation.

A. Requirements for the political science major: 36 credit hours
   See page 241.

B. Professional Preparation: 44-68 credit hours
   (Including additional social science courses)
   HIL 199: Critical School Health Issues
   PSY 101: General Psychology I
   PSY 232: Adolescent Psychology or
   PSY 332: Educational Psychology
   ECO 105: Political Economy and Social Thought
   GRY 425: Geography in the Classroom or
   GRY 482: Central America and the Caribbean or
   GRY 484: Geography of Europe or
   GRY 486: Monsoon Asia
   GRY 480: United States or
   GRY 481: Geography of New York State
   POL 100: Introduction to American Government and Politics
   HIS 100: The World to 1500 and
   HIS 101: The World since 1500 or
   HIS 110: Western Civilization to 1715 and
   HIS 111: Western Civilization since 1715
   HIS 200: The United States to 1877 and
   HIS 201: The United States from 1877 and
   Three hours at the 300 level or above
   AED 310: Grammar and the Writing Process or
   LIT 449: Literacy in the Middle and Secondary School or
   LIT 549: Literacy in the Middle and Secondary School
   SHH 300: Normal Language Development or
   PSY 350: Psychology of Language

C. Professional Sequence: Junior year, four credit hours
   AED 391: Introduction to Adolescence Education
   Fall semester only. A 25-hour field requirement is attached to this course.
   AED 300: Introduction to Secondary Social Studies
   Spring semester only. A 35-hour field requirement is attached to this course.

D. Professional Sequence: Senior year, 21 credit hours*
   AED 301: Pre-practice Teaching Seminar
   Fall semester only. A 40-hour field requirement is attached to this course.
   Student Teaching: Spring semester only. No other courses may be taken during the student teaching semester.
   AED 400: Student Teaching I
   AED 401: Student Teaching II
   AED 402: Student Teaching Seminar

* To be eligible for student teaching, a student must have declared adolescence education: social studies (7-12) as a major by the beginning of the second semester of the junior year and must have senior status at or near 90 credit hours with 24 credit hours in the academic social science major, which must be officially declared. A student must also have an overall grade point average of 2.5, a grade point average of 2.7 in the academic social science major, and a C or better in AED 300. No student who receives a grade below a C- in any introductory course in the academic social science major will be allowed to enter student teaching until the course has been retaken and a higher grade earned. Student teaching is a capstone experience; students who cannot graduate by December following student teaching may not register for the AED 400, 401, 402 sequence.

Total Credit Hours Required for Graduation: 126
Minor in Political Science [POL]
An opportunity to develop some fundamental knowledge in the areas of American government, comparative/international politics and political theory.

CAREER POTENTIAL
• Campaign manager
• Legislative aide (state or federal)
• Elected representative
• Journalist/reporter
• Government official
• Policy researcher

A. Required Courses: 18 credit hours
   POL 100: Introduction to American Government and Politics
   POL 101: Introduction to World Politics
   Twelve additional hours of POL courses to be decided upon with the advice of the student's advisor and with the consent of the department.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18

Minor in Political Science with an emphasis in Public Administration and Public Policy [POL/PADM]
An opportunity to develop fundamental skills in the analysis of public agencies and public policies. A key start for students interested in graduate school.

CAREER POTENTIAL
• Press secretary
• Government official
• Lobbyist
• Policy researcher

A. Required Courses: 15 credit hours
   POL 100: Introduction to American Government and Politics
   POL 112: Introduction to Political Research
   POL 240: Introduction to Public Administration and Policy
   POL 312: Methods of Political Analysis
   POL 341: Current Issues in Public Policy

B. Elective Courses: Six credit hours from
   POL 242: Environmental Policy
   POL 270: Introduction to Political Theory
   POL 304: Constitutional Law
   POL 308: Environmental Law
   POL 315: Evaluation Research
   POL 320: The Legislative Process
   POL 326: State and Local Government
   POL -29: Special Topics in Political Science (by advisement)
   POL 372: American Political Thought
   POL 405: Discrimination Law
   POL 420: The American Presidency
   POL 480: Washington Semester*
   POL 482: New York State Legislative Internship *
   POL 483: Public Administration and Policy Internship *
   POL 485: Field Study in Political Science *

   * For additional three hours beyond requirement, by advisement only

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 21

Example of the B.A. in Political Science over four years
This chart is simply a model and does not reflect the expectations for all political science programs.

First Year
Fall
CPN 100 or 102
POL 100 (GE 1)
POL 101 (GE 3)
COR 101
Foreign language 101
Quantitative Skills (e.g. POL 112)
Total credit hours: 16-17

Spring
CPN 101 or 103
Foreign language 102
POL elective/concentration
GE elective
GE elective
Total credit hours: 15

Second Year
Fall
Foreign language 201
POL elective/concentration
GE elective
GE elective
Total credit hours: 15

Spring
Foreign language 202
GE elective
GE elective
POL elective/concentration
Free elective
Total credit hours: 18

Third Year
Fall
POL 270
POL elective/concentration
Free elective/minor
Free elective
Free elective
Total credit hours: 15

Spring
POL elective/concentration (WI)
POL elective/concentration
Free elective/minor
Free elective
Free elective
Total credit hours: 15

Fourth Year
Fall
POL elective/concentration
POL elective/concentration
Free elective/minor
Free elective
Free elective
Total credit hours: 15

Spring
POL elective/concentration (WI)
POL elective/concentration
Free elective
Free elective
Free elective
Total credit hours: 15

See major and concentration listings above for specific requirements.
COURSE DESCRIPTIONS

POL 100: Introduction to American Government and Politics
(A) Basic structures and functions of the American political system, including the Constitution, Presidency, Congress, courts, bureaucracy, political parties, public opinion, elections, interest groups, media and public policy. Also examines who has power. (3 cr. hr.)

POL 101: Introduction to World Politics
(A) Study of political systems of world by comparing and contrasting them with the U.S. and other countries. Focus includes ideologies, developed and developing nations, and contemporary problems affecting interactions of these systems. (3 cr. hr.)

POL 102: Foundations of Democracy
(O) Theory and practice of democratic government from ancient Greece to the present. Topics include democratic institutions, rights and liberties, and the scope and limits of democratic governance in modern nation-states. (3 cr. hr.)

POL 110: Politics and Multiculturalism
(S) Introduce students to how and why general democratic theory, key political institutions, patterns of political interaction, and sociopolitical attitudes in the American polity and throughout the world generate or attempt to eliminate injustice, prejudice and discrimination. Problems of racism, sexism, classism, ageism, ableism, religio-ethnic conflicts and prospects for a "just" society will be examined through the lens of post-modernist political theory. Also listed as AAS 120. (3 cr. hr.)

POL 111: Politics and Film
(C) Introduces students to the connection between art and politics. Course examines overtly political films and will reveal how films which appear nonpolitical often have significant political messages. Course will use documentaries, feature films, propaganda films and explore cinematic approaches and political themes. (3 cr. hr.)

POL 112: Introduction to Political Research
(B) Introduction to basic methods of political research including literature reviews, generating and testing political hypotheses, and report writing. Material on time management, research skills and computer applications included. (3 cr. hr.)

POL 120: Student Government Practicum
(A) Participation credit. Participation in work of student government. Focus on process, issues and policy, and role of student government in a university community. May be taken up to four credit hours. Permission of instructor is required. (1-2 cr. hr.)

POL 121: Participation in Politics and Government
(O) Selected participation in activities related to governance and politics. Activities may be undertaken on or off campus. Permission of supervising faculty member and advisor are required. Open to all students, but majors should note restriction on number of credit hours that may be offered for the major. May be repeated. (1-3 cr. hr.)

POL 129, 229, 329, 429, 529: Special Topics in Political Science
Selected topics. May be taken more than once as subject changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

POL 160: Model European Union
(C) Participation in simulation of Model European Union Study. Focus on process, issues, development of the European Union. May be taken two times (four credit hours) toward the major and another two credit hours for elective credit. May also be taken for elective credit up to three times by majors and non-majors (six credit hours). Permission of instructor is required. (1-2 cr. hr.)

POL 162: Soccer: Politics, Law and Culture
(C) This course examines the sociopolitical and cultural developments of soccer. The connection between the world's most popular sport — soccer — and international politics will be emphasized. Through critical political theory, the role and impact of the nation state, the United States Soccer Federation (USSF), Federation Internationale de Football Association (FIFA), transnational corporations, race, gender and class will be discussed and analyzed from cross-cultural perspectives. Two field trips required for the course. Also listed as EXS 162. (3 cr. hr.)

POL 202: Introduction to Law and the Judicial Process
(F) Analysis, evaluation of main institutions, procedures affecting administration of justice under law. Course recommended for students who plan to enroll in upper division law classes (e.g. Constitutional Law, Civil Liberties.) (3 cr. hr.)

POL 240: Introduction to Public Administration and Public Policy
(A) Examines the formulation, administration and evaluation of public policy and programs. Includes survey of policy-making models and the politics of bureaucracy, principles of public finance and budgeting, personnel management, and organization theory. (3 cr. hr.)

POL 242: Environmental Policy
(B) An introduction to environmental policy in the United States. The course explores the relations between politics and the environment. Topics to be addressed include the origin and influence of grassroots public interest groups, the role of government in setting environmental agendas, and the effect of various actors on public policy. The course will include case studies of important issues such as global warming, overpopulation, ozone depletion, deforestation and water pollution. Prerequisite: POL 100 recommended. (3 cr. hr.)

POL 250: International Relations
(C) Basic factors underlying international relations, policy formulation, administration. Conduct of diplomacy, problems in world politics. (3 cr. hr.)

POL 260: Comparative Politics: Europe
(C) Introduction to constitutional structure, central political institutions, dynamics of political process of selected European nations with emphasis on contemporary period. (3 cr. hr.)

POL 262: Comparative Politics: Asia
(C) Comparative analysis of issues, problems of politics and institutions in Asian societies. Attention directed to political dynamics, processes in selected political systems with emphasis on contemporary period. (3 cr. hr.)

POL 264: Comparative Politics: Latin America
(C) Comparative analysis of issues, problems of politics and institutions in Latin America. Attention directed to political dynamics, processes in selected political systems with emphasis on contemporary period. (3 cr. hr.)
POL 270: Introduction to Political Theory
(B) Concepts of leading theorists from Plato to Nietzsche: development of political thought out of quarrel between the ancients and the moderns on nature of man and role of government. (3 cr. hr.) ■

POL 290: Introduction to African Politics And Society
(B) Insight and background to traditional, contemporary African society; orientation into aspects of African colonial administration, post-independence politics. Also listed as AAS 290. (3 cr. hr.) ■

POL 292: Race and Politics in America
(B) Analysis toward understanding factors, impact of race on American politics. Focus on American racial minorities, their role as pressure group, functional approach to problem of racism in this country. Also listed as AAS 292. (3 cr. hr.) ■

POL 302: Law and Politics
(C) Survey of law in the U.S., looking to different types of law, their sources and their influence on social practices. Examines a critique of law in practice, topics such as power of wealth under law, feminist views of law, legal education, legal reasoning and community participation in legal process. (3 cr. hr.) ■

POL 303: The Criminal Justice System
(C) Introduction to structure, operation and politics of criminal justice system. Basic operational details of CJS, including roles played by police, prosecutors, defense attorney, judges and community. Political dimension to definition of crime, race and sex bias in CJS, and contemporary problems in application of capital punishment. Look into white collar crime to see relationship between economics and criminal law. (3 cr. hr.) ■

POL 304: Constitutional Law
(F) Principles, functions of judiciary as forum where great public issues are explored, debated, tentatively resolved. Supreme Court decisions reflecting social, political, economic conflicts in society explored in context of current controversies. (3 cr. hr.) ■

POL 308: Environmental Law
(C) Contemporary environmental law, beginning with common law doctrine on property rights, continuing on to the policies adopted by Congress and the federal judiciary since the 1960s. Further topics include the political and social contexts of environmental reform and the limits of legal innovations designed to protect the environment. (3 cr. hr.) ■

POL 312: Methods of Political Analysis
(F) Intermediate and advanced quantitative research methods, including exploratory data analysis, parametric tests, correlation, regression, and statistical modeling. Not open to students with credit for PSY 201, COM 201, MAT 201, ECO 221. Prerequisite: POL 112 or permission of instructor. (3 cr. hr.) ■

POL 315: Evaluation Research
(O) Research design and measurement for evaluation research. Covers statistical and computer applications as needed for class research project. (3 cr. hr.) ■

POL 320: The Legislative Process
(S-C) Structure, behavior, lawmaking process and representativeness of legislative bodies, focusing primarily on the U.S. Congress. Examined. Impact of lobbying, money and other outside pressures on legislative process and policy making also examined. (3 cr. hr.) ■

POL 326: State and Local Government
(S-C) Structure function of state, county, municipal, special government units. (3 cr. hr.) ■

POL 330: Political Parties and Social Movements
(C) Relation between citizen and government via political parties and interest/pressure groups examined. Focus will be on electoral and group behavior, such as elections, parties, interest groups, Political Action Committees, single issue movements, etc. to assess the realities of “popular control.” (3 cr. hr.) ■

POL 332: Elections in America
(C) Focus on electoral process, campaigns, voting behavior, election outcomes, electoral system. (3 cr. hr.) ■

POL 338: Media and Politics
(O) Focus on political interactions of electronic and print media with political system in America and elsewhere. How “Fourth Estate” shapes political images and how government manipulates the media examined. Analysis of contemporary news coverage included. Also listed as COM 338. (3 cr. hr.) ■

POL 341: Current Issues in Public Policy
(B) Analysis of current public policy issues in United States. Theories which purport to define or prescribe what public policy should be; political/administrative process by which policies are made; substantive content of policies; policy problems confronting the country. Prerequisites: POL 100, 240. (3 cr. hr.) ■

POL 342: Environmental Policy and Biodiversity
(M) Examines policies needed to protect biodiversity in the modern world, including: legal protections such as the endangered species act, ex situ conservation methods such as zoos, botanical gardens and seed banks, and parks and preserves designed to protect natural ecosystems. Combines directed independent study with field studies conducted in residence at H. untington M emorial C amp. (3 cr. hr.)

POL 345: Adirondack Park Policies and Issues
(C) Analysis of environmental and land-use policies in the largest park in the contiguous United States. Often taught at Cortland’s O utdoor Education C enter at R aqueette Lake in the A dirondack P ark. When taught at the O utdoor Education C enter, students are assessed a fee for room and board. Prerequisite: Consent of department. Also listed as REC 345. (3 cr. hr.) ■

POL 347: The Politics of Education Policy
(C) An introduction to U.S. Education Policy; analyzes interaction between policy makers and education activists; examines the influence that political goals have exercised over American education development, and explores the ideology, data and goals that guide current public discourse on education policy. Prerequisite: POL 100 or POL 240. (3 cr. hr.)

POL 348: Gun Control: Crime, Law, Policy
(O) Criminological, legal, historical, policy, and political consequences of the gun issue in America. Historical and contemporary gun habits, the crime and self-defense debates, the role of the Second Amendment’s “right to bear arms," the gun culture, public attitudes, interest groups, federal gun laws, contemporary political controversies and the effectiveness of gun control measures. Also listed as CRM 348. (3 cr. hr.) ■

POL 350: American Foreign Policy
(C) Foreign policies of selected nations; analysis of national interest, international objectives of each; their successes, failures, impact on other members of international community. (3 cr. hr.) ■

POL 362: Politics of Developing Nation States
(C) Politics of development and nation building; political structures and forces examined with special attention to developing political systems of Third World including Asia, Africa, Latin America, Middle East. (3 cr. hr.) ■

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
POL 365: Irish Politics
(C) Development of 20th century’s first successful revolution through guerrilla warfare and political action. Development of a modern political system from Civil War through continuing conflict in Northern Ireland traced. (3 cr. hr.) ■

POL 372: American Political Thought
(C) American political, social thought from European antecedents to present. Emphasis on political statesmanship; Jefferson, Lincoln, Franklin Roosevelt. (3 cr. hr.) ■

POL 376: Asian Political Thought
(C) Asian political, social thought from ancient to present. Analysis of selected philosophies, ideas on nature, man, society and state. (3 cr. hr.) ■

POL 404: Civil Liberties
(B) Selected problems in struggle for protection of persons, opinions, property from arbitrary governmental, private interference. Prerequisite: POL 100. (3 cr. hr.) ■

POL 405: Discrimination Law
(C) Current status of national and state law on discrimination, with particular emphasis on racial and gender inequalities. Topics include affirmative action, comparable worth and equal protection. Great Britain’s public policies on discrimination are considered for purposes of comparison and contrast. (3 cr. hr.) ■

POL 420: The American Presidency
(C) Course focuses on dilemmas of the modern presidency: its power vs. its responsibility; the president vs. the institution, the simultaneous drives toward activism and restraint. Also the president’s interaction with the rest of the government, the media, the people. Current presidential politics and policy making included. (3 cr. hr.) ■

POL 440: Law and Politics in the Administrative Process
(C) Powers, procedures, roles, techniques utilized by public officials and bureaucracies. Includes delegation of powers, nature of administrative adjudication and rule-making, judicial control over administrative determination, all enforcement processes of independent regulatory agencies, analysis of general problem of adjusting administrative process to traditional constitutional principles. Prerequisites: POL 100, 240. (3 cr. hr.) ■

POL 441: Comparative Public Policy
(C) Course will compare and contrast the way public policy issues are handled in United States and other countries, such as United Kingdom, Sweden, Cuba. Problems such countries confront frequently are similar but approaches taken to dealing with them are often distinctive. Among areas considered are economic policy, human rights policy and social welfare policy. Prerequisite: POL 240. (3 cr. hr.) ■

POL 450: International Law
(C) Principles governing relations of states: jurisdiction over land, water, airspace, outer space, persons, adjudicatory agencies; treaties, executive agreements; pacific settlements; laws of war, neutrality. Prerequisite: POL 101. (3 cr. hr.) ■

POL 454: International Politics in Asia
(C) Analysis of politics among Asian countries including war, revolutionary movements, patterns of diplomacy and relationships with non-Asian world. Prerequisite: POL 101. (3 cr. hr.) ■

POL 455: International Politics in Latin America
(C) Analysis of Latin America’s international role and behavior. The inter-American system and impact of revolutionary movements. Prerequisite: POL 101. (3 cr. hr.) ■

POL 456: International Politics in the Middle East
(C) Analysis of Middle East as point of conflict between Arab and Israeli, east and west powers, oil producers and oil consumers. Prerequisite: POL 101. (3 cr. hr.) ■

POL 461: Europe Today: People and Politics
(C) Selected topics may include social and political change, parties and voting, decision-making, processes, political cleavages and institutions. May be repeated with change of topic. Prerequisite: POL 101. (3 cr. hr.) ■

POL 462: Political Culture and Behavior in Asian Societies
(C) Factors which condition patterns of orientation toward political action in Asian societies. Special attention may be given to individual Asian systems. Prerequisite: POL 101. (3 cr. hr.) ■

POL 463: Political Culture and Behavior in Latin American Societies
(C) Variables in Latin American political culture which comprise and affect political behavior and development. Prerequisite: POL 101. (3 cr. hr.) ■

POL 465: Contemporary British Politics and Government
(C) Contemporary British politics and government from 1945 to present, including Parliament, Cabinet, Constitution, party system, interest articulation, as well as the welfare state, ideological shifts, industrial relations, class and society, etc. (3 cr. hr.) ■

POL 470: Justice and Society: Theory and Practice
(C) Tensions between theory and practice; analysis of nature of justice and its implementation in society. Prerequisite: POL 270. (3 cr. hr.) ■

POL 471: Legal Theory
(C) Theoretical origins of legal justice and relation between law and politics with particular emphasis on natural law theory and positivist theory. Prerequisite: POL 270. (3 cr. hr.) ■

POL 480: Washington Semester
(A) Program for selected students conducted in Washington, D.C. Involving on-the-job work experience, independent study, seminars. Prerequisite: Consent of department. (16 cr. hr.) ■

POL 482: New York State Legislative Internship
(S) Spring semester program for selected students to live and work in Albany as interns with State Legislature (Assembly and Senate). Students receive stipend of approximately $3,000. Prerequisite: Consent of department. (15 cr. hr.) ■

POL 483: Public Administration And Policy Internship
(A) Students intern in a law-related department or agency, including the Office of the District Attorney, Public Defender, County Attorney, Police or Sheriff’s Department. Fieldwork experience combined with instructor-led seminars and workshops. Prerequisite: junior or senior standing; previous political science course work; consent of department. Letter grading. (3 cr. hr.) ■

POL 484: Prelaw Internship
(A) Students intern in a law-related department or agency, including the Office of the District Attorney, Public Defender, County Attorney, Police or Sheriff’s Department. Fieldwork experience combined with instructor-led seminars. Prerequisite: junior or senior standing; consent of the department. Letter grading. (3 cr. hr.) ■

POL 485: Field Study in Political Science
(A) Field study program covering off-campus experience. Prerequisite: Consent of department. H, S, U grades assigned. (1-16 cr. hr.)
POL 491: Readings in Political Science
(A) Individual readings in selected topics. May be repeated for credit with change in topic. Prerequisites: Nine hours of social science, consent of department. (3 cr. hr.)

POL 492: Seminar in Political Science
(C) Studies in depth on selected topics. May be repeated with change of subtitle. Prerequisite: Consent of department. (3 cr. hr.)

POL 500: Seminar in American Government and Politics
(O) Selected legislative, administrative, judicial aspects of public policy. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 523: The United States Constitution and Its Interpretation
(F) Structure, historical development of United States Constitution: currently discussed constitutional interpretations, controversies arising from such discussion. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 524: Courts, Judges and Politics
(S-C) Judicial interpretation as policy formulation in context of political process. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 526: Seminar in State and Local Government
(S-C) Selected topics, problems in state and local government. May be repeated with change of subtitle. Prerequisites: Nine hours of social science, consent of department. (3 cr. hr.)

POL 530: American Political Parties and Pressure Groups
(O) Organization, tactics, dynamics and roles. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 550: Seminar in International Relations
(O) Organizational changes in international relations. May be repeated with change of subtitle. Prerequisites: Nine hours of social science. (3 cr. hr.)

POL 560: Seminar in Comparative Politics
(O) Selected problems of comparative politics. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 570: Seminar in Political Theory
(O) Selected topics in political science. May be repeated for credit when topic changes. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 592: Seminar in Politics
(O) Selected problems in politics. May be repeated for credit with change of subtitle. Prerequisite: Nine hours of social science. (3 cr. hr.)

POL 593: Readings in Political Science
(O) Individual readings in selected topics. May be repeated for credit with change in topic. Prerequisites: Nine hours of social science, consent of department. (3 cr. hr.)

Related Education Courses

AED 300: Introduction to Secondary Social Studies
(S) Introduction to social studies education on the secondary level. Includes pre-student teaching field experience of 35 hours. Juniors only. Prerequisite: AED 391. (1 cr. hr.)

AED 301: Pre-Practice Teaching Seminar
(F) Integrated study of: A) introduction to methods of teaching secondary social studies; B) introduction to contemporary issues in the teaching of secondary social studies; C) preparation for specific practice teaching assignment; D) 40-hours of field experience. Prerequisites: AED 300 and 391. (6 cr. hr.)

AED 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)

AED 400: Student Teaching I: Adolescence Education Social Studies
(S) Full-time supervised adolescence education: social studies teaching experience in the public schools for eight weeks. This experience will be one of two school placements, at either the middle school/junior or high school level; the second experience must be at the other level. Prerequisites: AED 300, 301 and 391. Corequisites: AED 401 and 402 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (7 cr. hr.)

AED 401: Student Teaching II: Adolescence Education Social Studies
(S) Full-time supervised adolescence education: social studies teaching experience in the public schools for seven weeks. This experience will be one of two school placements, at either the middle school/junior or high school level; the second experience must be at the other level. Prerequisites: AED 300, 301 and 391. Corequisites: AED 400 and 402 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (7 cr. hr.)

AED 402: Student Teaching Seminar
(F) Problem approach drawing upon experience of students during practice teaching. Designed to focus on contemporary educational issues, beginning the job search and application process, teaching and learning at the middle and high school level, and exploring the history and philosophy of teaching. Prerequisites: AED 300, 301 and 391. Corequisites: AED 400 and 401 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (1 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Pre-Engineering

COOPERATIVE DEGREE PROGRAM FOR CHEMISTRY AND PHYSICS MAJORS

FACULTY
Yolanda Kime (Coordinator)

PROGRAMS OFFERED
Bachelor of Science in Chemistry and Engineering
Bachelor of Science in Physics and Engineering

MAJORS OFFERED
Chemistry/Engineering (3+2) [CEN]
Physics/Engineering (3+2) [PEN]

DESCRIPTION
SUNY Cortland participates in 3+2 engineering programs in which students spend three years on the Cortland campus majoring in chemistry or physics and then spend two years on a cooperating campus majoring in engineering. Those who complete this program receive two degrees, a Bachelor of Science in Chemistry or Physics, and a bachelor of science in a field of engineering. Schools that our students have attended include:

State University College of Ceramics at Alfred University
Ceramic Engineering

State University of New York at Binghamton
Electrical Engineering
Mechanical Engineering

State University of New York at Buffalo
Aerospace Engineering
Chemical Engineering
Civil Engineering
Electrical and Computer Engineering
Mechanical Engineering
Industrial Engineering

Case Institute of Technology, Case Western Reserve University
Engineering (Biomedical, Chemical, Civil, Computer, Electrical, Fluid and Thermal Sciences, Industrial, Mechanical and Aerospace, Metallurgy and Materials Science, Polymer Science, Systems and Control, and undesignated)

Clarkson University
Chemical Engineering (Biomedical Engineering Science, Energy Engineering, Environmental Engineering, Nuclear Engineering)
Civil and Environmental Engineering (Environmental, Surveying and Construction, Geotechnical, Structural, Transportation, Water Resources, Engineering Science)
Electrical and Computer Engineering (Communication Systems, Control Systems, Power Systems, Electronic Devices and Circuits, Engineering Science, Biomedical and Environmental Systems)

State University of New York at Stony Brook
Electrical Engineering
Engineering Science
Mechanical Engineering

A decision to enter the 3+2 program should be made upon admission to SUNY Cortland as a freshman. Transfer students generally cannot complete the Cortland phase of the program in three years.

PRE-ENGINEERING

Bowers Hall, Room 133
(607) 753-2919
Pre-Environmental Science and Forestry

2+2 PROGRAM WITH SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

SCHOOL
Arts and Sciences

FACULTY
Timothy J. Baroni (pre-ESF Advisor)

DESCRIPTION
This program is designed for students who ultimately desire a bachelor of science in one of several different areas of environmental sciences and/or forestry, wood products engineering, paper science engineering or landscape architecture from the SUNY College of Environmental Science and Forestry (ESF) in Syracuse. After the first two years of study at SUNY Cortland, transfers to ESF may apply to a variety of ESF degree programs.

SPECIAL FEATURES
B.S. programs at SUNY College of Environmental Science and Forestry are offered in:

- Environmental and Forest Biology
- Forest Resources Management and Forest Engineering
- Chemistry
- Environmental Studies
- Landscape Architecture
- Wood Products Engineering
- Paper Science and Engineering

REQUIREMENTS
Students planning to transfer to the SUNY College of Environmental Science and Forestry should consult Cortland’s pre-ESF advisor for program requirements and assistance in selecting electives, which vary according to the curriculum to be followed for the major at ESF. Students who complete the first two years in Cortland’s Pre-Environmental Science and Forestry Program generally gain admission to SUNY ESF with full junior class status.

Psychology

SCHOOL
Arts and Sciences

FACULTY
Margaret Anderson (Chair), David F. Berger, Michael D. Berzonsky, Raymond D. Collings, Leslie G. Eaton, William Hopkins, Melvyn B. King, Kimberly S. Kraabel, Linda O. Lavine, Robert Lehr, John P. Lombardo, Paul D. Luyben, Michie Odle, Judith Ouellette, James Starzec, Jeffery Swartwood, Michael P. Toglia

PROGRAMS OFFERED
Bachelor of Arts in Psychology
Bachelor of Science in Psychology

MAJORS OFFERED
Psychology

MINORS OFFERED
Psychology
Psychology of the Exceptional Child

DESCRIPTION
The Psychology Department focuses on preprofessional preparation for a combination of research and applied work. In addition to providing a strong liberal arts focus for majors not going beyond the bachelor's degree, the program is designed to provide a solid foundation for graduate school training in psychology. Successful students graduate ready for entry-level positions helping others or to pursue master’s and doctorate degrees. Psychology majors have opportunities to work with faculty on research projects and/or develop their skills in the field, working with psychologists and agencies dedicated to helping others. Our aim is to help our majors attain skills that prepare them for college-level teaching, research and therapeutic intervention.
SPECIAL FEATURES

- Internships
- Field Study
- Exceptional Child Club
- Psychology Club
- National Honor Society: Psi Chi
- Study abroad
- Research with faculty/conferences and publications
- Fall retreat to the O outdoor Education Center at Raquette Lake

PSYCHOLOGY HONORS PROGRAM

Students who have a 3.0 cumulative average and a 3.2 average in psychology courses are eligible to apply for admission to the Psychology Honors Program for those desiring to study in a particular field of psychology or who elect to pursue courses in psychology beyond those normally required for the major. With prior approval, such students may include as part of their programs 500-level graduate courses, special seminars, fieldwork, research and other independent studies. Admission to the program normally occurs at the beginning of the junior year but may be granted at the beginning of the senior year.

Requirements

1. Degree Requirements listed on pages 38-45 of this catalog apply to the following majors.

2. Liberal Arts Requirements:
   - B.A. – 90 credit hours
   - B.S. – 75 credit hours

Major in Psychology (B.A.) * [PSY]

The major provides a broad base of understanding of psychology as a science — the methodology of the discipline, the principles and concepts in major areas, and selected areas of application. Major areas include research methods, as well as a broad range of areas represented in our four-group distribution.

* The B.A. requires 0-13 credit hours of foreign language.

CAREER POTENTIAL

- Academics
- Counselor/therapist
- Industrial psychologist
- School psychologist
- Research
- Human Services

A. Required Courses: 15 credit hours

- PSY 101: General Psychology I
- PSY 201: Statistical Methods
- PSY 202: Experimental Psychology
- PSY 401: Research Methods in Psychology
- PSY 482: Senior Seminar in Psychology

B. Other: 18 credit hours

One course from two of the following groups and two courses from the other two groups.

Group I: Experimental Psychology

- PSY 311: Motivation *
- PSY 312: Learning and Memory *
- PSY 313: Cognitive Psychology *
- PSY 411: Behavioral Neuroscience *
- PSY 412: Sensory and Perceptual Processes *

Group II: Developmental Psychology

- PSY 231: Child Psychology
- PSY 232: Adolescent Psychology
- PSY 331: Psychology of Exceptional Children
- PSY 333: Developmental Psychology
- PSY 334: Psychology of Adulthood and Aging

Group III: Personality Psychology

- PSY 322: Theories of Personality
- PSY 421: Abnormal Psychology
- PSY 422: Social Psychology

Group IV: Applied Psychology

- PSY 341: Psychological Tests and Measurements
- PSY 342: Psychology in Organizations
- PSY 441: Human Factors and Ergonomics
- PSY 486: Counseling Psychology

* Lab course

C. Courses in Related Areas for the Bachelor of Arts:

Six credit hours in biology from:

- BIO 110: Principles of Biology I
- BIO 111: Principles of Biology II
- BIO 202: Biological Sciences II
- BIO 210: Cellular Biology
- BIO 301: Human Anatomy and Physiology I
- BIO 302: Human Anatomy and Physiology II
- BIO 303: Microbiology and Human Disease
- BIO 304: Microbiology
- BIO 306: Human Genetics
- BIO 312: Genetics
- BIO 325: Evolutionary Biology
- BIO 401: Invertebrate Zoology
- BIO 402: Biology of Vertebrates
- BIO 408: Biology of Insects
- BIO 409: Animal Behavior
- BIO 411: Ornithology
- BIO 412: General Ecology
- BIO 414: Mammalian Physiology
- BIO 422: Biological Evolution
- BIO 424: Physiological Ecology
- BIO 425: Developmental Biology

Three credit hours in sociology and three credit hours in anthropology from:

- ANT 102: Introduction to Cultural Anthropology
- ANT 300: Human Evolution and Survival
- SOC 150: Introduction to Sociology

Other sociology/anthropology courses may be substituted with the approval of the Psychology Department.

Three credit hours in philosophy from:

- PHI 100: Introduction to Philosophy
- PHI 202: Introduction to Modern Philosophy
- PHI 210: Knowledge and Reality
- PHI 375: Science, Truth and Bias

Other philosophy courses may be substituted with the approval of the Psychology Department.

Three credit hours in mathematics from:

- MAT 111: Algebra for College Students
- MAT 115: Preparation for Calculus
- MAT 121: Calculus A
- MAT 122: Calculus B
- MAT 125: Calculus C
- MAT 126: Calculus II
- MAT 224: Discrete Mathematics

Other undergraduate mathematics courses that have these as prerequisites may be substituted with the approval of the Psychology Department.

Three credit hours in computer applications:

- CAP 100: Introduction to Computer Applications

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Psychology (B.S.) * [PSY]

B.S. candidates must take an additional lab course in psychology as well as six additional units of biology, chemistry, physics or mathematics.

Acceptable related courses for the B.S. requirement include:

- Biology: Same as above
- Chemistry: 121, 122, 221, or any other undergraduate chemistry course that has any one of the above as a prerequisite
- Math: Same as above for the B.A. or MCS 186
- Physics: 100, 105, 106, 150, 201 or any undergraduate course that has any of the above as a prerequisite

* The B.S. requires 0-7 credit hours of foreign language

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Minor in Psychology [PSY]

A. Required Courses
- PSY 101: General Psychology I
- PSY 201: Statistical Methods
- PSY 202: Experimental Psychology or
- PSY 203: General Psychology II: Experimental Methods

B. Three credit hours selected from each of the four groups listed under the requirements for the psychology major with a B.A.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 21

Minor in Psychology of the Exceptional Child [PSYX]

This program is open to all majors of the College.

A. Required Core Courses:
- PSY 231: Child Psychology
- PSY 331: Psychology of Exceptional Children
- PSY 332: Educational Psychology
- PSY 360: Applied Behavior Analysis I

B. Elective Courses:
- PED 356: Physical Education for the Exceptional Child
- PED 446: Inclusion of Individuals with Disabilities in Physical Education
- PED 447: Adapted Physical Activity and Individual Differences
- PSY 250: Psychological Perspectives on the History of Special Education
- PSY 431: The Psychology of Mental Retardation
- PSY 432: Psychology of Learning Disabilities
- PSY 433: Behavior Disorders in Educational Settings
- REC 393: Recreation for Persons with Disabilities
- SHH 270: Introduction to Communication Disorders
- SHH 370: Articulation and Language Disorders
- SHH 473: Neuropathologies of Language and Speech
- PSY 400: Field Study in Psychology or other courses may be accepted for credit in the exceptional child minor with the consent of the department following the recommendation of the Exceptionality Committee.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 21

Example of the bachelor's degree in Psychology over four years

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>Fall</td>
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</tr>
<tr>
<td>PSY 101</td>
<td>PSY (Group III)</td>
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<td>CPN 100 or 102</td>
<td>PSY 201</td>
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<td>BIO 110 (GE)</td>
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<td>SOC 150 or ANT (GE)</td>
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<tbody>
<tr>
<td>PSY (Group II)</td>
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<tr>
<td>CPN 101 or 103</td>
<td>BIO 111</td>
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<tr>
<td>MAT 111 or higher</td>
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<tr>
<td>SOC 150 or ANT (GE)</td>
<td>GE course</td>
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<td>Fall</td>
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<td>PSY Lab**</td>
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<tr>
<td>PSY (Group IV)</td>
<td>PSY elective</td>
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<td>PHI elective</td>
<td>B.S. science/math req.***</td>
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<td>Elective</td>
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<tbody>
<tr>
<td>PSY elective</td>
<td>PSY 482</td>
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<tr>
<td>PSY Lab**</td>
<td>B.S. science/math req.</td>
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<td>Total credit hours: 15</td>
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* Foreign language required at intermediate level for a B.A.
** The B.A. requires one PSY lab; the B.S. requires two PSY labs.
*** The B.S. requires two science and/or math courses in addition to biology requirement in related areas.
Psychology

COURSE DESCRIPTIONS

PSY 101: General Psychology I
(A) Introduction to scientific study of behavior emphasizing motivation, emotion, perception, learning, thinking, personality, individual differences. (3 cr. hr.) ■

PSY 129, 229, 329, 429, 529: Special Topics in Psychology
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.) ■

PSY 201: Statistical Methods
(A) Basic concepts of probability, descriptive and inferential statistics including central tendency, variability, correlation; analysis of variance and parametric tests. Mathematics majors may take course only as free elective. Also listed as MAT 201, COM 230, ECO 221. (3 cr. hr.) ■

PSY 202: Experimental Psychology
(A) Lectures, coordinated laboratory in learning, sensation and perception, cognition, psychophysiology, motivation and other related areas. Coordinated laboratory work includes literature search, experimental design, data analysis, preparation of scientific reports. Prerequisites: PSY 101, 201. (3 cr. hr.) ■

PSY 203: General Psychology II: Experimental Methods
(A) Introductory laboratory course; experimental work in selected areas to illustrate basic research techniques. Coordinated laboratory work not open to psychology majors. Prerequisites: PSY 101, 201. (3 cr. hr.) ■

PSY 204: Research Methods I
(A) Introduction to concepts underlying scientific research. Course includes topics such as theory selection, hypothesis testing, reliability, validity, measurement and ethics in human and animal research. Prerequisites: PSY 101, 201. (3 cr. hr.) ■

PSY 210: Racial and Gender Role Stereotypes
(A) Focus on racial and gender role awareness and attitudes in individuals. Prejudice and discrimination against ethnic minorities and women are examined, from both historical and contemporary perspectives. Also, the causes and consequences of prejudice and discrimination are discussed. (3 cr. hr.) ■

PSY 211: Child Psychology
(A) Basic principles of child behavior, development. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 212: Adolescent Psychology
(A) Physical, intellectual, emotional, social aspects of adolescent development, adjustment. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 250: Psychological Perspectives on the History of Special Education
(O) Psychological, social, political origins of present views on care, treatment, education of people with handicapping conditions. Emphasis on people with mental retardation. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 304: Research Methods II
(A) Course consists of lectures with coordinated laboratory. Lectures include experimental and non-experimental methods in psychology. Laboratory is designed to address skills in evaluating, conducting and writing scientific reports. Prerequisites: PSY 101, 201 and 204. (3 cr. hr.) ■

PSY 311: Motivation
(B) Factors controlling initiation, direction, intensity of goal-directed behavior in man and animals. Selected theories; current research, coordinated laboratory work. Prerequisite: PSY 202 or 203. (3 cr. hr.) ■

PSY 312: Learning and Memory
(B) Conditions, principles of learning in man and animals. Learning theories; current research; coordinated laboratory work. Prerequisite: PSY 202 or 203. (3 cr. hr.) ■

PSY 313: Cognitive Psychology
(B) Models and theories used in the field of cognitive psychology, and research in many aspects of cognition including memory, knowledge acquisition and use, language, reasoning and problem solving, and metacognition. Prerequisite: PSY 202 or 203. (3 cr. hr.) ■

PSY 322: Theories of Personality
(B) Theories of organization, development of personality. Prerequisites: PSY 101, three additional hours in psychology. (3 cr. hr.) ■

PSY 330: Psychology of Gender Roles
(O) Survey and critical analysis of research and theory regarding behavioral and cognitive differences between the sexes. Emphasis will be placed on biological, social and cultural determinants of sex roles and their consequences. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 331: Psychology of Exceptional Children
(A) Etiology, diagnosis, facilitation and adjustment of physically handicapped, emotionally disturbed, gifted, mentally retarded children. Prerequisites: PSY 101. Recommended: PSY 231, 232, 332 or 333. (3 cr. hr.) ■

PSY 332: Educational Psychology
(A) Educational implications of psychological facts, principles, theories; human development; learning, evaluation, adjustment. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 333: Developmental Psychology
(B) Developmental processes from childhood through adulthood. Emphasis on life-span changes in cognitive, personality and social processes. Prerequisite: PSY 101. (3 cr. hr.) ■

PSY 334: Psychology of Adulthood and Aging
(B) Changes (in formal aging) in sensory and perceptual processes, learning and cognition, intelligence, personality, in social relations and other selected issues in aging. Prerequisite: PSY 101 or SOC 220. (3 cr. hr.) ■

PSY 341: Psychological Tests and Measurements
(B) Theory of test construction including evaluation, standardization, interpretation; representative survey of psychological tests, measures. Prerequisite: PSY 101, 201. (3 cr. hr.) ■

PSY 342: Psychology in Organizations
(B) Psychological principles and methods applied to organizational problems. Prerequisites: PSY 101, three additional hours in psychology. (3 cr. hr.) ■

PSY 346: Sport Psychology
(O) Selected psychological, related theoretical factors influencing behavior of individuals participating in sport, physical education. Prerequisite: PSY 101. Also listed as EXS 346. (3 cr. hr.) ■

PSY 350: Psychology of Language
(O) Problems, issues, theories, research related to acquisition of language and language behavior. Not open to those having credit for SHH 300. Prerequisite: PSY 101. (3 cr. hr.) ■
PSY 360: Applied Behavior Analysis I
(A) Principles, techniques of operant conditioning and experimental analysis of behavior. Relationship to selected areas such as hyperactivity, inattention, aggression, acting out and academic deficiencies. Prerequisite: Nine hours of psychology or six hours of psychology and consent of instructor. (3 cr. hr.)

PSY 361: Applied Behavior Analysis II
(O) Advanced study and application of the principles and procedures of behavior analysis. Use of behavioral strategies with individuals with exceptional needs concurrent with advanced course work in techniques such as task analysis, functional analysis and positive behavioral support. Prerequisites: PSY 360 and permission of instructor. (3 cr. hr.)

PSY 400: Field Study in Psychology
(A) Supervised field experience in areas or activities of applied psychology. May be repeated with consent of department. Prerequisites: Nine hours required, 15 hours recommended in psychology; consent of department. H, S, U grades assigned. (1-15 cr. hr.)

PSY 401: Research Methods in Psychology
(A) Research methodology in contemporary psychology. Designs, issues and analytic strategies relevant to experimental and nonexperimental research are emphasized. Prerequisites: PSY 101, 201 and 202. (3 cr. hr.)

PSY 405: History of Psychology
(O) Studies development of psychology as an independent discipline and contemporary science. Begins with Greek views on nature of man, traces evolution of such views to contemporary theories of human behavior, includes interrelationship of psychology and sociology. Prerequisites: PSY 202 or 203 and six additional hours in psychology. (3 cr. hr.)

PSY 410: Psychology of Human Emotion
(B) An interdisciplinary survey of theory and research relevant to the psychological/physiological expression and experience of emotion in humans. The history of the study of emotion will be covered, as well as several theories concerning typical expressions of emotion representing a variety of psychological perspectives. Findings from psychological, sociological, anthropological and evolutionary theories concerning cross-cultural differences in the experience and expression of emotion will also be presented. Coordinated laboratory work. Prerequisite: PSY 202 or PSY 203. (3 cr. hr.)

PSY 411: Behavioral Neuroscience
(B) Nervous endocrine systems regulating behavior; coordinated laboratory work. Prerequisites: PSY 202 or 203; or PSY 101 and 12 credit hours in biology. (3 cr. hr.)

PSY 412: Sensory and Perceptual Processes
(B) Experimental study of sensory mechanisms and perceptual phenomena; coordinated laboratory work. Prerequisite: PSY 202 or 203. (3 cr. hr.)

PSY 421: Abnormal Psychology
(A) Characteristics, etiology, treatment of abnormal behavior patterns. Field study may be assigned. Prerequisites: PSY 101, three additional hours in psychology. (3 cr. hr.)

PSY 422: Social Psychology
(B) An introduction to the research and theories of social psychology — takes a scientific-based approach to the psychological processes underlying social behavior. Topics to be covered include perception of self and others, social cognition, interpersonal attraction and group processes. Not open to those having credit for EXS 287. Prerequisite: PSY 101. (3 cr. hr.)

PSY 431: The Psychology of Mental Retardation
(A) Broad overview of field of mental retardation with specific emphasis on major areas of research and controversy, including issues in definition, etiology, behavioral characteristics, intervention. Prerequisite: PSY 101; recommended: PSY 231, 232, 331, 332 or 333. (3 cr. hr.)

PSY 432: Psychology of Learning Disabilities
(A) An examination of the physical, social-emotional and cognitive characteristics of individuals with learning disabilities. Theory and application of intervention strategies are also studied. Prerequisite: PSY 101; recommended: PSY 231, 232, 331, 332 or 333. (3 cr. hr.)

PSY 433: Behavior Disorders in Educational Settings
(A) A study of the cognitive and social-emotional characteristics of children and youth with behavior disorders. Etiology as well as intervention techniques will be discussed. Prerequisite: PSY 101. Recommended: PSY 231, 232, 331, 332 or 333. (3 cr. hr.)

PSY 436: Assessment and Instruction of Learners with Special Needs
(O) Study of assessment procedures (formal and informal) typically used with exceptional children and youth as well as relationship of these procedures to educational interventions. Students will learn how to write Individualized Educational Programs, evaluations, and plan daily lessons utilizing commercial and teacher-made materials. Course is divided into four modules — overview, reading, math and conclusions, each of which has a fieldwork component. Also listed as EDU 436. (4 cr. hr.)

PSY 441: Human Factors and Ergonomics
(B) The application of empirical data about human behavior, capabilities and limitations to the design of systems, machines, tools, consumer products, and work and living environments for safe and effective human use. Prerequisite: PSY 202 or 203 and 342. (3 cr. hr.)

PSY 482: Senior Seminar in Psychology
(A) Individual study or projects on selected topics in contemporary psychology — integration, elaboration of previous course work. Open only to senior psychology majors, minors. (3 cr. hr.)

PSY 486: Counseling Psychology
(B) Survey of systems of counseling, psychotherapy; consideration of prevention theory and methods, clinical techniques, professional issues, research in therapeutic effectiveness. Prerequisite: Nine hours of psychology; PSY 421 recommended. (3 cr. hr.)

PSY 490: Readings in Psychology
(A) Independent study on selected topic. Limited to topics for which no formal course is offered. Student is supervised by department member. Course may be taken only once. Prerequisites: Nine hours in psychology, consent of department. (3 cr. hr.)

PSY 491: Special Study in Psychology I
(A) Independent study or research on selected topic. May be taken for honors credit. Prerequisite: Consent of department. (3 cr. hr.)
PSY 492: Special Study in Psychology II  
(A) May be taken for honors credit. Prerequisites: PSY 491, consent of department. (3 cr. hr.)

PSY 493: Senior Thesis in Psychology  
(A) Investigation, written report of selected problem in major field of psychological research — supervised by a member of department. Completed thesis to be presented at a colloquium. May be taken for honors credit. Prerequisites: PSY 491, consent of department. (3 cr. hr.)

PSY 500: Advanced Child Psychology  
(O) Advanced study of principles of child behavior, development. Prerequisite: PSY 231, 232, 332 or 333. (3 cr. hr.)

PSY 501: Advanced Educational Psychology  
(B) Advanced study of psychological principles, theories related to education. Prerequisites: PSY 231, 232, 332 or 333. (3 cr. hr.)

PSY 505: History and Systems of Psychology  
(O) Historical evaluation of theoretical concepts, issues in systematic psychology from 1700 to 1950. Prerequisites: Twelve hours in psychology, consent of department. (3 cr. hr.)

PSY 507: Statistical Designs for Experimentation  
(O) Advanced statistical methods, experimental designs appropriate to univariate, multivariate problems. Prerequisite: PSY 201. (3 cr. hr.)

PSY 508: Interpretation of Advanced Statistical Techniques  
(O) Interpretation of univariate and multivariate statistical techniques used in applied research, analysis of variance, multivariate analyses, nonparametric tests and test construction statistics included. Prerequisite: PSY 507. (3 cr. hr.)

PSY 509: Advanced Laboratory Methods  
(O) Laboratory experience in conducting research; experimental design, apparatus construction, data analysis, reporting of results. Prerequisites: PSY 202 or 203. (3 cr. hr.)

PSY 510: Applied Research Methods  
(O) Methods of empirical research for applied settings, including hypothesis formation, data collection, data interpretation and reporting of results. Prerequisite: PSY 202. (3 cr. hr.)

PSY 511: Advanced Motivation  
(O) Advanced study of motivation as psychological construct in contemporary theories. Prerequisite: PSY 311. (3 cr. hr.)

PSY 512: Advanced Learning  
(O) Advanced study of post-1950 theoretical, methodological approaches to learning emphasizing operant conditioning, mathematical models, hypothetico-deductive systems. Prerequisite: PSY 312. (3 cr. hr.)

PSY 513: Advanced Theories of Sensory and Perceptual Processes  
(O) Advanced study of contemporary problems, issues, theories related to sensory, perceptual processes. Prerequisite: PSY 412. (3 cr. hr.)

PSY 514: Advanced Physiological Psychology  
(O) Detailed analysis of anatomical, neurophysiological, biochemical correlates of selected behavior. Prerequisite: PSY 411. (3 cr. hr.)

PSY 516: Psychological Foundations of Education  
(O) Theories, data, principles of psychology applied to classroom. Open only to graduate students not having child, adolescent, developmental or educational psychology. Prerequisite: Three hours of psychology. (3 cr. hr.)

PSY 520: Psychopharmacology  
(O) The study of the biological bases of major psychiatric disorders and the medications used to treat these disorders. Special attention will be paid to neurochemical and neurological mechanisms involved in the disorders and the neurochemical mechanisms affected by psychopharmacologically. Prerequisite: PSY 101 or PSY 421 or consent of department. (3 cr. hr.)

PSY 529: Special Topics in Psychology  
(O) Selected topics. May be taken more than once as subtitle changes. Prerequisite: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

PSY 532: Advanced Adolescent Psychology  
(O) Advanced study of adolescent behavior, development. Prerequisite: PSY 231 or 232 or 332 or 333 or 516. (3 cr. hr.)

PSY 533: Advanced Developmental Psychology  
(B) Advanced study of the developmental processes from childhood through adulthood. Emphasis on developmental changes in cognitive, personality and social processes. Prerequisites: PSY 101 and at least one of PSY 231, 232, 332 or 333, or permission of the department. (3 cr. hr.)

PSY 535: Health Psychology  
(O) An overview of the main topics in health psychology, including an introduction to the research, theory and methods of health psychology. This course addresses the contributions of the field to the understanding of the antecedents of health, illness (e.g., heart disease, cancer, AIDS) and related dysfunctions (e.g., substance abuse), the determinants of health promotion and maintenance, the prevention and treatment of illness, coping and to the psychology of major health problems. Prerequisite: PSY 101 or consent of department. (3 cr. hr.)
Recreation and Leisure Studies

DEPARTMENT

SCHOOL
Professional Studies

FACULTY
Lynn Anderson (Chair), Dale Anderson, Wayne Stormann, Sharon Todd, Vicki Wilkins, Susan Wilson, Anderson Young

PROGRAMS OFFERED
Bachelor of Science in Recreation

MAJORS OFFERED
Recreation

CONCENTRATIONS OFFERED
Management of Leisure Services
Therapeutic Recreation
Leisure/Recreation Program Delivery
Outdoor Recreation Management and Education
Emphasis: Outdoor Leadership
Emphasis: Natural Resource Recreation Management
Emphasis: Camp Management
Emphasis: Environmental and Cultural Interpretation

DESCRIPTION
The Recreation and Leisure Studies Department at SUNY Cortland is the most comprehensive professional preparation program of its kind in New York State. Established in 1948 and fully accredited by the National Recreation and Park Association, the department is also one of the oldest and most highly respected programs in the United States. Many of the most distinguished scholars and professionals in the recreation field began their careers by studying here. The curriculum prepares students for a wide variety of career opportunities in outdoor recreation, therapeutic recreation, recreation management and recreation programming and leadership in a wide variety of settings and agencies. See the department Web page for an in-depth description of degree offerings.

SPECIAL FEATURES
• Very bright job market for recreation graduates, as predicted by the U.S. Department of Labor
• High employment rate (more than 95 percent) of our graduates
• Nationally and internationally recognized faculty committed to students
• Internship experience
• The Annual Cortland Recreation Conference — one of the premier recreation conferences in the northeast
• Outdoor Education Center in the Adirondacks
• Opportunities for International Study
• Suggested minors in Environmental and Outdoor Education
• Development (see Geography Department)
• Cortland College Recreation Association and Rho Phi Lambda, the national honorary fraternity for recreation students
• Numerous scholarships for recreation majors

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to the following majors.
2. Liberal Arts Requirements: 60 credit hours
Note: Curriculum changes are pending. Consult department for updates.

Major in Recreation [REC]
The major in recreation prepares students for a variety of career opportunities. Because all people seek recreation services in a spectrum of agencies and settings, this degree provides a foundation in liberal arts, leadership, human relations and management skills. This degree is accredited by the National Recreation and Park Association and the American Association of Leisure and Recreation.

CAREER POTENTIAL
• Parks and recreation director
• YWCA/YMCA director
• Activity director
• Camp director

A. Required Courses: 36 credit hours
REC 271: Foundations of Recreation
REC 280: Programming in Parks, Recreation and Leisure Services
REC 370: Outdoor Education Practicum
REC 380: Leadership in Parks, Recreation and Leisure Services
REC 393: Diversity and Inclusive Recreation Services
REC 402: Management of Recreation Resources
REC 407: Evaluation and Research
REC 446: The Law of Parks, Recreation and Leisure Services
REC 470: Senior Seminar
REC 495: Administration of Recreation
REC electives

B. Internship: 15 credit hours
REC 475: Internship in Recreation and Leisure Services
Prerequisite is a New York State Child Abuse Identification and Reporting Certificate and completion of Responding to Emergencies or other approved first aid certification.

C. Other: 34 credit hours
CAP 100: Introduction to Computer Applications
COM 210: Fundamentals of Public Speaking
Activity Requirement: 2-6 credit hours of recreation activities
— at least two different activities
Liberal Arts and Free Electives (22-26 credit hours)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Recreation with a concentration in Management of Leisure Services [REC/MGLS]

Management of leisure services combines advanced-level study in leisure services management and administration with supporting management science courses in the Economics Department. The concentration prepares students to work at management-level positions in the diverse field of parks and recreation. This concentration is accredited by the National Recreation and Park Association.

CAREER POTENTIAL

• Parks and recreation director
• State park manager
• Recreation administrator in a nonprofit agency

A. Required Courses: 30 credit hours

REC 271: Foundations of Recreation
REC 280: Programming in Parks, Recreation and Leisure Services
REC 370: Outdoor Education Practicum
REC 380: Leadership in Parks, Recreation and Leisure Services
REC 393: Diversity and Inclusive Recreation Services
REC 402: Management of Recreation Resources
REC 407: Evaluation and Research
REC 446: The Law of Parks, Recreation and Leisure Services
REC 470: Senior Seminar
REC 495: Administration of Recreation

B. Internship: 15 credit hours

REC 475: Internship in Recreation and Leisure Services
Prerequisite is a New York State Child Abuse Identification and Reporting Certificate and completion of Responding to Emergencies or other approved first aid certification.

C. Concentration in Management of Leisure Services: 24 credit hours

ECO 111: Principles of Microeconomics
ECO 352: Finance
MGT 250: Principles of Management
MGT 253: Principles of Marketing
MGT 254: Principles of Accounting
POL 240: Introduction to Public Administration
REC 344: Commercial Recreation Management
REC 509: Human Resource Management in Leisure Services
REC 427: Special Events Planning I and
REC 428: Special Events Planning II or
REC 541: Site and Facilities Planning

D. Other: 16 credit hours

CAP 100: Introduction to Computer Applications
COM 210: Fundamentals of Public Speaking
Activity Requirement: 2-6 credit hours of recreation activities — at least two different activities
Liberal Arts and Free Electives (4-8 credit hours)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Recreation with a concentration in Therapeutic Recreation [REC/TR]

Therapeutic recreation services are provided to individuals with disabilities and other diverse needs in a variety of settings, from hospitals, to group homes, to human service centers. Advanced level study in therapeutic recreation, rehabilitation and human services allows graduates of this concentration to qualify to sit for the national certification examination to become a certified therapeutic recreation specialist. This concentration is accredited by the National Recreation and Park Association and the American Association for Leisure and Recreation.

CAREER POTENTIAL

• Therapeutic recreation specialist in health care facilities such as rehabilitation hospitals and psychiatric centers
• Therapeutic recreation specialist in long-term care facilities
• Therapeutic recreation manager
• Inclusion specialist in community parks and recreation departments or nonprofit agencies

A. Required Courses: 30 credit hours

REC 271: Foundations of Recreation
REC 280: Programming in Parks, Recreation and Leisure Services
REC 370: Outdoor Education Practicum
REC 380: Leadership in Parks, Recreation and Leisure Services
REC 393: Diversity and Inclusive Recreation Services
REC 402: Management of Recreation Resources
REC 407: Evaluation and Research
REC 446: The Law of Parks, Recreation and Leisure Services
REC 470: Senior Seminar
REC 495: Administration of Recreation

B. Internship: 15 credit hours

REC 475: Internship in Recreation and Leisure Services
Prerequisite is a New York State Child Abuse Identification and Reporting Certificate and completion of Responding to Emergencies or other approved first aid certification.

C. Concentration in Therapeutic Recreation: 27 credit hours

BIO 301: Human Anatomy and Physiology I or
BIO 302: Human Anatomy and Physiology II
PSY 101: General Psychology I
PSY 333: Developmental Psychology
PSY 421: Abnormal Psychology
REC 330: Introduction to Therapeutic Recreation
REC 530: The Therapeutic Recreation Process
REC 535: Therapeutic Recreation Interventions
REC 538: Design and Administration of Therapeutic Recreation Services
Support course in human services by advisement

D. Other: 13 credit hours

CAP 100: Introduction to Computer Applications
COM 210: Fundamentals of Public Speaking
Activity Requirement: 2-6 credit hours of recreation activities — at least two different activities
Liberal Arts and Free Electives (1-5 credit hours)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Major in Recreation with a concentration in Leisure/Recreation Program Delivery [REC/LRPD]
The leisure/recreation program delivery concentration builds on the core curriculum in recreation programming, adding in-depth knowledge and skills in leadership, supervision, event planning, human growth and development and social behavior. Students can choose a curriculum focused on working with youth or with older adults. This concentration is accredited by the National Recreation and Park Association and the American Association for Leisure and Recreation.

CAREER POTENTIAL
• Campus recreation director
• Boys and Girls Club director
• After school or teen center programmer
• Retirement community activity director
A. Required Courses: 30 credit hours
   REC 271: Foundations of Recreation
   REC 280: Programming in Parks, Recreation and Leisure Services
   REC 370: Outdoor Education Practicum
   REC 380: Leadership in Parks, Recreation and Leisure Services
   REC 393: Diversity and Inclusive Recreation Services
   REC 402: Management of Recreation Resources
   REC 407: Evaluation and Research
   REC 446: The Law of Parks, Recreation and Leisure Services
   REC 470: Senior Seminar
   REC 495: Administration of Recreation
B. Internship: 15 credit hours
   REC 475: Internship in Recreation and Leisure Services
   Prerequisite is a New York State Child Abuse Identification and Reporting Certificate and completion of Responding to Emergencies or other approved first aid certification.
C. Concentration in Leisure/Recreation Program Delivery: 24 credit hours:
   EDU 515: Leisure Education
   PSY 101: General Psychology I
   REC 427: Special Events Planning I
   REC 428: Special Events Planning II
   Advanced Administration and Supervision Area
   Three credit hours from the following:
   REC 503: Campus Recreation Programming and Administration
   REC 509: Human Resource Management in Leisure Services
   REC 560: Camp and Outdoor Program Administration
   Human Development Area
   Three credit hours from the following:
   PSY 231: Child Psychology
   PSY 232: Adolescent Psychology
   PSY 333: Developmental Psychology
   PSY 334: Psychology of Adulthood and Aging
   Social Behavior Area
   PSY 422: Social Psychology and
   Three credit hours from the following:
   EDU 525: Teaching the Inner City Child
   REC 508: Leisure Services for Older Adults
   SOC 220: Introduction to Social Gerontology
   SOC 373: Deviant Behavior
   SOC 425: Sociology of Aging and Life Course
   SOC/REC 455: Sociology of Leisure
   SOC 462: Juvenile Delinquency
   SOC 464: Corrections
   SOC 470: Sociology of the Family
   Wellness/Healthy Lifestyles Area
   Three credit hours from the following:
   HLH 110: Personal and Community Health
   HLH 210: Wellness and Health Promotion
   HLH 301: Stress Management
   HLH 313: Mental and Emotional Health
D. Other: 16 credit hours:
   CAP 100: Introduction to Computer Applications
   COM 210: Fundamentals of Public Speaking
   Activity Requirement: 2-6 credit hours of recreation activities — at least two different activities
   Liberal Arts and Free Electives (4-8 credit hours)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Recreation with a concentration in Outdoor Recreation Management and Education [REC/ORME]
Note: This concentration is not open to students with a minor in environmental and outdoor education.
The outdoor recreation management and education concentration allows students to focus in on different aspects of the outdoor recreation/education field. Outdoor leadership, natural resource recreation management, camp management and environmental and cultural interpretation are designated emphases in this concentration.

CAREER POTENTIAL
• Outdoor leader in a variety of agencies from Outward Bound, to campus outdoor programs, to camps
• Camp director
• State or national park manager
• Outdoor educator or interpretation specialist with nature centers, parks and other environmental agencies
A. Required Courses: 30 credit hours
   REC 271: Foundations of Recreation
   REC 280: Programming in Parks, Recreation and Leisure Services
   REC 370: Outdoor Education Practicum
   REC 380: Leadership in Parks, Recreation and Leisure Services
   REC 393: Diversity and Inclusive Recreation Services
   REC 402: Management of Recreation Resources
   REC 407: Evaluation and Research
   REC 446: The Law of Parks, Recreation and Leisure Services
   REC 470: Senior Seminar
   REC 495: Administration of Recreation
B. Internship: 15 credit hours
   REC 475: Internship in Recreation and Leisure Services
   Prerequisite is a New York State Child Abuse Identification and Reporting Certificate and completion of Responding to Emergencies or other approved first aid certification.
C. Core in Outdoor Recreation Management and Education (required in all emphases): 12-13 credit hours:
1. Natural Environment Area
   Three credit hours from the following:
   BIO 307: Field Natural History
   BIO 310: Field Biology
2. Ecology Area
Three credit hours from the following:
- BIO 102: Ecology and the Human Environment or
- BIO 412: General Ecology or
- CHE 125: Chemistry and the Environment or
- GLY 160: Geology and the Human Environment or
- GRY 110: Physical Geography

3. Environmental Attitudes and Literacy Area
Three credit hours from the following:
- EST 100: Introduction to Environmental Studies or
- REC 310: Wilderness and American Culture

4. Environmental Teaching Area
Three credit hours from the following:
- REC 569: Environmental and Cultural Interpretation or
- EDU 462: Environmental and Outdoor Education

D. One of the following Emphases: 12 credit hours

Outdoor Leadership Emphasis
- REC 379: Outdoor Recreation Activities
- Outdoor recreation activity courses, by advisement (3 cr. hr.)
- REC 574: Outdoor Pursuits Education and Leadership
- REC 560: Camp and Outdoor Program Administration

Natural Resource Recreation Management Emphasis
- REC 541: Site and Facilities Planning
- GLY 292: Land Use and Planning
- GRY 328: Geographic Information Systems
- POL 308: Environmental Law or
- REC 345: Adirondack Park Policies and Issues or
a policy course approved by the department

Camp Management Emphasis
- REC 360: Camp Counseling and Outdoor Education
- REC 509: Human Resource Management in Leisure Services
- REC 560: Camp and Outdoor Program Administration
- REC 541: Site and Facilities Planning or
- REC 344: Commercial Recreation Management or
- EDU 515: Leisure Education

Environmental and Cultural Interpretation Emphasis
- REC 569: Environmental and Cultural Interpretation or
- EDU 462: Environmental and Outdoor Education (whichever is not taken in the core)
- EST 100: Introduction to Environmental Studies or
- REC 310: Wilderness and American Culture (whichever is not taken in the core)
- REC 560: Camp and Outdoor Program Administration
Elective in interpretation, by advisement

E. Other: 15-16 credit hours
- CAP 100: Introduction to Computer Applications
- COM 210: Fundamentals of Public Speaking
Activity Requirement: 2-6 credit hours of recreation activities — at least two different activities
Liberal Arts and Free Electives (4-9 credit hours)

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Example of the B.S. in Recreation over four years

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Fall</strong></td>
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<tr>
<td>COR 101</td>
<td>COM 210</td>
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<td>REC 280</td>
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<td>REC 271</td>
<td>Foreign Language</td>
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<tbody>
<tr>
<td>CAP 100</td>
<td>REC 380</td>
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<td>CPN 101 or 103</td>
<td>REC 370</td>
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<tr>
<td>Quantitative Skills</td>
<td>GE Course</td>
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<td>Activity requirement</td>
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<th>Third Year</th>
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<td><strong>Fall</strong></td>
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<tr>
<td>REC 393</td>
<td>REC 470</td>
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<tr>
<td>Concentration</td>
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<td>Liberal Arts Elective</td>
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<tr>
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<td>Concentration</td>
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Note: Some recreation courses have an EDU prefix and are listed after the REC prefix courses

**REC 101: Recreation Activities**
(O) Focus on gaining skills in a specified recreation activity. Activities vary and course is repeatable as activities/subtitles change. S/U grading. (variable credit)

**REC 102: Backpacking**
(O) Backpacking techniques, skills, information and a practical experience. Participants will learn about technical equipment such as tents, packs and sleeping bags and acquire skills in navigation, cooking, low impact camping and other techniques necessary to practice this enjoyable outdoor recreation activity. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 103: Canoeing**
(O) Basic information and skills to canoe safely and efficiently. Strokes, portaging, handling, transporting, flat water, moving water, rescues and other experiences will be included. Local or more distant destination canoe trips will be involved, depending on the season. Equipment will be provided. Standards for American Canoe Association certifications will be used. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 104: Kayaking**
(O) Basic information and skills to kayak safely and efficiently. Strokes, rolls, portaging, flat water, moving water, rescues and other experiences will be included while paddling a variety of kayak models on nearby lakes and rivers. Field trip destinations will be determined by water levels, season and difficulty levels. Equipment will be provided. American Canoe Association standards for kayaking certifications will be used. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 105: Windsurfing**
(O) Windsurfing skills, equipment, environments, rescues and other practical experiences. A variety of wind, water, equipment and personal skills will be learned through field trips to local sailing areas. Equipment will be provided. US Windsurfing and US Sailing certification standards will be used. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 106: Rock Climbing**
(O) The fundamental skills and equipment necessary for a safe rock climbing experience. The basics of climbing such as belaying, knots and efficient movement will be mastered on the climbing wall at Cortland before venturing to a nearby crag for a day of outside climbing. All necessary equipment will be provided. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 107: Snowshoeing**
(O) Information, equipment and practical experiences allow students to quickly acquire the skills necessary to participate in one of the fastest growing winter activities—snowshoeing. Participants will learn backcountry navigation, dressing for the season and equipment selection. Local natural areas will be explored on snowshoe. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 108: Cross-Country Skiing**
(O) Basic skills and techniques of cross-country skiing, including the diagonal stride, skating, double poling, uphill techniques and downhill techniques will be taught. Participants will also learn how to safely enjoy the winter environment and the natural history of the region on trips to local forests and preserves. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 109: Winter Camping**
(O) Information and skills in order to travel and camp in snow and cold environments. Travel, safety and survival skills, shelters, clothing, equipment, cold injuries, illness and other topics. Winter trips to local or backcountry areas will be included. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 110: Bike Touring**
(O) Information and practical experiences involving bicycle travel, touring and lightweight camping. Participants will learn and practice mechanical skills, travel skills, planning routes, camping skills and other tasks typical of bike trips. Field trips to nearby scenic areas will be involved. Participants must provide their own bicycle. A special fee will be charged for field trip expenses. S/U grading. (1 cr. hr.)

**REC 129, 229, 329, 429, 529: Special Topics in Recreation and Leisure Studies**
Selected topics. May be taken more than once as subtitles change. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

**REC 150: Play Across Cultures**
(A) Study of similarities and differences in young people's play and celebrations through an examination of world cultures. (3 cr. hr.)

**REC 271: Foundations of Recreation**
(A) History, theory, philosophy of play and recreation; implications for individuals, groups in changing society. (3 cr. hr.)

**REC 280: Programming in Parks, Recreation, and Leisure Services**
(B) Introduction to programming principles and techniques for parks, recreation and leisure service settings. Particular focus on the design and implementation of recreation programs. (3 cr. hr.)

**REC 302: Community Recreation**
(O) Recreation in community agencies. History, organization, personnel, programming, finances, areas, facilities. Field trips may be required. (3 cr. hr.)

**REC 307: Outdoor Education for Persons with Disabilities**
(O) Overview of philosophy, principles, strategies and practices of outdoor education in working with persons with disabilities. Course typically includes practical experience at SUNY Cortland. Outdoor Education Center at Raquette Lake. Not open to students with credit for PED 307. (3 cr. hr.)
REC 310: Wilderness and American Culture
(F) History of ideas and attitudes about wilderness as expressed in the art, literature, philosophy and politics of American culture. Emphasis on developing views of wilderness, nature and environment that are historically and philosophically grounded. (3 cr. hr.) ■

REC 315: Ecotourism
(S-C) A global and local analysis of the physical environment as a tourism development resource. An examination of such natural systems as the rain forest, ocean and desert as tourism resources and the environmental impact of tourism on the viability of these riches. Regional and local studies of the environment as a basis for tourism development will be drawn from Amazonia, East Africa, Central America, the Caribbean and North America. Also listed as GRY 315. (3 cr. hr.) ■

REC 330: Introduction to Therapeutic Recreation
(F) History and philosophical development of therapeutic recreation. Examination of the needs, characteristics, abilities of people with disabilities; role of therapeutic recreation in enhancing quality of life. (3 cr. hr.)

REC 344: Commercial Recreation Management
(F) Study of commercial recreation as major component of the leisure service delivery system. Analysis of development potential of different types of recreation enterprises including resources, location, risks, sources of financing, pricing, managerial requirements, marketing, sources of technical assistance. (3 cr. hr.)

REC 345: Adirondack Park Policies and Issues
(O) Analysis of environmental and land-use policies in the largest park in the contiguous United States. Often taught at Cortland's Outdoor Education Center at Raquette Lake in the Adirondack Park. When taught at the Outdoor Education Center, students are assessed a fee for room and board. Also listed as POL 345. (3 cr. hr.) ■

REC 360: Camp Counseling and Outdoor Education
(C) Methods, techniques of camp counseling, programming. Knowledge, methods, practices for education in, about and for the outdoors. Often includes lab, field trips. (3 cr. hr.)

REC 370: Outdoor Education Practicum
(S-M) Outdoor living skills and environmental appreciation. Techniques and practices of outdoor education, organized camping and backcountry travel. Summer lab on campus followed by summer session at Raquette Lake. Participants are assessed a practicum fee. (3 cr. hr.)

REC 375: Wilderness First Responder
(O) Wilderness First Responder (WFR) certification course that focuses on preparation for emergency situations that involve prolonged patient care, severe environments, and improvised equipment. Topics include patient assessment, body systems, equipment improvisation, trauma, environmental medicine, toxins, backcountry medicine, wilderness protocols, and wilderness rescue. WFR is the definitive emergency care training course for all outdoor leaders and enthusiasts. Participants are assessed a fee for certification costs. (3 cr. hr.)

REC 379: Outdoor Recreation Activities
(F) Knowledge, skill, techniques, policies and procedures related to selected outdoor recreation activities. (3 cr. hr.)

REC 380: Leadership in Parks, Recreation and Leisure Services
(B) Study of leadership theory and practice at the small group, agency, and community level in a range of parks, recreation and leisure services contexts. Essential skills of leadership are learned and practiced, with a focus on ethical and value-based leadership with diverse people and communities. (3 cr. hr.)

REC 393: Diversity and Inclusive Recreation Services
(A) Inclusive programming guidelines and considerations for eliminating barriers to leisure participation for persons with differences (i.e., disability, race, sex, sexual identity, class). Involves practical experiences with persons with disabilities. (3 cr. hr.)■
RECREATION AND LEISURE STUDIES

REC 446: The Law of Parks, Recreation and Leisure Services
(B) The study of contracts, civic liberties and rights, property law, tort liability, and managing and transferring risks in the context of parks, recreation and leisure services. (3 cr. hr.)

REC 455: The Sociology of Leisure
(O) History, growth of leisure. Contemporary problems of mass leisure, relation to work, politics, economics, and such basic human institutions as family, church, community. Prerequisite: REC 271 or SOC 100, 150 or ANT 102. Also listed as SOC 455. (3 cr. hr.)

REC 462: Environmental and Outdoor Education
(S) History, development and trends in environmental and outdoor education. Curriculum development for fostering an environmentally literate citizenry and techniques for successfully utilizing the out-of-doors as a teaching medium. Field trips and outdoor laboratory experiences. Also listed as EDU 462. (3 cr. hr.)

REC 470: Senior Seminar
(A) Development and analysis of internship and career goals, exploration of characteristics of the profession in relation to personal and professional goals, including a focus on professional ethics, continued professional development, and development of supervision skills in the context of issues and trends in the field. Professional field experience required. Prerequisite: Students must have senior standing during the semester course is taken. (3 cr. hr.)

REC 473: Camp Leadership
(S-M) Advanced theory practicum in administration, leadership, programming at the College Outdoor Education Center. Prerequisite: Consent of instructor. (2 cr. hr.)

REC 475: Internship in Recreation and Leisure Services
(A) Fourteen weeks of supervised full-time internship experience in municipal, school, community, commercial, corporate, youth-serving agency, park and forest, medical/clinical, camp. Work done in communities, agencies, designated by College. Prerequisites: REC 470, New York State certification in Child Abuse Identification and Reporting, completion of Responding to Emergencies (RTE) or other approved first aid certification, approval of internship coordinator, cumulative grade point average of at least 2.5 in the major and 2.0 overall. Consult department advisement manual for specific prerequisites and policies. S, U grades are assigned. (15 cr. hr.)

REC 495: Administration of Recreation
(F) Procedures, practices, policies in administration of recreation. Legislation, torts and contracts, managing authorities, budgets, records and reports, public relations, personnel practices. (3 cr. hr.)

REC 503: Campus Recreation Programming and Administration
(O) Design, coordination, delivery and management of leisure arts, and recreation programs and services for the campus community. Topics include programming principles, types of programs, interoffice/provider coordination, publicity, budgeting, supervision, evaluation, facilities, equipment management and auxiliary services. (3 cr. hr.)

REC 508: Leisure Services for Older Adults
(C) Intensive study of problems associated with aging; implications for health, recreation. Recreational needs, programs, physical and emotional health; sociological, psychological, educational, economic factors pertinent to aging. (3 cr. hr.)

REC 509: Human Resource Management in Leisure Services
(S) Contemporary issues and related administrative practices associated with managing human resources in leisure services. Examining concepts, principles and objectives of personnel supervision, including functions, processes, identification and application of methods and techniques. (3 cr. hr.)

REC 530: The Therapeutic Recreation Process
(S) In-depth examination of the therapeutic recreation process, including assessment, planning, implementation, documentation, and evaluation. Additional topics include working with other health and human service professionals on interdisciplinary or transdisciplinary teams, activity analysis and adaptations, and principles and best practices in applying the therapeutic recreation process in a variety of health and human service settings. Lab is required. Prerequisite: REC 330 or equivalent consent of department. Corequisite: REC 535. (3 cr. hr.)

REC 531: Inclusive Outdoor Education
(O) This course is designed to address issues, models and strategies pertaining to the development of inclusive outdoor education programs that address all ability levels including those with physical and developmental disabilities. Also listed as PED 531. Not open to students with credit for PED 531. (3 cr. hr.)

REC 532: Therapeutic Recreation in the Schools
(O) This course prepares students to provide therapeutic recreation services to students with disabilities in public school systems as mandated by the Individuals with Disabilities Education Act. Participants will learn to apply the therapeutic recreation process in a school setting and develop appropriate recreation goals for Individualized Educational Plans. Curricula to support therapeutic recreation in the schools will be identified, as well as the roles therapeutic recreation specialists can play to advocate for and deliver recreation as a related service in the schools. Prerequisite: REC 330 or department consent. (3 cr. hr.)

REC 535: Therapeutic Recreation Interventions
(S) In-depth examination of individual and group techniques used in therapeutic recreation practice, including therapeutic interventions, modalities, instruction, leadership, supervision, and counseling techniques. Prerequisite: REC 330 or equivalent consent of department. Corequisite: REC 530. (3 cr. hr.)

REC 538: Design and Administration of Therapeutic Recreation Services
(F) In-depth examination of the design and administration of therapeutic recreation services delivered in health and human service settings. Focus on planning, organizing, funding, and managing therapeutic recreation services. Analysis of standards, legislation, policies, issues, and trends that affect service delivery. Prerequisite: REC 535. (3 cr. hr.)

REC 541: Site and Facilities Planning
(O) Design of recreation areas and facilities; feasibility studies, site selection, environmental impact, accessibility, planning and development. (3 cr. hr.)

REC 549: Natural Resource Recreation Policy and Management
(C) History and processes of natural resources law and policy development. Contemporary issues in human dimensions of natural resource management. Case studies in recreation resource management. Prerequisites: REC 310 and 402 or REC 610 and 640. (3 cr. hr.)
RECREATION AND LEISURE STUDIES

RELIGIOUS STUDIES

Course Descriptions

RLS 200: World Religions
(B) Introduction to a variety of ways for understanding religion and religious experience through examination of some major world religions, their origins, historical development, contemporary manifestations. (3 cr. hr.)

RLS 129, 229, 329, 429: Special Topics in the Study of Religion
(B) This course will focus on specialized religious topics, within one or several religious traditions. (1-3 cr. hr.)

EDU 515: Leisure Education
(B) Introduction to philosophy, principles and techniques of leisure education. Implications for curriculum development in various settings and leisure service delivery systems. (3 cr. hr.)

Cortland International Program in Recreation
The following titles are among the recreation and leisure courses offered at the London Metropolitan University through Cortland's Study Abroad Program. These may be substituted for certain major requirements.

The Leisure and Tourism Environment
Public Policy: Leisure and Tourism
Human Resource Management
Organization Management and Design
Destination Marketing
Leisure Planning and Development
Museums and Heritage

The following titles are among the outdoor education and tourism courses offered at St. Martin's University through Cortland's Study Abroad Program. These may be substituted for certain major requirements. A wide range of courses in other subjects is also available at St. Martin's.

Therapeutic and Residential Applications of Outdoor Adventure
Generic Outdoor Skills
Environmental Education
Nature Conservation and Management
Expedition Organization
Tourism Policy and Planning
Leisure and Recreation Policy and Issues

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
Science

COURSE DESCRIPTIONS

SCI 129, 229, 329, 429, 529: Special Topics in Science
Selected topics. May be taken more than once as subtitle changes.
Prerequisites: Designated by department as appropriate for
content and academic level of credit. (1-4 cr. hr.)

SCI 141: Integrated Earth Science and Biology
(A) An interdisciplinary course for elementary education majors.
Course utilizes a student-centered, hands-on approach to develop
basic concepts of Earth science and biology. Emphasis is on the
construction of meaningful mental models which can be applied to
every day science of biology, astronomy, meteorology and geology.
Two two-hour lectures, one two-hour lab. (4 cr. hr.)

SCI 142: Integrated Physics and Chemistry
(F) Activity-based, discussion-oriented science course for childhood
education majors, involving experiments and problem-solving
activities in areas typically classified as chemistry and physics. Gives
students insight into some of the basic aspects of nature, helps
develop a better understanding of science, and improves ability to
teach these ideas. (3 cr. hr.)

SCI 180: Natural Hazards and Disasters
(F) Study of the interaction between society and natural hazards
such as hurricanes, floods, earthquakes and volcanoes. Consideration
of both the physical operation and impacts of these phenomena,
and how humans evaluate and respond to these threats to their
lives and property. Emphasis on current events and recent natural
disasters. (3 cr. hr.)

SCI 300: Science and Its Social Context
(B) Philosophical discussion about the nature of scientific
knowledge and the relation between science and society. Will
consider the impact powerful social groups have on science and
how the scientist's nonscientific attitudes might influence her/his
work. (3 cr. hr.)

SCI 304: Plants and People
(A) Historical and present-day relationships between plants and
people. Major topics include: photosynthesis and the evolution
of life; the Green Revolution; drugs and medicines obtained from
plants; plant diseases and ecological relationships; plants
providing food and beverages. Three lectures. (3 cr. hr.)

SCI 310: Nuclear Weapons and Arms Control
(A) Overview of atomic and nuclear weapons, arms control
agreements, basic scientific principles, fission and fusion reactions,
general effects of nuclear war with emphasis on health and genetic
effects, climatic effects, including nuclear winter. (3 cr. hr.)

SCI 320: Science, Technology and Culture
(F) Relationship between scientific and technological developments
and social changes throughout history. (3 cr. hr.)

SCI 325: Biotechnology and Human Aging
(F) Biological perspectives on aging in cells, humans and societies
including how past, present and future biotechnological advances
may have a major impact on our society. (3 cr. hr.)

SCI 330: Science and the Public
(F) Conceptual aspects of science and selected scientific issues
discussed in context of how people perceive science and scientists
and how they respond to and affect scientific developments.
Three one-hour discussion sessions. Prerequisite: Completion of
course requirements in English Composition; completion of GE
category 8 (Natural Sciences) courses recommended. (3 cr. hr.)

SCI 340: Science and Technology in the United States
(F) Scientific and technological developments in U.S. and their
impact on American society from Colonial period to present will
be discussed. (3 cr. hr.)

SCI 350: Science in the Social World
(C) Modern scientific progress and its bearing upon human
society. (3 cr. hr.)

SCI 360: Science and Technology in Medicine
(O) Development of medical science and technology throughout
history. (3 cr. hr.)
SUNY Cortland 2004-2005 Undergraduate Catalog

SCHOOL
Arts and Sciences

FACULTY
Jamie Dangler (Chair), Herbert Haines, Richard Kendrick, Kassim Kone, William C. Lane, Craig Little, Ellis McDowell-Loudan, William Skipper, John R. Sosa, Sharon Steadman, Stuart Traub, Anne Vittoria, Philip Walsh, Tiantian Zheng

PROGRAMS OFFERED
Bachelor of Arts in Sociology
Bachelor of Arts in Adolescence Education: Social Studies and Sociology (7-12)

MAJORS OFFERED
Sociology
Adolescence Education: Social Studies and Sociology (7-12)
Criminology

CONCENTRATIONS OFFERED
Criminology
Social Gerontology

MINORS OFFERED
Sociology
Social Gerontology

DESCRIPTION
The sociology program offers a curriculum designed to help students develop their analytical skills and ability to understand conceptual and theoretical material. Courses encourage students to think creatively and flexibly and to broaden their perspectives on the world around them. Sociology majors acquire an educational background that is useful in careers relating to counseling, gerontology, human services, law, law enforcement, probation work, public administration, management and international relations.

The major also prepares students for a variety of careers in the private and public sectors that require an understanding of race and ethnic relations, cross-cultural settings, contemporary social problems, and demographic and social transformations in contemporary society.

Students are encouraged to take pre-career internships and research experiences for academic credit. Students who are interested in teaching may combine study in the sociology major with professional courses leading to a qualification for provisional certification in adolescence social studies (grades 7-12).

SPECIAL FEATURES
• Internships
• Study abroad opportunities
• Exchange program with Griffith University, Australia
• National honor society in sociology (Alpha Kappa Delta)
• National honor society in gerontology (Sigma Phi Omega)
• Sociology/Anthropology Club
• Teaching certification for adolescence social studies

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to all sociology majors.
2. Liberal Arts Requirements - 90 credit hours

Major in Criminology [CRM]

Criminology focuses on the nature and causes of crime, as well as on the analysis of crime control policy. The B.A. in criminology allows students to pursue focused study in criminology within the context of a broad liberal arts education. It offers the dual options of preparation for immediate entry into employment in the criminal justice area, or pursuit of advanced studies in criminology and related fields at the graduate level. With appropriate guidance from advisors, students can combine the criminology major with course work in other areas that will prepare them for graduate-level studies in specialty areas such as forensics, computer crime investigation, law and social work.

CAREER POTENTIAL
• Law Enforcement • Substance Abuse Counseling
• Corrections • Criminal Investigation
• Probation • Social Work
• Youth Counseling • Human Services

Total credit hours required for major: 39

A. Core courses, required: 27 credit hours
SOC 150: Introduction to Sociology or
SOC 100: American Society
CRM/POL 303: The Criminal Justice System
CRM/SOC 373: Deviant Behavior
CRM/SOC 462: Juvenile Delinquency
CRM/SOC 463: Criminology
CRM/SOC 464: Corrections

B. Legal process electives: Three credit hours
Students must choose one of the following:
CRM/SOC 375: Sociology of Law
CRM/SOC 377: Crime and Criminal Law
POL 202: Law and Judicial Process
POL 304: Constitutional Law
POL 404: Civil Liberties
POL 470: Justice and Society
PHI 340: Philosophy of Law

C. Criminology electives: Six credit hours
Students must choose two of the following:
CRM/SOC 333: The Police
CRM/POL 348: Gun Control: Crime, Law, Policy
CRM/SOC 365: Sociology of Violence

Sociology/Anthropology

DEPARTMENT
Cornish Hall, Room D-311
(607) 753-2726
E-Mail: danglerj@cortland.edu
www.cortland.edu/sociology/
Major in Sociology [SOC]

The sociology major provides students with a broad degree of flexibility in choosing a career after graduation, the opportunity to explore careers in the human services, public administration and management, and a general background for graduate work in the social sciences, public policy, law and social work. In a rapidly changing world, students who major in sociology obtain a solid liberal arts education that fosters versatility in the world of work and good citizenship.

CAREER POTENTIAL
• Social work
• Consulting
• Health care
• Government agencies
• Human services

Total credit hours required for major: 36

A. Required Courses: 12 credit hours
   SOC 150: Introduction to Sociology (GE 1)
   SOC 492: Sociological Theory
   SOC 493: Methods of Social Research I
   SOC 494: Methods of Social Research II (QS)

B. Category Courses: 12 credit hours
   Three credit hours from Category A
   Three credit hours from Category B
   Three credit hours from Category C
   Three credit hours from Category D

   All sociology majors must have at least one course from each of the four categories (A, B, C, D) from the list that follows. Whether or not more than one course is taken from any single category will depend on the student’s personal preferences or declared concentration. Special courses not listed within a category are occasionally taught with topics (TP) designation (SOC 129, 229, 329 or 429) and may fulfill one of these categories. Category designations for such courses are posted by the department each semester.

   Category A: Social Institutions
   SO CANT 330: Religions of Asia
   SO C 340: Environmental Sociology
   SO C 371: Sociology of Medicine
   SO C/CRM 375: Sociology of Law
   SO C/CRM 377: Crime and Criminal Law
   SO C 405: Social Breakdown in the United States
   SO C/HUS 430: Social Welfare Institutions
   SO C 455: Sociology of Leisure
   SO C 465: Political Sociology
   SO C/HUS 470: Sociology of the Family
   SO C 475: Sociology of Religion
   SO C 487: Sociology of Education

   Category B: Social Problems and Deviance
   SO C 303: Crime Waves and Culture Wars
   SO C 351: The Community
   SO C/CRM 352: U.S. Ethnic Identity and Conflict
   SO C 355: Gender and the Life Course
   SO C/CRM 369: Population and Society
   SO C 385: Sociology of Work
   SO C 401: Sociology of Sex and Gender
   SO C 420: Issues in Gerontology
   SO C 451: Social Stratification
   SO C 461: Urban Sociology

   Category C: Social Processes
   SO C 160: Social Change in the Modern World (GE 5)
   SO C 220: Introduction to Social Gerontology
   SO C/ANT 315: Development Sociology
   SO C 350: Civil Society (GE 5)
   SO C 360: Self and Society
   SO C 366: Sociology of International Conflict
   SO C 425: Sociology of Aging and the Life Course
   SO C 486: Collective Behavior

   Category D: Social Problems and Deviance
   SO C/CRM 333: The Police
   SO C/CRM 365: Sociology of Violence
   SO C 373: Deviant Behavior
   SO C/CRM 380: White-Collar Crime
   SO C/CRM 383: Race, Class Gender and Crime
   SO C/CRM 462: Juvenile Delinquency
   SO C/CRM 463: Criminology
   SO C/CRM 464: Corrections
   SO C/CRM 485: Capital Punishment

C. Sociology Electives: 12 credit hours

   Options for fulfilling these credit hours include courses from any of the four categories (A, B, C, D), three credit hours of internship (CPV 400), and/or one anthropology course at the 300- or 400-level (excluding AN T 300).

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Sociology with a concentration in Criminology [SOC/CRIM]

The criminology concentration is especially relevant to students considering a career in law enforcement and human service related agencies such as the federal, state and local police, correctional institutions, security organizations and judicial organizations. The program includes opportunities to earn academic credit for internship experiences with community police, court and probation agencies, juvenile detention centers and other agencies involved in counseling, criminal justice and reform.

CAREER POTENTIAL
• Law enforcement
• Youth counseling
• Private security
• Correctional institutions
• Substance Abuse Counseling

Total credit hours required for major: 36
C. Category Courses, required: 12 credit hours
SOC 150: Introduction to Sociology (GE 1)
SOC 492: Sociological Theory
SOC 493: Methods of Social Research I
SOC 494: Methods of Social Research II (QS)

B. Gerontology Concentration Courses, required: 12 credit hours
SOC/CRM 373: Deviant Behavior
SOC/CRM 463: Criminology
SOC/CRM 464: Corrections

One additional course chosen from the following:
SOC 302: Crime Waves and Culture Wars (covers Category B)
SOC/CRM 333: The Police
SOC/CRM 365: Sociology of Violence
SOC/CRM 375: Sociology of Law (covers Category A)
SOC/CRM 380: White-Collar Crime
SOC/CRM 383: Race, Class, Gender and Crime
SOC/CRM 462: Juvenile Delinquency
SOC/CRM 485: Capital Punishment

C. Category Courses: 6-9 credit hours
See list under Major in Sociology.

D. Sociology Electives: 3-6 credit hours

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Dual major in Adolescence Education: Social Studies and Sociology (7-12) [SST and SOC]
This program is currently in the process of being reviewed by SUNY and the State Education Department.
This program allows students who major in sociology to qualify for certification to teach adolescence education in social studies (grades 7-12). It combines a major in sociology with 47-68 credit hours in additional course work and professional teacher preparation.

A. Requirements for the sociology major: 36 credit hours (see above)
B. Professional Preparation: 44-68 credit hours
(Including additional social science courses)
HIS 100: The World to 1500
HIS 101: The World since 1500
HIS 110: Western Civilization from 1715
HIS 111: Western Civilization since 1715
HIS 200: The United States to 1877
HIS 201: The United States from 1877
HIS 301: The United States from 1877

C. Professional Sequence: Junior year, four credit hours
AED 310: Grammar and the Writing Process
HIS 449: Literacy in the Middle and Secondary School

D. Professional Sequence: Senior year, 21 credit hours*
AED 301: Pre-practice Teaching Seminar

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124
Example of the B.A. in Sociology over four years

Note: Based on freshman admission and 15 credits per semester. More than 15 credits will have to be taken in one or more semesters in order to reach the required 124 credits for graduation.

**First Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall     | SOC 150 (GE 1)  
CPN 100 or 102  
COR 101  
Foreign language or elective |
| Spring   | CPN 101 or 103  
One sociology course (200 or 300 level)  
Foreign language course  
Two GE courses |

**Second Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall     | Two sociology courses  
Two GE courses  
Foreign language course  
GE course  
Elective |
| Spring   | Two sociology courses  
Two GE courses  
Elective |

**Third Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall     | Two sociology courses  
Two GE courses  
Total credit hours: 15-16 |
| Spring   | Two sociology courses  
Two GE courses  
Total credit hours: 15 |

**Fourth Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall     | One sociology course  
Four electives  
Total credit hours: 15-18 |
| Spring   | One sociology course  
Four electives  
Total credit hours: 15 |

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**Minor in Sociology [SOC]**

A. Required Courses: Three credit hours  
SOC 150: Introduction to Sociology (GE 1)

B. Sociology Electives: 15 credit hours  
In addition to sociology courses, options for fulfilling these credit hours include three credit hours of internship (CPV 400) and one anthropology course at the 300-400 level (excluding ANT 300).

**Minor in Social Gerontology [SGRT]**

This minor is open to students in any major other than sociology. Majors in sociology can declare a concentration in social gerontology.

A. Required Courses: Twelve credit hours  
SOC 220: Introduction to Social Gerontology  
SCI 325: Biotechnology and Human Aging  
PSY 334: Psychology of Adulthood and Aging  
SOC 425: Sociology of Aging and the Life Course

B. Elective Courses: Six credit hours  
Choose two of the following:  
CPV 400: Cooperative Educational Internship  
HLH 513: Death, Bereavement and Suicide  
HLH 555: Health and Aging  
REC 508: Leisure Services for Older Adults  
SO C 355: Gender and the Life Course  
SO C 420: Issues in Social Gerontology  
SO C/HUS 430: Social Welfare Institutions

**TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18**

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*To be eligible for student teaching, a student must have declared adolescence education: social studies (7-12) as a major by the beginning of the second semester of the junior year and must have senior status at or near 90 credit hours, with 24 credit hours in the academic social science major, which must be officially declared. A student must also have an overall grade point average of 2.5, a grade point average of 2.7 in the academic social science major, and a C or better in AED 300. No student who receives a grade below a C- in any introductory course in the academic social science major will be allowed to enter student teaching until the course has been retaken and a higher grade earned. Student teaching is a capstone experience; students who cannot graduate by the December following student teaching may not register for the AED 400, 401, 402 sequence.*

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 126**

**Minor in Sociology [SOC]**

A. Required Courses: Three credit hours  
SOC 150: Introduction to Sociology (GE 1)

B. Sociology Electives: 15 credit hours  
In addition to sociology courses, options for fulfilling these credit hours include three credit hours of internship (CPV 400) and one anthropology course at the 300-400 level (excluding ANT 300).

**TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18**

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**Minor in Social Gerontology [SGRT]**

This minor is open to students in any major other than sociology. Majors in sociology can declare a concentration in social gerontology.

A. Required Courses: Twelve credit hours  
SOC 220: Introduction to Social Gerontology  
SCI 325: Biotechnology and Human Aging  
PSY 334: Psychology of Adulthood and Aging  
SOC 425: Sociology of Aging and the Life Course

B. Elective Courses: Six credit hours  
Choose two of the following:  
CPV 400: Cooperative Educational Internship  
HLH 513: Death, Bereavement and Suicide  
HLH 555: Health and Aging  
REC 508: Leisure Services for Older Adults  
SO C 355: Gender and the Life Course  
SO C 420: Issues in Social Gerontology  
SO C/HUS 430: Social Welfare Institutions

**TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18**
Crimimology/Sociology

COURSE DESCRIPTIONS

Criminology

CRM 303: The Criminal Justice System
(C) Introduction to structure, operation and politics of criminal justice system (CJS). Basic operational details of CJS, including roles played by police, prosecutors, defense attorney, judges, and community. Political dimension to definition of crime, race and sex bias in CJS, and contemporary problems in application of capital punishment. Examination of white-collar crime as it relates to economics and criminal law. Also listed as POL 303. (3 cr. hr.)

CRM 333: The Police
(C) Provides students with a critical understanding of history of law enforcement, the police, and policing in the United States. Will focus on four major issues related to policing: the history and role of the police in America; learning police work and becoming a police officer; issues and problems in policing; and current issues and trends in policing. Social science research on the police and policing will be the basis for studying and analyzing this aspect of the criminal justice system. Also listed as SOC 333. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 348: Gun Control: Crime, Law, Policy
(O) Criminological, legal, historical, policy and political consequences of the gun issue in America. Historical and contemporary gun habits, the crime and self-defense debates, the role of the Second Amendment’s “right to bear arms,” the gun culture, public attitudes, interest groups, federal gun laws, contemporary political controversies and the effectiveness of gun control measures. Also listed as POL 348. (3 cr. hr.)

CRM 365: Sociology of Violence
(B) Physical violence as interpersonal, cultural, societal, political phenomenon. Topics include the learning of aggression, the social organization and rationalization of various forms of violence, the experiences of victims, and the prospects for reducing current levels of violent conflict. Prerequisite: ANT 102 or SOC 100 or 150. Also listed as SOC 365. (3 cr. hr.)

CRM 373: Deviant Behavior
(A) A critical examination of sociological theories of deviance and social control (functionalism, anomie, social disorganization, differential association, labeling, conflict, and others as appropriate) and their application to behavior that elicits social disapproval. Also listed as SOC 373. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 375: Sociology of Law
(B) Analysis of law with respect to its functions as a means of social control and its relationships with other social institutions. Topics include an interdisciplinary survey of jurisprudence, the natural law approach versus legal and cultural realism, law as a source of crime, the administration of justice, and law in non-Western cultures. Also listed as SOC 375. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 377: Crime and Criminal Law
(B) Study of legal rules and procedures that are essential to the criminal judicial process. Examination of the English basis for criminal law, an analysis of the relationship between the state and the development of criminal law. Examination of criminal law and rules of evidence with emphasis on the origins, development, scope and impact on the accused, the criminal justice system, and society. Also listed as SOC 377. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 380: White-Collar Crime
(B) Surveys the broad range of white-collar crimes from employee embezzlement to corporate pollution law violations. Includes extensive coverage of the theories proposed to explain white-collar crimes, the methodologies used to study white-collar wrongdoing, and a review of the strategies proposed to control white-collar crimes. Also listed as SOC 380. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 462: Juvenile Delinquency
(B) Historical development of juvenile court; theoretical interpretations of delinquency; modern trends in prevention, treatment. Also listed as SOC 462. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 463: Criminology
(B) Sociological study of crime and its consequences; the etiology, extent, and nature of crime in society. The focus of attention is on an historical and contemporary examination of that nature, role, and causes of crime and the relationship between crime and social control. Topics include explanations for crime, typologies of crime, criminal statistics, criminal law, and how pragmatic agencies of the justice system — the police and courts — operate to prevent, detect, manage, and influence crime in society. Also listed as SOC 463. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 464: Corrections
(B) Historical approach to correctional ideas and institutions in the United States and Europe. Focus is on the development of institutions and ideas for “correcting” dependent poverty, chronicity, delinquency and mental illness. Examination of the changing relationship between correctional institutions and other economic and social institutions. Also listed as SOC 464. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

CRM 485: Capital Punishment
(C) Examination of the death penalty as an element of American criminal justice policy. Topics include the development of the modern system of capital punishment; the responsibilities and experiences of attorneys, jurors, prison personnel and others in its implementation; the social network of death row; and empirical research on deterrence, sentencing disparities by race, and death penalty’s fiscal impact, the estimated probability of miscarriages of justice, and other issues in the current policy debate. Also listed as SOC 485. Prerequisite: ANT 102 or SOC 100 or 150. (3 cr. hr.)

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, LAS
SOC 100: American Society
(A) This course examines the historical development of American society with reference to changing notions of freedom and equality as they are embedded in the social institutions of polity, work, religion and the family. (3 cr. hrs.)

SOC 129, 229, 329, 429, 529: Special Topics in Sociology
Selected topics. May be taken more than once as substitute titles. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

SOC 150: Introduction to Sociology
(A) Social structure, institutions, processes and major social forces. Emphasis on American society. (3 cr. hr.)

SOC 160: Social Change in the Modern World
(B) Examines the ways in which three major events have shaped the modern world and the symbols, images and words with which we attempt to understand that world. The course looks at the effects of the French Revolution of 1789, the Russian Revolution of 1917, and the fall of Communism in Eastern Europe and Russia, not just as the extraordinary events they were in and of themselves but in terms of the enduring impact of these events on the modern world and the way we understand it. (3 cr. hr.)

SOC 202: Introduction to Social Gerontology
(F) Introduces theories, concepts, research and applied aspects of the study of aging in American society. Topic areas include: social and institutional issues related to family, work and retirement and the economy, minority groups, biomedical, psychological, demographic and public policy perspectives on aging. (3 cr. hr.)

SOC 230: Prejudice and Discrimination
(B) Descriptive and theoretical review of the existence and effects of prejudice and discrimination in worldwide context. Comparison of Western and non-Western social structure, and of dominant and subordinate relationships in the U.S. and around the world. Also listed as ANT 230. (3 cr. hr.)

SOC 233: The Police
(C) Provides students with a critical understanding of history of law enforcement, the police and policing in the United States. Will focus on four major issues related to policing: the history and role of the police in America; learning police work and becoming a police officer; issues and problems in policing; and current issues and trends in policing. Social science research on the police and policing will be the basis for studying and analyzing this aspect of the criminal justice system. Also listed as CRM 333. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.)

SOC 235: Civil Society
(C) The course begins with an examination of the historical development of and the social and psychological underpinnings of civility. It then describes the ideas and the practices of civil society in liberal modern societies from the eighteenth century to the present. The course concludes by examining the character of civility and of civil society in the contemporary United States in light of recent changes in the market economy, the democratic state, publics and the social realm of familial, communal and associational ties. (3 cr. hr.)

SOC 237: Religions of Asia
(B) General introduction to the basic and enduring structures of the major religions of Asia with attention to the fundamentals of history, cultural aspects (sacred objects or places, beliefs, values, symbols and rituals), social organization, and present day position. Prerequisite: SOC 100 or 150 or ANT 102. Also listed as ANT 330. (3 cr. hr.)

SOC 250: Environmental Sociology
(C) Analysis of household, workplace, local and global environmental issues with emphasis on the interplay of cultural, social, political and economic factors in the development of and response to environmental problems. Topics covered include the effects of toxic substances on ecosystems, human health and safety risks, consumption patterns and their relationship to environmental problems, government regulation, conflicts between science and politics in the assessment of workplace and environmental risks, social stratification and environmental risks, citizen activism and social movements around environmental issues. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.)

SOC 280: Development Sociology
(O) This course examines the historical development of American society with reference to changing notions of freedom and equality as they are embedded in the social institutions of polity, work, religion and the family. (3 cr. hrs.)

SOC 301: Development Sociology
(O) Anthropologists and development sociologists' specific roles in economic development, public health, other projects involving cross-cultural planned change. Concepts of socioeconomic change emphasizing classic case studies of applied anthropology and sociology; modern roles in project planning, design, instrumentation and evaluation. Social scientists' responsibilities in understanding recipient culture, in encouraging participatory approaches to development as part of an interdisciplinary development project team emphasized. Prerequisite: SOC 100 or 150 or ANT 102. Also listed as ANT 315. (3 cr. hr.)

SOC 330: Religions of Asia
(B) General introduction to the basic and enduring structures of the major religions of Asia with attention to the fundamentals of history, cultural aspects (sacred objects or places, beliefs, values, symbols and rituals), social organization, and present day position. Prerequisite: SOC 100 or 150 or ANT 102. Also listed as ANT 330. (3 cr. hr.)

SOC 340: Environmental Sociology
(C) Analysis of household, workplace, local and global environmental issues with emphasis on the interplay of cultural, social, political and economic factors in the development of and response to environmental problems. Topics covered include the effects of toxic substances on ecosystems, human health and safety risks, consumption patterns and their relationship to environmental problems, government regulation, conflicts between science and politics in the assessment of workplace and environmental risks, social stratification and environmental risks, citizen activism and social movements around environmental issues. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.)

SOC 350: Civil Society
(C) The course begins with an examination of the historical development of and the social and psychological underpinnings of civility. It then describes the ideas and the practices of civil society in liberal modern societies from the eighteenth century to the present. The course concludes by examining the character of civility and of civil society in the contemporary United States in light of recent changes in the market economy, the democratic state, publics and the social realm of familial, communal and associational ties. (3 cr. hr.)

SOC 498: Seminar in Criminology
(O) Theoretical, empirical analysis of selected topics in criminology. Topics will vary according to instructor. Prerequisites: Nine hours of criminology, junior standing. (3 cr. hr.)
SOC 355: Gender and the Life Course
(B) Theoretical and practical examination of the interlocking forces of gender and age within the context of society and the constraints of social structure, from a life course perspective. Topical areas will include the social construction of age and gender, structural inequalities that result in ageism and sexism across the life course, male and female experiences of aging that interact with gender to give rise to changed gender roles and relationships into later life. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category B. ■

SOC 360: Self and Society
(B) Theories of structure, function of self in society dealing primarily with the American case. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category C. ■

SOC 365: Sociology of Violence
(B) Physical violence as interpersonal, cultural, societal, political phenomenon. Topics include the learning of aggression, the social organization and rationalization of various forms of violence, the experiences of victims, and the prospects for reducing current levels of violent conflict. Also listed as CRM 365. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 366: Sociology of International Conflict
(S) General theories of social conflict used to provide theoretical framework for understanding and analyzing complexities of international conflicts and ways which conflicts emerge, are waged, and end. General theories of social conflict are applied to one or more case studies of recent international conflicts. Portion of course devoted to discussing ways which international conflict can be resolved nonviolently — through negotiation and mediation — and the limits of our knowledge about nonviolent approaches. Prerequisite: One of the following: ANT 102, GRY 120, 125, HIS 101, 111, IST 200, POL 100, 101, SOC 100, 150. (3 cr. hr.) Category C. ■

SOC 369: Population and Society
(S) Social significance of population mass, population redistribution through births, deaths, migration. Prerequisite: SOC 100 or 150 or ANT 102. Also listed as ANT 369. (3 cr. hr.) Category B. ■

SOC 371: Sociology of Medicine
(O) Sociological examination of illness, treatment of disease, medical politics and medical policy. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 373: Deviant Behavior
(A) A critical examination of sociological theories of deviance and social control (functionalism, anomie, social disorganization, differential association, labeling, conflict and others as appropriate) and their application to behavior that elicits social disapproval. Also listed as CRM 373. Prerequisite SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 375: Sociology of Law
(B) Law is analyzed with respect to its functions as a means of social control and its relationships with other social institutions. Topics include an interdisciplinary survey of jurisprudence, the natural law approach versus legal and cultural realism, law as a source of crime, the administration of justice, and law in non-Western cultures. Also listed as CRM 375. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 377: Crime and Criminal Law
(B) Study of legal rules and procedures that are essential to the criminal judicial process. Examination of the English basis for the development of criminal law. Examination of criminal law and rules of evidence with emphasis on the origins, development, scope and impact on the accused, the criminal justice system, and society. Also listed as CRM 377. Prerequisites: ANT 102 or SO C 100 or SO C 150. (3 cr. hr.) Category A. ■

SOC 380: White-Collar Crime
(B) Surveys the broad range of white-collar crimes from employee embezzlement to corporate pollution law violations. Includes extensive coverage of the theories proposed to explain white-collar crimes, the methodologies used to study white-collar wrongdoing, and a review of the strategies proposed to control white-collar crimes. Also listed as CRM 380. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 383: Race, Class, Gender and Crime
(B) Involvement of the poor and minorities, especially African-Americans, Latinos, Asian-Americans, Native Americans, and women in crime and the criminal justice system. Special attention given to the role of racism in theories of crime and criminal law, and the treatment of minorities by the police, courts, and other components of the criminal justice system. Also listed as CRM 383. Prerequisite: ANT 102 or SOC 100 or SOC 150. (3 cr. hr.) ■

SOC 385: Sociology of Work
(B) Social organization of work in modern society, with particular attention devoted to the major transformations of work organization and occupational structure in the United States and to the consequences they have had for family life, class structure, politics and America's place in the international economy. Prerequisite: SOC 100 or SOC 150. (3 cr. hr.) Category A. ■

SOC 400: Field Practicum
(A) Supervised experience in a social agency. Open to sociology- anthropology majors only. Only three credit hours will count for the major requirement; the other three will be credited as electives. (3-6 cr. hr.)

SOC 401: Sociology of Sex and Gender
(C) Theoretical, empirical examination of male and female experiences of inequality in social institutions; changing sex roles, gender socialization, and the interaction of biology and culture. A comparative perspective is used and theoretical differences between sex and gender are investigated sociologically. Prerequisite: SOC 100, 150 or ANT 102. (3 cr. hr.) Category B. ■

SOC 405: Social Breakdown in the United States
(O) Examination of key social problems that result from the deterioration of trust, mutuality, informal social control, social obligation and institutional authority; an analysis of those forces, especially the capitalist market and the welfare state, which weaken the social bases of enduring relations and moral competence, and an assessment of various strategies for revitalizing the social context within which people learn to care for the fate of others. Prerequisite: SOC 100, 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 420: Issues in Gerontology
(O) Selected topics in gerontology. May be repeated as subtitle changes. Prerequisite: SOC 220. (3 cr. hr.) Category B. ■
SOC 425: Sociology of Aging and the Life Course  
(S) Analysis of sociological and social psychological processes associated with the adult life span. Prerequisite: SOC 100, 150, 220 or ANT 102. (3 cr. hr.) Category C. ■

SOC 430: Social Welfare Institutions  
(C) Sociological study of process of institutionalization of welfare. Focus is on American society with some comparative analysis with other industrialized societies. Prerequisite: SOC 100, 150 or ANT 102. Also listed as HUS 430. (3 cr. hr.) Category A. ■

SOC 451: Social Stratification  
(O) Theories, structures, function, trends of social class, social mobility in industrial, nonindustrial societies. Dynamics of caste, caste system in Asian and other nations. Prerequisite: SOC 100, 150 or ANT 102. (3 cr. hr.) Category B. ■

SOC 455: The Sociology of Leisure  
(O) History of leisure; contemporary problems of mass leisure and relation to work, politics, economics, other social institutions. Prerequisite: EDU 271, SOC 100, 150 or ANT 102. Also listed as REC 455. (3 cr. hr.) Category A. ■

SOC 461: Urban Sociology  
(O) Structure, function, quality of urban life from early city to contemporary American megalopolis. Analysis of change, resultant problems. Prerequisite: SOC 100, 150 or ANT 102. (3 cr. hr.) Category B. ■

SOC 462: Juvenile Delinquency  
(B) Historical development of juvenile court; theoretical interpretations of delinquency; modern trends in prevention, treatment. Also listed as CRM 462. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 463: Criminology  
(B) Sociological study of crime and its consequences; the etiology, extent and nature of crime in society. The focus of attention is on an historical and contemporary examination of the nature, role and causes of crime, and the relationship between crime and social control. Topics include explanations of crime, typologies of crime, criminal statistics, criminal law, and how pragmatic agencies of the justice system – the police and courts – operate to prevent, detect, manage and influence crime in society. Also listed as CRM 463. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 464: Corrections  
(B) Course takes a long range historical approach to correctional ideas and institutions in the United States and Europe. Focus is on the development of institutions and ideas for “correcting” dependent poverty, criminality, delinquency and mental illness. Course also examines the changing relationship between correctional institutions and other economic and social institutions. Also listed as CRM 464. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 465: Political Sociology  
(O) Analysis, interpretation of social power, socioeconomic bases of political behavior with reference to participation in politics, political consequences of social mobility and political socialization. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 470: Sociology of the Family  
(B) Comparative perspective of the family as a social institution, focusing on analysis of historical and cross-cultural variations within American society, with some comparative analysis of other societies. Topics covered include demographic changes, changes in family functions; relationship of the family to other social institutions; contemporary family issues and problems. Prerequisite: SOC 100 or 150 or ANT 102. Also listed as HUS 470. (3 cr. hr.) Category A. ■

SOC 475: Sociology of Religion  
(C) Comparative religious systems, institutions, functions, role of religion and church in society. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 485: Capital Punishment  
(D) Deals with the death penalty as an element of American criminal justice policy. Topics include the development of the modern system of capital punishment; the responsibilities and experiences of attorneys, jurors, prison personnel and others in its implementation; the social network of death row; and empirical research on deterrence, sentencing disparities by race, the death penalty’s fiscal impact, the estimated probability of miscarriages of justice, and other issues in the current policy debate. Also listed as CRM 485. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category D. ■

SOC 486: Collective Behavior  
(C) Elementary forms, mechanisms of collective dynamics; crowd, public, mass, fads, fashions, social movements in contemporary society. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category C. ■

SOC 487: Sociology of Education  
(C) Ideas, approaches, research of sociologists in their study of public schools, higher education. Prerequisite: SOC 100 or 150 or ANT 102. (3 cr. hr.) Category A. ■

SOC 492: Sociological Theory  
(A) Sociological theory as an appreciation and a critique of modernity; the classical tradition as formulated by Marx, Durkheim, Weber and others, such as Simmel and Mead; the relevance of this tradition to the understanding of both contemporary sociological theory and the promises and discontents of contemporary modern societies. Prerequisite: Junior or senior status. (3 cr. hr.) ■

SOC 493: Methods of Social Research I  
(A) Introduction to methods of social research. Provides students with basic understanding of how to conduct and evaluate scientific research in the social sciences. Course topics follow the major steps in design and execution of social research from definition of the problem and formulation of hypotheses to interpretation of results and preparation of final report. Course provides suitable background for pursuing more advanced courses in research. Prerequisite: Junior or senior status. (3 cr. hr.) ■

SOC 494: Methods of Social Research II  
(A) Analysis, interpretation of data including statistical methods; measures of central tendency, dispersion, frequency distributions, measures of association and selected inferential statistics. Both computation of statistics and computer applications for statistics are included: coordinated laboratory work. Prerequisites: SOC 493 and junior or senior status. (3 cr. hr.) ■

SOC 498: Seminar in Sociology  
(A) Theoretical, empirical analysis of a general sociological problem and its implications for development of the discipline. May be repeated as subtitle changes. (3 cr. hr.) ■

SOC 596: Independent Study in Sociology  
(A) Individual study in selected areas. Prerequisite: Junior or senior status. (3-8 cr. hr.)
Related Education Courses

AED 300: Introduction to Secondary Social Studies
(S) Introduction to social studies education on the secondary level. Includes pre-student teaching field experience of 35 hours. Juniors only. Prerequisite: AED 391. (1 cr. hr.)

AED 301: Pre-Practice Teaching Seminar
(F) Integrated study of: A) introduction to methods of teaching secondary social studies; B) introduction to contemporary issues in the teaching of secondary social studies; C) preparation for specific practice teaching assignment; D) 40-hours of field experience. Prerequisites: AED 300 and 391. (6 cr. hr.)

AED 391: Introduction to Adolescence Education
(A) Students will develop a coherent and comprehensive personal educational philosophy; analyze the role of education and teachers in society; demonstrate an understanding of teacher certification standards and requirements; evaluate teaching, lesson planning and implementation and cooperative skills; and develop a portfolio. The course includes 25 hours of field observation/teaching experience. (3 cr. hr.)

AED 400: Student Teaching I: Adolescence Education Social Studies
(S) Full-time supervised adolescence education: social studies teaching experience in the public schools for eight weeks. This experience will be one of two school placements, at either the middle school/junior or high school level; the second experience must be at the other level. Prerequisites: AED 300, 301 and 391. Corequisites: AED 401 and 402 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (7 cr. hr.)

AED 401: Student Teaching II: Adolescence Education Social Studies
(S) Full-time supervised adolescence education: social studies teaching experience in the public schools for seven weeks. This experience will be one of two school placements, at either the middle school/junior high or high school level; the second experience must be at the other level. Prerequisites: AED 300, 301 and 391. Corequisites: AED 400 and 402 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (7 cr. hr.)

AED 402: Student Teaching Seminar
(S) Problem approach drawing upon experience of students during practice teaching. Designed to focus on contemporary educational issues, beginning the job search and application process, teaching and learning at the middle and high school level, and exploring the history and philosophy of teaching. Prerequisites: AED 300, 301 and 391. Corequisites: AED 400 and 401 must be taken in the same semester. Open only to senior SSA majors meeting all departmental requirements. S, U grades are assigned. (1 cr. hr.)

Speech Pathology and Audiology

DEPARTMENT

SCHOOL
Professional Studies

FACULTY
Regina B. Grantham (Chair), Mary Emm, Janet Ford, Heather Forsythe, Eileen Gravani, Michael Pitcher,

PROGRAMS OFFERED
Bachelor of Science in Speech Pathology and Audiology
Bachelor of Science in Speech and Hearing Science

MAJORS OFFERED
Speech and Language Disabilities (teacher certification)
Speech and Hearing Science (non-certification major)

MINORS OFFERED
Speech and Hearing Science

DESCRIPTION
The Speech Pathology and Audiology Department provides a solid, well rounded education with emphasis on speech language pathology and audiology, including theoretical foundations of normal communication; theoretical and research-based information on communication disorders; educational principles; experiential/active learning; technological aspects; and multicultural issues.

The programs develop critical thinking and problem-solving skills that assist students in applying theoretical knowledge to the clinical setting. The department's pre-professional program includes clinical experiences and opportunities for the completion of requirements for initial certification in New York State as a Teacher of Students with Speech and Language Disabilities, as well as the development of competencies to pursue further study at the graduate level.

Course codes: A = every semester, B = at least once per year, C = at least once every two years, F = fall, M = summer, O = occasionally, S = spring, W = winter, ■ = LAS
SPECIAL FEATURES
- provides an excellent background to pursue graduate study
- integrates theory and research with clinical practice
- clinical practicum opportunities (on campus, student teaching)
- caring, mentoring faculty dedicated to teaching cutting edge theory and clinical methods as well as being involved in research, scholarship and professional standard setting
- individual class meetings and the Speech and Hearing Club
- Center for Speech and Hearing Disorders (provides clinical experience for students as well as a service to the community)
- independent study experience is available and encouraged
- opportunity to study abroad in Venezuela and other sites

Requirements
1. Degree Requirements listed on pages 38-45 of this catalog apply to all speech pathology and audiology majors
2. Liberal Arts Requirements: 60 credit hours
3. Two years of a foreign language or completion of 202 level

SUNY Cortland students and transfer students below junior status wishing to major in speech pathology and audiology may apply for admission to one of the majors after the completion of at least 12 credit hours at Cortland with a cumulative grade point average of 2.7 or better.

Transfer students with junior level or higher standing will be allowed to declare one of the speech pathology and audiology majors upon admission to the College.

Students are expected to maintain a 2.7 overall grade point average and a 2.7 grade point average in speech pathology and audiology courses to continue to take courses in the certification and non-certification majors. If students fail to maintain the required grade point average, they will not be allowed to continue to take courses in the major.

Major in Speech and Language Disabilities [SLD]
This program is a combination of academic courses and clinical experiences. It leads to qualification for the initial teaching certificate in Speech and Language Disabilities (all grades).

CAREER POTENTIAL
- Teacher of students with speech and language disabilities
- Graduate school (speech-language pathology, teacher of the deaf, audiology, education, special education)
- Substitute teacher
- With a master's degree, graduates can work in hospitals, clinics, rehabilitation centers, universities, private practice and industry. Some states, such as New York, also require a license.

A. Speech Pathology and Audiology Courses: 36 credit hours
   - SHH 280: Phonetics
   - SHH 281: Speech Science
   - SHH 300: Normal Language Development
   - SHH 360: Teaching Children with Limited English Proficiency
   - SHH 370: Articulation and Language Disorders
   - SHH 371: Fluency and Voice
   - SHH 383: Basic Audiology
   - SHH 473: Neuropathologies of Language and Speech
   - SHH 475: Technology in Communication Disorders
   - SHH 477: Diagnostic Procedures: Introduction to Assessment in Speech-Language Pathology
   - SHH 480: Clinical Practicum I
   - SHH 481: Clinical Practicum II
   - SHH 483: Aural Rehabilitation

B. Professional Preparation: 29-30 credit hours
   - PSY 101: General Psychology I
   - PSY 332: Educational Psychology
   - PSY ___: Elective in normal development
   - EDU 488: Student Teaching in Speech, Language and Hearing
   - EDU 496: Organization of Speech, Language, Hearing Programs in the Schools
   - ENG 201: Introduction to Language Study
   - HLH 199: Critical School Health Issues or
   - HLH 110: Personal and Community Health

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Major in Speech and Hearing Science [SHS]
This major prepares students for graduate study in speech-language pathology, audiology, education, teacher of the deaf or special education.

CAREER POTENTIAL
- Graduate school
- Substitute teacher
- With master's degree in speech-language pathology and/or audiology, can work in hospitals, clinics, rehabilitation centers, universities, private practice and industry. Some states, such as New York, also require a license.

A. Speech Pathology and Audiology Courses: 32 credit hours
   - SHH 280: Phonetics
   - SHH 281: Speech Science
   - SHH 300: Normal Language Development
   - SHH 370: Articulation and Language Disorders
   - SHH 371: Fluency and Voice
   - SHH 383: Basic Audiology
   - SHH 473: Neuropathologies of Language and Speech
   - SHH 477: Diagnostic Procedures: Introduction to Assessment in Speech-Language Pathology
   - SHH 480: Clinical Practicum I
   - SHH 483: Aural Rehabilitation

B. Non-Departmental Requirements: 12 credit hours
   - PSY 101: General Psychology I
   - PSY ___: Elective in normal development
   - MAT/PSY 201: Statistical Methods
   - PSY ___: Elective in normal development
   - PSY 101: General Psychology I
   - PSY 332: Educational Psychology
   - PSY ___: Elective in normal development
   - PSY 101: General Psychology I
   - PSY 332: Educational Psychology

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124

Minor in Speech and Hearing Science [SHS]
Required Courses: 18 credit hours
- SHH 270: Introduction to Communication Disorders
- SHH 280: Phonetics
- SHH 281: Speech Science
- SHH 300: Normal Language Development
- SHH 370: Articulation and Language Disorders
- SHH 383: Basic Audiology
- SHH 473: Neuropathologies of Language and Speech

One course from the following:
- SHH 371: Fluency and Voice
- SHH 473: Neuropathologies of Language and Speech
- SHH 483: Aural Rehabilitation

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18
SPEECH PATHOLOGY AND AUDIOLOGY

COURSE DESCRIPTIONS

SHH 129, 220, 329, 429, 529: Special Topics in Speech Pathology and Audiology
Selected topics. May be taken more than once as subtitle changes. Prerequisites: Designated by department as appropriate for content and academic level of credit. (1-4 cr. hr.)

SHH 270: Introduction to Communication Disorders
(A) The basic processes of speech, language and hearing and the nature of communication disorders are discussed in terms of multidisciplinary approaches used in identification and intervention. Includes disorders of: language, learning, articulation, phonology, cognition, behavior, motor, voice, fluency and hearing. An overview of the professions of Speech-Language Pathology and Audiology is presented. (3 cr. hr.)

SHH 280: Phonetics
(A) Nature of spoken language explored with respect to phonology, articulatory and clinical phonetics, and transcription using the International Phonetic Alphabet and diacritic markers. Includes information on phonological development and disorders, phonological awareness and dialect. (3 cr. hr.)

SHH 281: Speech Science
(B) Anatomy and physiology of the speech mechanism and nervous system; an overview of the acoustics and the acoustic nature of speech. (3 cr. hr.)

SHH 300: Normal Language Development
(A) Course of language development in typical children explored from infancy to late adolescence with cultural and socioeconomic issues addressed. Includes semantic, syntactic, morphological, phonological and pragmatic aspects. Emphasis placed on language and pre-literacy in toddler and preschool years, and school-age language and literacy. Neurological, theoretical and applied issues addressed. Not open to those having credit for PSY 350. (3 cr. hr.)

SHH 360: Teaching Children with Limited English Proficiency
(A) An introduction to assessment and intervention for children with limited English proficiency and/or English as a second language. Emphasis will be placed on classroom assessment and developing strategies that will support students' language and literacy performance in the classroom. Prerequisite: Completion of SHH 300. (1 cr. hr.)

SHH 370: Articulation and Language Disorders
(A) Disorders of articulation/phonology and language are explored within a multicultural framework of normal patterns of acquisition and use. Includes behavioral disorders, learning disabilities, delayed or limited cognitive development, safety and accessibility issues of people with disabilities, physical, cognitive, and affective characteristics of persons with disabilities and the impact of culture and social economic status. Paper(s) requiring research using word-processing and Internet access are required. Prerequisites: SHH 270, 280 and 300. (3 cr. hr.)

Example of the B.S. in Speech and Language Disabilities over four years

First Year

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Total credit hours: 16-18

Second Year

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Total credit hours: 15

Third Year

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Total credit hours: 15

Fourth Year

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Total credit hours: 15

Spring

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Total credit hours: 12
SHH 371: Fluency and Voice
(S) Fluency disorders and phonatory/resonance disorders (theories, characteristics, etiologies and clinical management) will be presented. Physical, cognitive and affective attributes of fluency voice disorders will be discussed. Prerequisite: SHH 281. (3 cr. hr.)

SHH 383: Basic Audiology
(F) Anatomy, physiology, pathology and audiological assessment of the hearing mechanism. Prerequisite: SHH 281 or permission of the department. (3 cr. hr.)

SHH 470: Studies in Speech Pathology
(O) Selected area. May be repeated as subtitle changes. Prerequisite: Consent of department. (1-3 cr. hr.)

SHH 473: Neuropathologies of Language and Speech
(F) Speech and language disorders resulting from neuropathologies – an overview of neurology, etiologies, assessment and treatment. Physical, cognitive and affective attributes of these disorders are discussed. A case study including Internet accessing and other technology is required and critiqued. Prerequisites: SHH 281 and 370 (3 cr. hr.)

SHH 475: Technology in Communication Disorders
(A) An introduction to the types of technology used in the practice of speech-language pathology and audiology: Augmentative communication, computer applications, classroom FM systems and assistive devices for the hearing impaired. Prerequisite: SHH 480. (1 cr. hr.)

SHH 477: Diagnostic Procedures: Introduction to Assessment in Speech-Language Pathology
(A) The diagnostic process in communication disorders within a multicultural and historical framework. Emphasis on evaluation/reporting procedures, including choice and administration of standardized instruments, functional and learning outcomes assessment, language sample analysis and diagnostic report writing in the preschool and school aged population. Therapeutic implications and referral procedures are introduced. Prerequisite: SHH 480. (1 cr. hr.)

SHH 480: Clinical Practicum I
(A) Principles and techniques of case management, including designing individualized/differentiated programs for persons with speech/language, motor, developmental, behavioral and sensory impairments. Emphasis on writing behavioral objectives and lesson plans, prioritizing goals, developing therapy strategies, analyzing behavior and behavior management strategies, assessing learning outcomes and writing clinical reports. A required clinical observation experience is integrated with classroom instruction to facilitate the transition from theory to practice. Prerequisites: SHH 281 and 370. (2 cr. hr.)

SHH 481: Clinical Practicum II
(A) Supervised evaluation and treatment of individuals with communication disorders, report writing, conferences and self-evaluation techniques. Lectures include instruction in assessment procedures, teaching techniques for groups and individuals, clinical report writing, language and phonology remediation techniques, ethics, multicultural issues, socio-economic status, analysis of behavior and development of behavior management strategies. Prerequisites: SHH 480, 477, consent of instructor. Achieve passing score on the SPAA Competency Examination. See department academic advisement manual for further information. (2 cr. hr.)

SHH 483: Aural Rehabilitation
(S) The management principles of hearing impairment are considered across age groups: Auditory perception, speech perception, auditory training, speech reading and psychosocial issues. The nature and accessibility of personal and educational amplification systems and assistive devices are discussed. Case studies are reviewed and critiqued. Prerequisites: SHH 270, 370, 383. (3 cr. hr.)

Related Education Courses

EDU 488: Student Teaching in Speech, Language and Hearing
(A) Full-time speech and language assessment and intervention in school settings under College supervision. Related seminars are included in the course. This experience includes task analysis, formal and informal assessment, development of Individualized Educational Programs and Individualized Family Service Plans, curriculum planning, instructional planning and strategies, working within a multidisciplinary team, behavior management, classroom management and self-analysis of skills. Prerequisites: SHH 371, 383, 481 and EDU 496; cumulative grade point average of 2.7 and grade point average in SHH courses of 2.7; consent of department. (12 cr. hr.)

EDU 496: Organization of Speech, Language, Hearing Programs in the Schools
(A) Historical, social and legal foundation for establishing and providing speech/language/hearing services within the curricula of different school settings. Emphasis on legal and professional concerns including eligibility issues for the Individualized Family Service Plan and Individualized Education Plan; the impact of language based learning disabilities on classroom performance, particularly reading and writing, curricular development and instructional planning strategies for various populations, differentiated instruction within the classroom, classroom/behavioral management and the role of ASHA in the schools. Applying concepts to specific cases and employing collaboration with parents and other school based professionals are addressed. Prerequisites: SHH 370, 371, 383 and 481. (3 cr. hr.)
Urban Studies

INTERDISCIPLINARY MINOR

SCHOOL
Arts and Sciences

FACULTY
Lisi Krall (Coordinator)

MINOR OFFERED
Urban Studies

CAREER POTENTIAL
• Urban planner
• Consultant
• Transportation analyst
• City manager

DESCRIPTION
The interdisciplinary minor in urban studies draws on the resources of the economics, geography, political science and sociology-anthropology departments and may be combined with many of the majors offered by the College. Advisement of students majoring in departments cooperating in urban studies is the responsibility of the urban studies staff members of the respective departments. Students majoring in other departments are advised by advisors assigned from the urban studies staff.

Minor in Urban Studies [URB]
A. Required courses total 12 credit hours. Prerequisites for these courses must be taken without credit toward the urban studies minor:
- ECO 393: Urban Economics (prerequisites are ECO 110, 111)
- GRY 250: Urban Geography
- POL 326: State and Local Government
- SOC 461: Urban Sociology (prerequisite is SOC 150)

B. Elective courses total six credit hours and are to be taken for minor credit upon advisement only. They may be taken from the following list of courses, or from outside the cooperating departments with written permission of the advisor. Such electives may be chosen specifically to emphasize general content, planning, techniques, empirical analysis, or whatever focus is desired by the student and advisor. POL 485 and SOC 400 provide field experiences which would be worthwhile electives for the urban studies minor.
- ECO 383: Labor Economics
- ECO 494: Regional Economics
- GRY 324: Cartography and Geographic Information
- GRY 440: Seminar in Geography
- GRY 470: Resource Geography
- GRY 429: Topics (as appropriate)
- POL 240: Introduction to Public Administration and Public Policy
- POL 292: Race and Politics in America
- POL 485: Field Study in Political Science
- POL 492: Seminar in Political Science
- POL 526: Seminar in State and Local Government
- SOC 351: The Community
- SOC 352: U.S. Ethnic Identity and Conflict
- SOC 373: Deviant Behavior
- SOC 400: Field Practicum
- SOC 498: Seminar in Sociology

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18

Women’s Studies

INTERDISCIPLINARY MINOR

SCHOOL
Arts and Sciences

FACULTY
Caroline Kaltefleiter and Cecile Lawrence (Co-Coordinators)

MINORS OFFERED
Women’s Studies

CAREER POTENTIAL
• Teacher
• Counselor
• Journalist
• Lobbyist

DESCRIPTION
The women’s studies minor is interdisciplinary and is designed to complement many academic majors. Administration of this program and advisement for its students is conducted by the Women’s Studies Committee, a subcommittee of the Multicultural and Gender Studies Council. Students completing the minor will be exposed to scholarship focusing on women’s role and status in society in both historical and contemporary contexts. The minor helps students prepare for numerous careers that are enhanced by an understanding of sex roles and relations between men and women in society.
Minor in Women's Studies [WST]

A. Required Courses: Nine credit hours
   WST 100: Approaches to Women's Studies
   WST 400: Colloquium in Women's Studies
   One course from the following:
   COM 432: African Americans in Television and Film
   ENG 250: Introduction to Jewish Authors
   AAS/ENG 251: Introduction to African American Literature
   ENG 421: Afro-American Autobiography
   GRY 485: Africa, South of the Sahara
   AAS 334/HIS 312: African American History I
   AAS 336/HIS 313: African American History II
   AAS/HIS 321: Africa, Human Origins to 1800
   AAS/HIS 322: Modern Africa, 1800-Present
   HIS 363: Jews in the Modern World, 1789-1948
   HIS 460: The Holocaust
   Other courses that address experiences related to ethnicity or social groups in the minority in the U.S. may be used to fulfill this category with permission of the program coordinator.

B. Other: Nine credit hours. Three courses from at least two of the following categories:

   Theoretical Perspectives
   PHI 380: Feminist Social Thought
   Any course that deals with theoretical issues underlying the study of women may be used to fulfill this category, with the permission of the program coordinator.

   Women in Society
   ECO 325: Political Economy of Women
   HHL 550: Women's Health
   POL 405: Discrimination Law
   PSY 330: Psychology of Sex Roles
   SOC 401: Sociology of Sex and Gender
   SOC 470: Sociology of the Family
   HIS 317: Women in the United States
   HIS 318: The History of Women in Modern Europe
   WST 200: Women and U.S. Institutions
   WST 445: Women and Sport
   Any course that considers the role of women in a broader societal and/or historical context may be used to fulfill this category with the permission of the program coordinator.

   Women and Aesthetics
   ENG 261: Women in Literature
   ENG 422: American Women Writers
   ENG/AAS 425: African American Women Novelists
   Any course that specifically examines women within the context of fine arts or literature may be used to fulfill this category with the permission of the program coordinator.

TOTAL CREDIT HOURS REQUIRED FOR THE MINOR: 18