

## INTERDISCIPLINARY MINOR—ASIAN STUDIES

*Director:* Betty Chan; *Executive Committee Members:* Inaam A. Al-Hashimi, Sachio Ashida, Sri Ram V. Bakashi, Oh Kon Cho, Saladuddin Malik.

Asian Studies, an interdisciplinary minor of 21 credits, is designed to make students more knowledgeable about Asian societies and cultures in order to increase students' understanding of the region. This program will benefit organizations which employ college graduates who have acquired knowledge on Asia. Students can enhance their future career possibilities while strengthening their appreciation for this diverse region.

Students interested in this minor should contact the Department of Political Science, 228 Albert W. Brown Building, (585) 395-2584.

The curriculum consists of the following courses:

### Core Courses (6 credits)

HST 387	Asian Survey
CMC 418	Cross-cultural Communication

### Language Requirements (6 credits)

One of the following languages:

CHN 111	Beginning Chinese I
CHN 112	Chinese II

#### OR

JPN 111	Beginning Japanese I
JPN 112	Japanese II

The language requirement may be met in any Asian language including the above by demonstrating competency in these languages.

### Electives (9 credits)

Any three courses from the following or other recommended courses:

ANT 330	World Poverty and Economic Underdevelopment
HST 361	History of Japan
HST 363	Islam
HST 388	Traditional China
HST 385	Asian Civilization I, Antiquity to 1600 AD
HST 386	Asian Civilization II
PLS 348	Asian Politics
PLS 410	International Political Economy
SOC 306	Social Changes in The Third World
THE 490	Special Topics in Academic Theatre: Asian Theatre

In addition to the language requirement, courses taken at other institutions, or participation in overseas programs, up to 12 credits, may be transferred with the approval of the Executive Committee of the program. For information and advisement contact: Betty Chan, Director of Asian Studies Minor, Drake Library, (585) 395-2197.

## INTERDISCIPLINARY MINOR — JEWISH STUDIES

The Jewish Studies minor is an interdisciplinary liberal arts program focusing on the study of the Jewish people—their history, their literature, their language (Hebrew) and their culture. The program aims to enhance the student's knowledge of the Jewish people.

Changes to the Interdisciplinary Minor in Jewish Studies Program were in process as of the publication of this *Undergraduate Studies Catalog*. Changes in the Jewish Studies Program were being made at the time this catalog was printed. For current information about this program, contact Dr. Herbert Fink, Department of Psychology, 137 Holmes Hall, (585) 395-5635.

### Requirements (18 Credits)

Completion of the interdisciplinary Jewish Studies minor requires the completion of six of the courses listed below, from at least two different disciplines, selected with advisement.

ENL 353	The <i>Bible</i> and Modernism
ENL 354	The <i>Bible</i> as Literature
ENL 495	Literature of the Holocaust
HBR 111	Beginning Hebrew I
HST 351	Nazi Germany
PLS 383	The Middle East in World Politics
PSH 437	Psychology and Jewish Studies

Relevant overseas courses (in Israel)

### JEWISH STUDIES COURSES

**HBR 111 Beginning Hebrew I (A).** Provides an introduction to modern Hebrew. Emphasizes oral use. 3 Cr.

**ENL 353 The *Bible* and Modernism (A,C,I).** Provides an interdisciplinary investigation of controversies surrounding the *Bible* in the modern world. 3 Cr.

**ENL 354 *Bible* as Literature (A).** Provides an extensive examination of the design, moral, ethical and historical significance of the *Bible*, as well as its major literary forms, including short story, myth, proverbs, psalms, historical narrative and apocrypha. 3 Cr.

**ENL 495 Literature of the Holocaust (A,I,W).** Provides for readings and discussions concerning Hitler's attempted destruction of the European

Jews, both fiction and non-fiction, including the work of survivors and victims. Incorporates esthetic, moral, and political perspectives, with special emphasis on the relevance for our time. 3 Cr.

**HST 351 Nazi Germany (A).** Explores the creation and destruction of Hitler's Germany within the context of 20th-century Europe, and the ironies and complexities of this modern human catastrophe. 3 Cr.

**PLS 383 Mid-East in World Politics (A).** Studies political conflict of global issues and international politics. Covers the Arab-Israeli conflict. 3 Cr.

**PSH 437 Psychology and Jewish Studies (A).** Explores psychological factors related to Jewish people, the Arab-Israeli conflict, and the Holocaust. 3 Cr.

**JOURNALISM—SEE DEPARTMENT OF COMMUNICATION**

**LAW—SEE DEPARTMENT OF POLITICAL SCIENCE**

## DEPARTMENT OF MATHEMATICS

**200 Albert W. Brown Building**  
**(585) 395-2036; Fax: (585) 395-2304**  
**[www.brockport.edu/math](http://www.brockport.edu/math)**

*Chair and Associate Professor:* Mihail Barbosu, PhD, Paris Observatory and Paris VI University; *Professor:* Sanford S. Miller, PhD, University of Kentucky; *Associate Professors:* Dawn M. Jones, PhD, Western Michigan University; Gabriel T. Prajitura, PhD, University of Tennessee-Knoxville; Howard J. Skogman, PhD, University of California at San Diego; Charles J. Sommer, PhD, SUNY Buffalo; *Assistant Professors:* Jason R. Morris, PhD, University of Pittsburgh; Bogdan Petrenko, PhD, University of Illinois at Urbana-Champaign; Rebecca Smith, PhD, University of Florida; Pierangela Veneziani, PhD, Rutgers University; Ruhan Zhao, PhD, University of Joensuu, Finland.

An in-depth understanding of mathematics is of great importance to many careers in our technologically complex society. Moreover, the study of mathematics promotes analytical and critical thinking skills, and therefore is a valuable part of any program of study. The major and minor programs in mathematics are designed to provide the knowledge and skills necessary to pursue graduate study or to support career goals in a range of professions. Recent graduates who have majored in mathematics have found rewarding careers in business, teaching, computing, government, law, engineering, actuarial science and medicine. A major or minor in mathematics is a natural adjunct to the study of physics, chemistry, biology, earth science, business, economics, computer science, computational science, or the social sciences.

The department offers a major in mathematics, a minor in mathematics, and a minor in mathematics/statistics. In addition, it supports a double major in mathematics and computer science. To complete a major in mathematics, students take 10 required courses that provide a thorough foundation in several central areas of mathematics, a computer science course that emphasizes the design of algorithms, and a minimum of three advanced courses chosen to give special depth in at least one area. The two minor programs require students to take six mathematics courses that coherently complement their particular major.

Because of the sequential nature of the study of mathematics, students should meet with the department's advisement coordinator as soon as possible to declare a major or minor, be assigned a departmental advisor, and plan an academic program.

*Please note that the information in this document is subject to change. For the latest information on our program and our courses, please contact the department.*

### **Major in Mathematics (46 credits)**

Students must complete a minimum of 42 credits in mathematics and four credits in computer science, as follows:

<b>1. Required courses (33 credits)</b>		<b>Credits</b>
MTH 201, 202, 203	Calculus I, II, III	12
MTH 255	Differential Equations	3
MTH 281	Discrete Mathematics I	3
MTH 324	Linear Algebra	3
MTH 346, 446	Probability and Statistics I, II	6
MTH 425	Abstract Algebra	3
MTH 457	Real Analysis	3
<b>2. Elective courses (9 credits)</b>		<b>9</b>
Nine credits in mathematics, by advisement, from courses numbered MTH 400 or higher. CSC 483 may be substituted for one of these MTH courses.		
<b>3. Program corequisite (computer science course):</b>		
CSC 203	Fundamentals of Computer Science I	4

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**Total: 46**

**Notes:**

- (a) Students intending to obtain secondary education certification in mathematics must complete MTH 432.
- (b) At least three 400-level MTH courses must be taken at SUNY Brockport, including at least one of the following: MTH 425, 446, or 457.
- (c) Students receiving elementary certification may substitute MTH 314 for one of the mathematics electives.
- (d) MTH 203 Calculus III, four credits, begins fall 2008; MTH 202 Calculus II, four credits, begins spring 2007.

Students who have successfully completed a calculus course in high school may qualify for college credit for MTH 201. Qualifying students must contact the department before they register for their first calculus course at SUNY Brockport.

More details concerning the mathematics major, including sample programs of study and information on advisement for majors, student awards, computing facilities, library holdings, the Mathematics Club, and the Student Chapter of the Mathematical Association of America, can be found in the *Mathematics Majors Handbook* or on the department Web site. Copies of the handbook are available in the department office.

**Minor in Mathematics**

Students must complete a minimum of six courses in mathematics, as follows:

1. **Required courses:** MTH 201 Calculus I and MTH 202 Calculus II.
2. **Elective courses:** Four courses in mathematics, chosen from MTH 203, MTH 255, MTH 243 or higher. Students should choose these electives after consultation with an advisor from their major department as well as with a mathematics faculty member.

Note: At least nine credits toward the minor must be completed at SUNY Brockport.

**Minor in Mathematics/Statistics**

Students must complete either sequence A or B below.

**Sequence A**

MTH 201	Calculus I
MTH 202	Calculus II
MTH 203	Calculus III
MTH 281	Discrete Mathematics I
MTH 346	Probability and Statistics I
MTH 446	Probability and Statistics II

**Sequence B**

MTH 201	Calculus I
MTH 202	Calculus II
MTH 281	Discrete Mathematics I
MTH 346	Probability and Statistics I
MTH 441	Statistical Methods I
MTH 442	Statistical Methods II

**Notes:**

- a) MTH 281 Discrete Mathematics I can be replaced with MTH 245 Finite Mathematics.
- b) At least nine credits toward the minor must be completed at SUNY Brockport.
- c) MTH 203 Calculus III, four credits, begins fall 2008; MTH 202 Calculus II, four credits, begins spring 2007.

**Secondary Certification in Mathematics**

Students who wish to teach mathematics at the secondary level can pursue a program at SUNY Brockport that leads to provisional certification. The program requires completion of a major in mathematics, including a geometry course, and a prescribed group of professional courses offered chiefly by the Department of Education and Human Development. Students seeking certification should contact the Department of Education and Human Development as soon as possible.

## MATHEMATICS COURSES

**MTH 110 Introduction to Mathematics (A).** *(Placement for students with weak backgrounds in mathematics. Closed to students who have passed MTH 111 or 122 or higher or any statistics course.)* Places major emphasis on algebraic skills, basic operations on signed numbers (decimal and fractional forms); percents; techniques for solving linear and quadratic equations and systems of equations using two variables; algebraic operations on polynomials, roots and radicals. 3 Cr.

**MTH 111 College Algebra (A).** *Prerequisite: Two years of qualifying high school mathematics. Closed to students who have completed more than three years of high school mathematics or MTH 122 or a calculus course.* Covers algebra at the intermediate level, including operations on polynomials and algebraic fractions, solution of first- and second-degree equations, graphs of functions, logarithms and exponential functions. 3 Cr. Every Semester.

**MTH 112 College Mathematics (A).** *Prerequisite: MTH 111 or three years of qualifying high school mathematics. Meets Brockport General Education Mathematics course requirement.* Develops college-level skills in algebra, geometry, data analysis, and quantitative reasoning. Practice with linear and non-linear equations, geometric problem-solving, probability, algorithms, tabular and graphic techniques, modeling real world problems. Must pass final comprehensive examination to pass course. 3 Cr. Every Semester.

**MTH 122 Pre-Calculus (A).** *Prerequisites: MTH 111 or minimum of 70 on Regents Math B Exam. Closed to students who have credit for MTH 201.* Designed to prepare students for the study of calculus. Covers algebraic, exponential, logarithmic, and trigonometric functions. 3 Cr.

**MTH 201 Calculus I (A).** *Prerequisites: MTH 122 or high school pre-calculus* Covers limits and continuity; derivatives and integrals of algebraic, trigonometric, exponential, and logarithmic functions; and applications of the derivative. 4 Cr.

**MTH 202 Calculus II (A).** *Prerequisite: MTH 201.* Covers techniques and applications of integration, polar coordinates, parametric curves, approximation methods, improper integrals, infinite series and Taylor polynomials. 4 Cr.

**MTH 203 Calculus III (A).** *Prerequisite: MTH 202.* Covers polar-coordinates, vectors and 3-space, functions of several variables, applications of partial derivatives, and multiple integrals. 4 Cr.

**MTH 221 Calculus for Business, Social and Life Sciences I (A).** *Prerequisites: MTH 111 or minimum of 70 on Regents Math B Exam. Closed*

*to students who have completed MTH 201 with a grade of "C" or better.* Provides an introduction to calculus, with an emphasis on its applications to business and the behavioral sciences. Covers derivatives of functions of one and several variables, applied maximization and minimization problems, exponential growth and decay models, the natural logarithm function, and an introduction to integration. 3 Cr.

**MTH 243 Elementary Statistics (A).** *Closed to students who have received credit for an equivalent elementary statistics course.* Covers the use and limitations of various statistical concepts, including frequency distributions, measures of central tendency and of variation, use of normal curve and t-tables, sampling, estimation, tests of significance for means, and correlation. 3 Cr.

**MTH 245 Finite Mathematics (A).** *Prerequisites: MTH 111 or minimum of 70 on Regents Math B Exam. Closed to students who have successfully completed MTH 281.* Covers linear equations, matrix algebra, linear programming, and probability theory. Uses these concepts to build mathematical models to solve problems arising in various disciplines. 3 Cr.

**MTH 255 Differential Equations (A).** *Prerequisite: MTH 202 or minimum of 70 on Regents Math B Exam.* Covers first order differential equations and applications, second order and higher order linear differential equations, series solutions about ordinary points and the Laplace Transform. 3 Cr. Every Semester.

**MTH 281 Discrete Mathematics I (A).** *Prerequisites: MTH 122 or minimum of 75 on Regents Math B Exam.* Provides an introduction to discrete mathematics. Includes these topics: propositional and predicate logic, sets, functions, matrix algebra, algorithms, valid arguments, direct and indirect proofs, mathematical induction, permutations and combinations, and discrete probability. 3 Cr. Every Semester.

**MTH 313 Mathematics for Elementary Teachers I (A).** *Prerequisite: A mathematics course that satisfies the General Education requirement. Open only students seeking elementary teaching certification.* Includes: sets, relations, number systems, elementary number theory, algebra, and mathematical systems. Uses a problem-solving approach where appropriate. 3 Cr. Every Semester.

**MTH 314 Mathematics for Elementary Teachers II (A).** *Prerequisites: MTH 313 or any MTH course numbered 201 or higher.* Covers various aspects of geometry, including area, volume, coord-

dinate and transformational geometry, probability and statistics. Emphasizes problem solving and the instructional use of calculators and computers. 3 Cr.

**MTH 324 Linear Algebra (A).** *Prerequisites: MTH 202 and MTH 281.* Covers matrices, determinants, vector spaces and subspaces, dimension, linear transformations and Euclidean vector spaces. 3 Cr. *Every Semester.*

**MTH 346 Probability and Statistics I (A).** *Prerequisites: MTH 202 and either MTH 245 or MTH 281.* Covers random variables and vectors, moments and moment generating functions, discrete and continuous probability distributions, and sampling distributions. 3 Cr. *Every Semester.*

**MTH 363 Financial Mathematics (A).** *Prerequisite: MTH 202.* Provides fundamental concepts of financial mathematics and prepares students for EXAM FM (Financial Mathematics) of the Society of Actuaries. Students will learn about inflation, rate of interest, stocks, bonds, and other financial instruments. 3 Cr.

**MTH 399 Independent Study in Mathematics (A).** To be defined in consultation with the instructor sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. 1-3 Cr.

**MTH 405 Mathematical Problem Solving (A).** *Prerequisites: MTH 202, MTH 281 and instructor's permission.* Develops problem-solving ability in mathematics. Includes how to get started, methods of proof, devising a strategy, and "looking back." Places strong emphasis on critical reasoning and clarity of written expression. 3 Cr.

**MTH 412 History of Mathematics (A).** *Prerequisites: MTH 202 and either MTH 245 or MTH 281.* Covers the history and development of mathematical ideas from primitive origins to the present. Includes topics such as arithmetic, number theory, geometries, algebra, calculus, and selected advanced topics. 3 Cr. *Spring.*

**MTH 420 Mathematics for Adolescence Teachers (A).** *Prerequisite: MTH 432.* Analyzes the adolescence mathematics curriculum (grades 5-12) from an advanced prospective. Topics include algebra, geometry, data analysis, statistics, trigonometry, discrete mathematics, calculus. Students will examine their own understanding of these topics as well as examine the theoretical underpinning of each. 3 Cr.

**MTH 421 Number Theory (A).** *Prerequisite: MTH 281.* Topics include but are not limited to: mathematical induction, divisibility, primes, arithmetic functions, congruencies, modular arithmetic,

Diophantine problems and the distribution of primes. 3 Cr.

**MTH 424 Linear Algebra (A).** *Prerequisites: MTH 202 and either MTH 245 or MTH 281.* Covers matrices, determinants, vector spaces and subspaces, dimension, linear transformations, and Euclidean vector spaces. 3 Cr.

**MTH 425 Abstract Algebra (A).** *Prerequisites: MTH 203 and MTH 324.* Provides a study of algebraic systems, with special attention to groups and rings and their classification properties. Emphasizes theory and proofs, but clarifies the ideas by means of specific examples involving modular arithmetic, real and complex numbers, permutations, matrices. Requires extensive writing. 3 Cr.

**MTH 426 Modern Algebra II (A).** Covers topics such as rings, ideals, fields and further group theory. Course requires extensive proof writing. 3 Cr.

**MTH 429 Topics in Algebra (A).** *Prerequisite: Instructor's permission.* Addresses specific topics in abstract algebra not covered in other courses. A list of topics to be covered will be announced before course is offered. 3 Cr.

**MTH 430 Topology (A).** *Prerequisite: MTH 281.* Provides a study of topologies on various spaces. Emphasizes theory, abstraction, proof techniques and clarifies these by means of many specific examples. Bridges topics such as geometry, analysis and algebra. Topics include, but are not limited to set theory, continuous functions, connectedness, compactness, and separation. 3 Cr.

**MTH 432 College Geometry (A).** *Prerequisite: MTH 324.* Provides a study of geometry from the synthetic, analytic, transformational, and vector viewpoints. Includes these topics: axiomatic systems, finite geometries, absolute geometry, Euclidean geometry, non-Euclidean geometries, geometric transformations, and projective geometry. Requires extensive writing. 3 Cr. *Every Semester.*

**MTH 439 Topics in Geometry (A).** *Prerequisite: Instructor's permission.* Addresses specific topics in geometry and topology not covered in other courses. A list of topics to be covered will be announced before course is offered. 3 Cr.

**MTH 441 Statistical Methods I (A).** *Prerequisites: MTH 243 or MTH 346.* Covers estimation, hypothesis testing, simple regression, categorical data, and non-parametric methods. Uses statistical analysis software. 3 Cr.

**MTH 442 Statistical Methods II (A).** *Prerequisites: MTH 441 or instructor's permission.* Covers one- and two-way analysis of variance, multiple regression, experimental design and linear models. Uses statistical analysis software. 3 Cr.

**MTH 446 Probability and Statistics II (A).** *Prerequisites:* MTH 203 and MTH 346. Covers the Central Limit Theorem, maximum likelihood estimation, unbiased and sufficient statistics, minimum variance, confidence intervals, Neyman-Pearson Lemma, power calculations, and likelihood ratio tests. 3 Cr. *Every Semester.*

**MTH 449 Topics in Applied Mathematics (A).** *Prerequisite:* Instructor's permission. Addresses specific topics in applied mathematics not covered in other courses. A list of topics to be covered will be announced before course is offered. 3 Cr.

**MTH 453 Actuarial Problem Solving (A).** *Prerequisites:* MTH 446 or instructor's permission. Introduces students to Actuarial Science, emphasizes the development of strong problem solving skills in preparation for the Exam P (Probability) of the Society of Actuaries. 3 Cr.

**MTH 456 Advanced Differential Equations (A).** *Prerequisites:* MTH 255 and MTH 324 or exposure to matrix theory. Covers series solutions about singular points, systems of linear first-order differential equations, plane autonomous systems, Fourier series, Sturm Liouville problems, partial differential equations of physics including the heat, wave and Laplace equation. 3 Cr.

**MTH 457 Real Analysis (A).** *Prerequisites:* MTH 203 and MTH 324. Provides a study of functions of a real variable. Emphasizes theory, proof techniques, and writing skills. Includes: real numbers, denseness of the rational numbers, convergence of sequences of real numbers, Cauchy sequences, Bolzano-Weierstrass theorem, continuous functions, uniform continuity, differentiable functions, and integrable functions. Enhances understanding of the topics through a series of required writing tasks. 3 Cr.

**MTH 459 Topics in Analysis (A).** *Prerequisite:* Instructor's permission. Addresses specific topics in real and complex analysis not covered in other courses. A list of topics to be covered will be announced before course is offered. 3 Cr.

**MTH 461 Deterministic Mathematical Models (A).** *Prerequisites:* MTH 245 or MTH 281 or instructor's permission. Teaches applied mathematics techniques to be used in engineering, business, finance and other management fields. Topics covered include linear programming, sensitivity analysis, the simplex method, shortest path method, integer linear programming and network models. 3 Cr.

**MTH 462 Stochastic Mathematical Models (A).** *Prerequisite:* MTH 346. Teaches applied mathematics techniques to be used in engineer-

ing, business, finance and other management fields. Topics covered include project scheduling, decision theory, simulation, risk analysis, multi-criteria decision problems, inventory and queuing models, forecasting, dynamic programming and Markov analysis. 3 Cr.

**MTH 463 Graph Theory (A).** *Prerequisites:* MTH 324 or instructor's permission. An introduction to graph theory, including distance concepts, symmetry and structure, trees and connectivity, Eulerian and Hamiltonian Graphs, planar graphs and imbeddings, and applications of graphs. 3 Cr.

**MTH 465 Combinatorics (A).** *Prerequisite:* MTH 324. Gives an introduction to combinatorics including basic counting techniques involving permutations, combinations, compositions and partitions; binomial coefficients; the twelvefold way; recursions and generating functions. Other topics may include a more advanced study of permutations, sequences in combinatorics, magic squares, the probabilistic method, etc. 3 Cr.

**MTH 471 Numerical Analysis I (A).** *Prerequisite:* MTH 203. Provides a survey of methods used to numerically approximate the solutions of a variety of mathematical problems. Covers the generation and propagation of round-off errors, convergence criteria, and efficiency of computation. Includes: roots of non-linear equations, systems of linear or non-linear equations, polynomial approximations, and an introduction to numerical differentiation and integration. Mathematical software will be used. 3 Cr.

**MTH 481 Discrete Mathematics II (A).** *Prerequisites:* MTH 201 and MTH 281. A second course in discrete mathematics. Includes: complexity of algorithms, recurrence relations, inclusion-exclusion principle, partial order and equivalence relations, graph theory, trees, Boolean algebra, grammars, formal languages, and finite-state machines. 3 Cr. *Every Semester.*

**MTH 492 Mathematics Internship (A).** Allows for a supervised experience in applying mathematical skills and techniques in a practical work environment. Requires projects that may include applications in business, the social sciences, or physical sciences. A maximum of three credits can be applied toward the mathematics major. 1-6 Cr.

**MTH 499 Independent Study in Mathematics (A).** To be defined in consultation with the instructor/sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. 1-3 Cr.

**MEDICAL, DENTAL, VETERINARY AND ALLIED FIELDS;  
PRE-PROFESSIONAL PREPARATION; MEDICAL TECHNOLOGY  
— SEE DEPARTMENT OF BIOLOGICAL SCIENCES**

**METEOROLOGY — SEE DEPARTMENT OF THE EARTH SCIENCES**

**DEPARTMENT OF MILITARY SCIENCE—  
UNITED STATES ARMY ROTC**

**C29 Cooper Hall  
(585) 395-2249**

*Chair and Professor:* William S. Cragg, MSA, Central Michigan University; *Assistant Professors:* Christopher Fahrenbach, BA, Vanderbilt University; Daniel Fletcher, BA, SUNY Brockport; Charles Meyer, MEd, SUNY Oswego; Stanley Schall, MS, Troy State University; Nicholas A. Teta, BA, SUNY Albany; *Instructors:* Timothy Hall, AAS, Jefferson Community College; John Leggat; *Support Staff:* Marvin Pawlowski, Rodney Brinkman.

The military science program offers courses of study leading to an academic minor in military science and an officer's commission in the United States Army. Students may enroll in lower-division courses without incurring a military service obligation. The courses provide theoretical and practical training in leadership and management principles and applications, basic military skills, and officer responsibilities.

The military science program at the upper-division level consists of instruction in military skills, tactics, communications, and practical leadership experience.

The lower-division portion must be completed before enrollment in the upper division is approved. All contracted students receive a stipend of \$300-\$500 per month for each month in school up to \$4,500 per academic year. Admission to the upper-division program requires the acceptance and approval of the Professor of Military Science, (585) 395-2249.

Additional military training available through participation in the program includes the US Army's Airborne School, Air Assault School, Northern Warfare School, and Army Nurse Training. Other typical activities during a semester include field training exercises at an Army installation and military formals. Merit-based scholarships are available to interested and qualified students. All scholarships pay for full tuition and fees, a flat rate for textbooks valued at \$900 (\$450 each semester), and an allowance of up to \$4,500 for every year the scholarship is in effect.

**The department offers minors under two options.**

**Option 1—Academic Minor in Military Science and US Army Officer's Commission**

<b>Lower Division Course Prerequisites for the minor:</b>	<b>Credits</b>
MSC 101 Leadership and Personal Development	2
MSC 102 Foundations in Leadership	2
MSC 201 Innovative Tactical Leadership	3
MSC 202 Leadership in Changing Environments	3
Four approved three-credit liberal arts core courses with grades of "C" or better (standard breadth components)	12
<b>Total:</b>	<hr/> 22

**There are three alternatives for completing the lower division MSC course prerequisites.**

Satisfy any of the following requirements with the approval of the Professor of Military Science:

1. Completion of a special accelerated program of study  
**OR**
2. Prior honorable military service, which includes as a minimum successful completion of military basic training  
**OR**
3. Completion of a special five-week summer training program (Leadership Training Course), conducted off campus; all expenses paid by the United States Army.

**<sup>1</sup>Upper Division Course Prerequisites for Academic Minor and US Army Officer's Commission**

MSC 301	Adaptive Team Leadership	4
MSC 302	Leadership Development and Assessment	4
MSC 401	Developing Adaptive Leaders	4
MSC 402	Leadership in a Complex World	4
	One approved military history course with grade of "C" or better	3

**Total:** 19

**Option 2—Minor in Military Science Only<sup>2</sup>**

<b>Lower Division Course Prerequisites:</b>	<b>Credits</b>
MSC 101 Leadership and Personal Development	2
MSC 102 Foundations in Leadership	2
MSC 201 Innovative Tactical Leadership	3
MSC 202 Leadership in Changing Environments	3
Four approved three-credit liberal arts core courses with grades of "C" or better (standard breadth components)	12

**Subtotal:** 22

**There are three alternatives for completing the lower division MSC course prerequisites:**

1. Completion of a special accelerated program of study  
**OR**
2. Prior honorable military service, which includes as a minimum successful completion of military basic training  
**OR**
3. Completion of a special five-week summer training program (Leadership Training Course), conducted off campus; all expenses paid by the United States Army.

<sup>1</sup>Applicants for commissioning credit will complete the Leadership Development and Assessment Course following their junior year.

<sup>2</sup>Applicants for the minor will receive only academic credit, not commissioning credit.

## MILITARY SCIENCE COURSES

**MSC 101 Leadership and Personal Development**

**(A).** Introduces students to the personal challenges and competencies critical for effective leadership. Students learn how personal development of life skills, such as goal setting, time management, physical fitness and stress management, relate to leadership, officership and the Army profession. Focus is placed on developing basic knowledge and comprehension of Army Leadership Dimensions while gaining an understanding of the ROTC program, its purpose in the Army, and its advantages for the student. Classes meet for one hour of classroom instruction and two hours of leadership lab per week. Students incur no military obligation. Meets GEP 100 requirement. See Option 1 Academic Minor MSC 101. 2 Cr.

**MSC 102 Foundations in Leadership**

**(B).** Provides an overview of leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback and using effective writing skills. Explores dimensions of leadership values, attributes, skills and actions in the context of practical, hands-on and interactive exercises. Classes meet for one hour of classroom instruction and two hours of leadership lab per week. Students incur no military obligation. 2 Cr.

**MSC 103 Military Fitness and Conditioning**

**(B).** Provides skills necessary to develop a balanced, military-type fitness program for a group while maintaining focus on the individual's needs and progression. Also provides an understanding of the whole-body fitness and conditioning principals used by the Army. Helps students develop skills necessary to plan, implement, evaluate and manage a military fitness program. Students incur no military obligation. 1 Cr. Fall.

**MSC 104 Military Conditioning Lab**

**(B).** Provides skills necessary to develop a balanced, military-type fitness program for a group while maintaining focus on the individual's needs and progression. Also provides an understanding of the whole-body fitness and conditioning principals used by the Army. Helps students develop skills necessary to plan, implement, evaluate and manage a military fitness program. Students incur no military obligation. 1 Cr. Spring.

**MSC 201 Innovative Tactical Leadership**

**(B).** Explores dimensions of creative and innovative tactical leadership strategies and styles by studying historical case studies and engaging in interactive student exercises. Students practice aspects of personal motivation and team building in the context of planning, executing and assessing team

exercises. Focuses on the continued development of the knowledge of leadership values and attributes through an understanding of rank, uniform, customs and courtesies. Classes meet for two hours of classroom instruction and two hours of leadership lab per week. Students incur no military obligation. 3 Cr.

**MSC 202 Leadership in Changing Environments**

**(B).** Examines the challenges of leading in complex contemporary operating environments. Dimensions of the cross-cultural challenges of leadership in a constantly changing world are highlighted and applied to practical Army leadership tasks and situations. Develops greater self-awareness as students practice communication and team-building skills. Contemporary Operating Environment case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios. Classes meet for two hours of classroom instruction and two hours of leadership lab per week. Students incur no military obligation. 3 Cr.

**MSC 301 Adaptive Team Leadership**

**(B).** *Prerequisite: MSC 202.* Challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented with the demands of the ROTC Leader Development and Assessment Course (LDAC). Challenging scenarios related to small unit tactical operations are used to develop self-awareness and critical-thinking skills. Cadets receive systematic and specific feedback on their leadership abilities. Cadets begin to analyze and evaluate their own leadership values, attributes, skills and actions. Primary attention is given to preparation for LDAC and the development of leadership qualities. Classes meet for three hours of classroom instruction and two hours of leadership lab per week. 4 Cr.

**MSC 302 Leader Development and Assessment**

**(B).** *Prerequisite: MSC 301.* Uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skills in decision-making, persuading, and motivating team members are explored, evaluated, and developed. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development and Assessment Course (LDAC). Cadets are expected to apply basic principles to Army training and motivation to troop-leading procedures. Emphasis also is placed on conducting military briefings and developing proficiency of operation orders. Classes meet for three hours of classroom instruction and two hours of leadership lab per week. 4 Cr.

**MSC 310 Survey of American Military History**

**(A).** Does not count toward the major in history or fulfillment of General Education requirements for history. Focuses on a narrative of American military history following a chronological format. Emphasizes the role of the American military as an element of national power and how the government wields it in domestic and foreign relationships. Class discussions and course work also cover the impact of technology on war, civil and political-military relationships, growth and the overall organization of the American armed forces and impact of its use on United States and world history. *3 Cr. Every Semester.*

**MSC 401 Developing Adaptive Leaders (B).**

*Prerequisites: MSC 301; MSC 302 and one of HST 327, HST 355, HST 356, HST 362, HST 417 or HST 419.* Develops cadet proficiency in planning, executing and assessing complex operations, functioning as a member of a staff, and providing leadership performance feedback to subordinates. Cadets are given situational opportunities to assess risk, make ethical decisions and provide coaching to fellow ROTC cadets. Cadets are challenged to analyze, evaluate and instruct younger cadets. Both their classroom and battalion leadership experiences are designed to prepare cadets for

their first unit of assignment. Cadets identify responsibilities of key staff, coordinate staff roles, and use situational opportunities to teach, train and develop subordinates. Classes meet for three hours of classroom instruction and two hours of leadership lab per week. *4 Cr.*

**MSC 402 Leadership in a Complex World (B).**

*Prerequisites: MSC 401, MSC 301 and MSC 302.*

Explores the dynamics of leading in the complex situations of current military operations. Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. Aspects of interacting with non-governmental organizations, civilians on the battlefield, and host nation support are examined and evaluated. Significant emphasis is placed on preparing cadets for their first unit of assignment. Case studies, scenarios and decision-making exercises are used to prepare cadets to face the complex ethical and practical demands of leading as commissioned officers in the United States Army. Classes meet for three hours of classroom instruction and two hours of leadership lab per week. *4 Cr.*

## MODERN WAR AND SOCIETY—INTERDISCIPLINARY MINOR

Modern War and Society, an interdisciplinary minor that requires 18 credits, provides a broad gauged perspective on a vital contemporary issue. The nature of human conflict, international power relations, the battlefield in various contexts, the literature of war, and myriad sub-topics make up the substance of the program. The Departments of English, History and Political Science offer an array of mostly upper-level courses. Students must meet the following requirements:

- A. HST 355 Modern War, 1740–1939
- B. Five electives which must include courses from at least two departments and at least one 400-level offering from the following:
  - ENL 495 Literature of the Holocaust
  - HST 327 American Military Experience
  - HST 351 Nazi Germany
  - HST 356 War Since 1945
  - HST 362 World War II
  - HST 417 The American Revolution
  - HST 419 The Civil War Era, 1848–1877
  - HST 441 World War I
  - PLS 111 World Politics
  - PLS 333 American Foreign Policy
  - PLS 448 Leadership

For further information, contact Dr. Arden Bucholz, Department of History, 130 Faculty Office Building, (585) 395-2377.

## OTHER MILITARY TRAINING— UNITED STATES AIR FORCE ROTC

Air Force ROTC is available to all full-time students through cross-registration with Rochester Institute of Technology (RIT). Details concerning Air Force ROTC classes and scholarships may be obtained by calling RIT at (585) 475-5196.

## MUSIC COURSE OFFERINGS

**1101 Tower Fine Arts Building**  
(585) 395-2496

*Associate Professor:* William Hullfish, Jr., EdD, SUNY Buffalo; *Assistant Professor:* Natalie Sarrazin, PhD, University of Maryland; *Lecturers:* Elizabeth Banner, MA, SUNY Brockport; Carol Brown, PhD, Eastman School of Music; Lara Mannes Sipolis, MM, College of Music; Herbert Wise, PhD, Eastman School of Music.

The College offers classes in applied music, music theory, music history and music appreciation, both to fulfill a music minor and general education requirements. Interested students may participate in musical ensembles. A unique collaboration has been developed with Rochester Philharmonic Orchestra, which includes RPO performances on the SUNY Brockport campus; a RPO member teaching a music course on campus and invited musicians presenting lecture-demonstrations. Music courses also serve as a component of the arts for children program. Music classes and the music minor are offered by the Department of Theatre.

### Requirements for Music Minor:

For admission to the music minor program, students must pass a pretest or successfully complete MUS 105 Introduction to Music.

<b>Music Minor</b>	<b>Credits</b>
<b>Theory Courses (6 credits):</b>	<b>6</b>
MUS 305 Theory I (3)	
MUS 306 Theory II (3)	
<b>Music History (6 credits):</b>	<b>6</b>
<i>Required:</i>	
MUS 112 World Music (3) OR	
MUS 210 Music Appreciation (3)	
<i>Choose 3 credits from:</i>	
DNS 232 African Music and Drumming (3)	
MUS 413 American Music (3)	
MUS 414 American Musical Theatre (3)	
MUS 485 American Folk Music (3)	
MUS 399 Independent Study (1-3) on music history topic	
MUS 499 Advanced Independent Study (1-3) on music history topic	
<b>Applied Music (4 credits):</b>	<b>4</b>
MUS 135 Class Piano I (2)	
MUS 139 Class Voice I (2)	
MUS 235 Class Piano II (2)	
MUS 335 Advanced Piano Class (2)	
MUS 339 Class Voice II (2)	
MUS 399 Independent Study (2)	
applied music with approved private instructor	
MUS 499 Advanced Independent Study (2)	
applied music with approved private instructor	
<b>Ensemble (2 credits)*:</b>	<b>2</b>
MUS 320 Brockport Chorus (1)	
MUS 322 Gospel Choir (1)	
MUS 399 Independent Study (1)	
with approved instrumental ensemble	

**Total credits required for music minor: 18**

*\* Music minors must participate in an ensemble for a minimum of two semesters. Maximum amount of credit for ensemble participation is two credits. Students may take ensemble for no credit.*

### **INTERDISCIPLINARY ARTS FOR CHILDREN: MUSIC SPECIALTY**

Students seeking an interdisciplinary major in arts for children with a specialty in music are required to complete a 48 credit program consisting of (1) two interdisciplinary courses, IAC 280 Introduction to Related Arts for Children, and IAC 491 Seminar in Arts for Children; (2) a music specialty of 21 credits; and (3) a 21-credit block consisting of two courses in each of the other three arts and one approved elective. Students wishing a major in arts for children with a music specialty must pass the entrance audition — performance in voice or an instrument at NYSSMA level IV or above. A minimum grade of “C” must be maintained in all required courses.

For detailed information and a comprehensive listing of courses required in this specialty area, refer to the section Arts for Children - Interdisciplinary Major in this catalog.

## MUSIC COURSES

**MUS 100 Fundamentals of Music for Dance (A).** Provides a study of rhythm and elements of music. Explores the significance of “time” in movements and its importance to rhythmic phrasing in music and dance. *2 Cr.*

**MUS 105 Introduction to Music (A,P).** Open to all students. Required of arts for children majors. Includes a performance component. No musical background required. Covers music fundamentals, such as reading music in treble and bass clefs, keyboard, scales, intervals and chords and ear training. *3 Cr.*

**MUS 112 World Music (A,F).** Examines the universal principles that connect music around the world. Includes the music of India, Africa, Japan, South America, the United States and Europe. Includes a unit on the contribution of women composers. *3 Cr. Every Semester.*

**MUS 135 Class Piano I (B).** Allows development of practical skills in reading music at the keyboard, including some knowledge of scales and chords to provide basic accompaniment. *2 Cr. Fall.*

**MUS 139 Class Voice I (B).** Allows development of basic vocal skills, including breathing, placement, sight reading; study of vowels, consonants, and appropriate song literature. *2 Cr.*

**MUS 210 Music Appreciation With the RPO (A,F).** Open to all students; no musical background required. Explores the inner world of orchestral music contra-bassoon; 3 Bs of classical music; contemporary composers; and the influence of changing historical, social, and artistic trends on the orchestra. Studies the use of Howard Gardner’s Theory of Multiple Intelligences in learning music. Examines the influence of other cultures upon Western music. Helps students to become educated and discriminating listeners through guided listening and required attendance at Rochester Philharmonic Orchestra concerts. *3 Cr. Every Semester.*

**MUS 235 Class Piano II (A).** Piano II provides students an opportunity to continue the skills developed in Class Piano I. Emphasis will be on further mastery of the keyboard through increased technical abilities such as sight-reading, improvisation and harmonization. By the end of the course students will be able to play all major scales and minor scales on white keys, 2 octaves, hands together and all white key major and minor arpeggios. Repertoire will focus on pieces by great masters at the late elementary or early intermediate levels and will stress hand independence,

a broader choice of articulation, a wider dynamic range, scale passages, chords in root and inverted position and 7th chords.

*2 Cr. Fall.*

**MUS 239 Class Voice II (B).** Studies standard vocal repertoire, improvement of technical vocal problems through performance, and stage awareness. *2 Cr.*

**MUS 278 Afro-American Music and Culture (A).** Cross listed as AAS 278. Provides a basic history of African-American music and related aspects of theatre, dance, and literature from the 17th century to the present. *3 Cr. Fall.*

**MUS 300 Music for Dance (A).** Emphasizes the correlation between rhythm and dynamics in music and movement, and rhythmic notation in relation to dance. Studies musical techniques needed to provide percussion accompaniment for dance movement. Provides some analysis of simple musical forms, and an introduction to music resources for the dance. *3 Cr.*

**MUS 305 Music Theory I (A).** Music Theory I has written exercises in the basic harmonic system, melodic principles of part-writing, the chorale and four-part writing in root position and in inversions, secondary dominants and modulation. It also contains exercises in rhythmic, melodic, and simple harmonic ear-training. *3 Cr. Fall.*

**MUS 306 Music Theory II (A).** *Prerequisite: MUS 305.* Music Theory II is a continuation of Music Theory I and begins with exercises in chromatic harmonic, including secondary dominants, jazz and popular harmony, modulation and beginning counterpoint. Students will use computer notation software (Sibelius) in completing assignments for the course. Advanced ear-training in rhythmic, melodic and harmonic dictation is included. *3 Cr. Spring.*

**MUS 320 Brockport Chorus (B).** Includes performance of standard choral works from many styles and periods. *1 Cr.*

**MUS 321 Vocal and Instrumental Jazz Ensemble (B).** Includes performance of instrumental and vocal jazz. Provides an instruction in improvisation, stylistic elements, and historical background. *1 Cr.*

**MUS 322 Gospel Music I (B).** *Cross-listed as AAS 322.* Provides a basic history of black American gospel music and its relationship to contemporary music form; and includes performances of Gospel Music. *1 Cr.*

**MUS 323 Instrumental Ensemble (A).** Instrumental ensemble acts as a blanket course for small chamber ensembles (e.g. recorder ensemble, saxophone quartet, etc.) and large ensembles such as a community band, community jazz ensemble, Brockport Symphony Orchestra, etc. *1 Cr. Every Semester.*

**MUS 335 Class Piano II (B).** Allows development of more advanced skills in piano performance techniques, including pedaling, phrases and fingering, and study of polyphonic and homophonic styles. *2 Cr. Fall.*

**MUS 399 Independent Study in Music (A).** To be defined in consultation with the instructor-sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. *1-3 Cr.*

**MUS 413 American Music (A).** Provides a study of representative music styles and idioms of North America from Colonial times to the present; analysis of visual and aural, structural and stylistic characteristics of the music; and recognition of important composers and musicians who contributed to the development of American music. *3 Cr.*

**MUS 414 American Musical Theatre (A).** Surveys the American musical theatre, including Broadway shows, through investigation of its form. Provides analyses, discussions, viewing and research of selected works to serve as a basis for a more aware listening technique. *3 Cr.*

**MUS 420 Music Literature for Dance (A).** *Prerequisites: MUS 300.* Provides a study of musical literature with particular reference to interrelationships between dance and music; a historical survey; selection of music for dance; and Western classical, jazz, and world music resources. *3 Cr.*

**MUS 455 Music Resources for Dance (A).** *Prerequisite: MUS 300.* Explores music materials and resources for use in choreography; techniques of taping and creating taped collages for production; and concerns for original scores. Analyzes musical forms and rhythmic structure; and historical styles of music. *3 Cr.*

**MUS 485 American Roots Music (A).** Takes a performance approach to the history, styles, and repertoire of North-American folk music. Allows students to learn approximately 100 folk songs, covering all geographic regions, from performances by the instructor, guest artists, members of the class, films, and recordings. Especially recommended for arts for children, recreation and leisure, education, and music education majors. *3 Cr.*

**MUS 487 Music and the Child (A).** *Prerequisite: MUS 105.* Covers current approaches in using music with children and ways in which music can contribute to the total growth of the child. Explores existing vocal and instrumental materials suitable for children, creating original songs, rhythmic games, and sound stories. *3 Cr. Spring.*

**MUS 499 Independent Study in Music (A).** To be defined in consultation with the instructor-sponsor and in accordance with the procedures of the Office of Academic Advisement prior to registration. *1-3 Cr.*

## DEPARTMENT OF NURSING

**B361 Tuttle North**  
**(585) 395-2355**

*Chair and Associate Professor:* Linda Snell, DNS, SUNY Buffalo; *Associate Professors:* Margie Lovett-Scott, EdD, SUNY Buffalo; Kathleen Peterson-Sweeney, PhD, RN, PNPC, University of Rochester; *Assistant Professors:* Zara R. Brenner, MS, APRN, BC, University of Rochester; Elizabeth Heavey, PhD, University of Buffalo; Nancy Iafrati, St. John Fisher College; Marlaine Ortiz Mangels EdD, RN, CNA, BC, University of Rochester; Patricia Lee Sharkey, MSN, RN, CS; Joanne Stevens, PhD, University of Rochester; *Lecturers:* Susan Glose, MS, University at Buffalo; Pamela Reame, MS, SUNY College at Brockport; Jennifer Elseta Reid, RN, MS, GNP, Nazareth College; Diane Weezorak; Marcia Wiczorek, RN.

### **Philosophy**

The curriculum of the Department of Nursing is derived from the program's mission, purpose, objectives and organizing framework. The philosophy describes the faculty's beliefs concerning the purpose of nursing, the focus of baccalaureate nursing education, and the expectations for program graduates.

The philosophy of the Department of Nursing states that:

The faculty of the Department of Nursing at the State University of New York College at Brockport believe that education is a lifelong process which fosters the cultural, psychosocial and intellectual development of the individual. Faculty fully support the Mission of the College, recognizing that students bring to the educational setting a diversity of abilities, motivations, experiences and cultures. Accordingly, opportunities are provided, which allow each individual to build on past knowledge and experience and to develop within the educational philosophy of the State University of New York.

Nursing is a profession, science and art with the primary purpose of facilitating clients (individuals, families and communities) to retain, attain and maintain an optimal level of wellness through purposeful interventions. The faculty believe that clients are a composite of physiological, psychological, developmental, sociocultural and spiritual dimensions. Professional nurses utilize the nursing process to manage care of clients throughout the life cycle. Nurses work independently and in collaboration with other health professionals.

Nursing education utilizes knowledge drawn from nursing, the liberal arts, sciences and humanities. Nursing curricula emphasize the development of concepts and skills that are essential to nursing practice, leadership and research, and foster the development of critical thinking. Students are active, responsible participants in the learning process.

The faculty believe that baccalaureate education serves as the foundation for graduate study and continuing professional and personal growth.

### **Baccalaureate Nursing Program**

Nursing is one of the most rewarding and challenging health care professions. The baccalaureate nursing program at SUNY Brockport prepares a generalist professional practitioner to utilize the nursing process and interpersonal skills in providing health care to clients, families and groups of all ages in any setting. The program also prepares the graduate to interpret and promote professional nursing and to accept responsibility for personal and professional growth.

The nursing program is accredited by the Commission on Collegiate Education and the New York State Department of Education. The College is a member of the American Association of Colleges of Nursing. The program is designed to help students become scientifically and humanistically prepared professional nurses, and to provide a foundation for graduate study in nursing.

Beginning practitioners are most frequently employed in either hospital or community settings. Hospitals offer challenging opportunities for the baccalaureate graduate as do long-term health care facilities. In the community, nurses are employed by public health departments,

health maintenance organizations, outpatient clinics, voluntary health organizations and hospices. Increasingly, nurses have opportunities to participate in entrepreneurial endeavors as independent health care providers. The armed services also offer excellent career opportunities for graduates.

The nursing curriculum involves classroom, field and clinical experience in nursing theory and practice. The curriculum uses a variety of teaching modalities. Students are expected to assume an active role in the learning process and are responsible for achieving learning outcomes. The focus on learner responsibility lays the foundation for the graduate's assuming accountability for professional practice and continued individual growth.

Achievement of a grade of 75 or better in all nursing courses is required for continued progress through the nursing program. Successful completion of the following courses is required for graduation:

NUR 321	Introduction to Pharmacology
NUR 328	Medication Administration and Techniques
NUR 329	Nursing: A Systems Approach
NUR 342	Foundations for Professional Practice for Nursing
NUR 343	Foundations for Professional Practice for Nursing Clinical
NUR 344	Health Assessment
NUR 345	Health Assessment Clinical
NUR 346	Adult Response to Health Stressors I
NUR 347	Adult Response to Health Stressors I Clinical
NUR 348	Childbearing Family and Women's Health
NUR 349	Childbearing Family and Women's Health Clinical
NUR 350	Adult Response to Health Stressors II
NUR 351	Adult Response to Health Stressors II Clinical
NUR 440	Psychiatric/Mental Health Nursing
NUR 441	Psychiatric/Mental Health Clinical
NUR 442	Critical Care Nursing
NUR 443	Critical Care Nursing Clinical
NUR 444	Community Health Nursing
NUR 445	Community Health Nursing Clinical
NUR 446	Child and Adolescent Responses to Health Stressors
NUR 447	Child and Adolescent Responses to Health Stressors Clinical
NUR 451	Contemporary Issues in Nursing Leadership and Management
NUR 452	Management and Leadership
NUR 478	Problem Solving in Nursing
PRO 310	Research: Process and Critique

Curriculum and program requirements are subject to change as necessary. Students should consult department faculty for current information.

Clinical experiences provide students with an opportunity to apply theory in the following areas of nursing: adult health, mental health, child health, maternal health, critical care, and community health. Clinical experiences involve either day or evening hours, depending on the agency and the specialty area. Students need to keep Tuesdays and Thursdays free of all other commitments.

### **Requirements for a Bachelor of Science in Nursing**

To qualify for the degree of Bachelor of Science in Nursing, students must complete all nursing course requirements, and achieve and maintain a cumulative grade of 75 in each nursing course. Students are also responsible for meeting the General Education requirements of the College. All degree requirements must be completed within five years after beginning the clinical component of the major.

### **Admission to the Program**

Admission policies provide an opportunity for a baccalaureate education in nursing to qualified students in each of three groups: 1) students enrolled in this College, 2) transfer students from

other colleges and universities, and 3) registered nurses. The Department of Nursing is limited in the number of students it can accept for clinical placement. Affiliating agencies require strict faculty-student ratios. Admission criteria are subject to change. Consult the Department of Nursing for current information.

#### **Minimum Criteria for Admission:**

- 1) a cumulative college grade point average of 2.75 by the end of fall semester of sophomore year;
- 2) junior status with a minimum of 54 non-nursing liberal arts credits;
- 3) current CPR (Basic Life Support for the Professional Rescuer) certification through the American Red Cross or Health Provider course through the Heart Association);
- 4) satisfactory references, personal statement and health form.
- 5) completion of an application to the Department of Nursing by the third Wednesday of the month of January of the applicant's sophomore year and acceptance by SUNY Brockport. **(Please note, these are two separate applications.);**
- 6) achievement of a "C" or better in all nursing prerequisites with no more than one of these courses repeated; and
- 7) completion of all but two prerequisites by May of the year the student plans to start the nursing program. Maximum prerequisite courses to be taken in the summer is two.

#### **SUNY Brockport Students—Freshmen**

Admission to nursing is competitive. There is no guarantee of admission to the nursing program. There is a separate application process for nursing and this must be submitted no later than the third Wednesday of the month of January of the applicant's sophomore year. Students must have a 2.75 GPA by the end of the fall semester of their sophomore year to be considered for admission to the nursing program and maintain this average as they continue to complete their course work.

To document successful completion of these criteria, students should file an application with the Department of Nursing by the third Wednesday of the month of January of their sophomore year. These students' forms will be reviewed by the Admissions Committee early in the spring semester and students will then be notified about acceptance into the nursing program.

#### **Transfers**

Students transferring into the College should apply directly to the Department of Nursing for admission to the nursing program. Consideration of admission is contingent upon acceptance to the College by the third Wednesday of the month of January and completion of the criteria listed above. Acceptance is on a space-available basis. There is no guarantee of admission to the nursing program.

#### **Registered Nurses**

Registered nurses also should apply directly to the Department of Nursing for admission to the nursing program. Admission is on a space-available basis. RN students should note that a maximum of 64 credits may be transferred from the associate's degree level.

For further information concerning opportunities for transfer credit and credit by exam, contact the Department of Nursing.

Currently, a new Fast-Track RN-BSN program has been developed and is at the approval phase. Please consult the Department of Nursing Web site for the latest information

#### **Required Prerequisite Courses**

**All students must complete the following courses (or their equivalent) prior to admission to the program:**

	<b>Credits</b>
Anatomy and Physiology I, II	6–8
Microbiology	4
Chemistry (not a preparatory course)	4

Nutrition	3
Statistics	3
Sociology	3
Psychology	3
Development Assessment or Psychology (must cover entire lifespan from birth to death)	3
<b>Total:</b>	<b>29–31</b>

Prerequisite and corequisite requirements may undergo change. Contact the Department of Nursing for current information.

### Student Health Requirements

Because of the special demands of the nursing program and the need to protect patients and students, junior and senior students in the nursing program are required to have a physical examination and prescribed lab tests prior to the start of the school year. The health form may be obtained from the Office of Undergraduate Admissions or the Department of Nursing. A current, complete health form including the prescribed lab tests must be on file in the Department of Nursing by the date specified in the admission letter in order for the student to participate in clinical learning experiences. Nursing students are required to discuss with their nursing faculty advisors any health factors that may affect their capacity to perform as professional nurses. (Note: New York State Department of Health and individual health care agencies require additional protective measures prior to caring for patients. Presently, health care agencies require a positive rubella titer, a tine test or PPD, and Hepatitis B vaccination or its declination.)

### Transportation

The majority of the clinical facilities are located in Rochester, 16 miles east of the SUNY Brockport campus. Transportation to and from clinical sites is the student's responsibility.

### Uniforms

Uniforms must be purchased before the beginning of the junior year. Students accepted into the program are advised concerning arrangements for fittings and costs.

### Requirements for RN Licensure

Graduates of this nursing program meet the education requirements for admittance to the RN licensure exam; however, there is a requirement that the applicant be of "good moral character," and a fee must be paid for the test. On the application for the test, the applicant is required to truthfully answer the following questions:

- Have you ever been convicted of a crime (felony or misdemeanor) in any state or country?
- Are charges pending against you for a crime (felony or misdemeanor) in any state or country?
- Have you ever been found guilty of professional misconduct, unprofessional conduct or negligence in any state or country?
- Are charges pending against you for professional misconduct, unprofessional conduct or negligence in any state or country?

If the answer to any of the questions is yes, the applicant must offer full explanation and establish his/her good moral character with the State Education Department.

Any student charged with or convicted of a crime (felony or misdemeanor) before or after admittance to the nursing major must discuss their situation individually (and confidentially) with the chair of the Department of Nursing to assess the impact of this on the student's eventual ability to be licensed as a RN. The chair will assist the student in the proper procedure to report their situation to the New York State Department of Education. The Department of Nursing takes no responsibility for lack of employability of program graduates.

In addition, some clinical agencies affiliated with the Department of Nursing may require background checks on nursing students before allowing them to participate in clinical activities. Agency requirements concerning the results of background checks are not under the control of the Department of Nursing and may be subject to change without notice.

If the result of a background check blocks a student from participation at certain clinical sites, the student may be unable to successfully complete clinical course requirements of the Department of Nursing. Inability to successfully complete the clinical course requirements will result in failure of the clinical course and requires dismissal from the nursing program.

#### NURSING COURSES

**NUR 321 Introduction to Pharmacology (A).** Presents drugs used therapeutically and their mechanisms of actions. Emphasizes classes of drugs, the major drugs in each class, and how they are used to promote client stability. Considers important side effects and drug interactions relevant to the role of the nurse in client care. *2 Cr. Spring.*

**NUR 328 Medication Administration and Techniques (B).** Provides guided learning experiences designed to develop the skills necessary for safe administration of medications. Open to pre-nursing sophomores with faculty permission only. *1 Cr. Fall.*

**NUR 329 Nursing: A Systems Approach (B).** Examines the four major concepts of the Neuman Systems Model: health, environment, client, and nursing. Focuses on defining and promoting client health, recognizing that clients may be communities, families, or individuals. Discusses aspects of therapeutic communication, the development of nurse-client relationships, spirituality, culture and ethnicity, values and ethics and professional issues in nursing. Open to pre-nursing sophomores with faculty permission only. *2 Cr. Fall.*

**NUR 342 Foundations for Professional Practice for Nursing (B).** *Corequisite: NUR 343 must be taken concurrently.* Presents both the skills and theoretical basis for professional practice in nursing with an emphasis on a systems approach. Introduces the components and use of the nursing process and basic nursing techniques. *3 Cr. Fall.*

**NUR 343 Foundations for Professional Practice for Nursing Clinical (B).** *Corequisite: NUR 342 must be taken concurrently. Course fee.* Presents both the skills and theoretical basis for professional practice in nursing with an emphasis on a systems approach. Introduces the components and use of the nursing process and basic nursing techniques. *1 Cr. Fall.*

**NUR 344 Health Assessment (B).** *Corequisite: NUR 345 must be taken concurrently.* Bridges the gap between the basic sciences and their application in assessing the client. Includes history taking and systematic assessment of the person. *1 Cr. Fall.*

**NUR 345 Health Assessment Clinical (B).** *Corequisite: NUR 344 must be taken concurrently.* Examination skills and techniques are practiced in a lab setting. *1 Cr. Fall.*

**NUR 346 Adult Response to Health Stressors I (B).** *Corequisite: NUR 347 must be taken concurrently.* Examines the response of adult clients to stressors affecting essential body systems. The course emphasizes primary and secondary preventions for clients experiencing major health problems in the US today. *2 Cr. Fall.*

**NUR 347 Adult Response to Health Stressors I Clinical (B).** *Corequisite: NUR 346 must be taken concurrently. Course fee.* Application of the nursing process in a clinical setting to assist clients in strengthening their flexible lines of defense and to diminish the impact of stressors on core stability. *2 Cr. Fall.*

**NUR 348 Childbearing Family and Women's Health (B).** *Corequisite: NUR 349 must be taken concurrently.* Examines the responses of families to expected and high-risk obstetrical and neonatal stressors, and complications that occur during the prenatal, intrapartum and post-partum periods. Also examines stressors inherent in women's health care such as gynecological health concerns. *3 Cr. Spring.*

**NUR 349 Childbearing Family and Women's Health Clinical (B).** *Corequisite: NUR 348 must be taken concurrently.* Course fees. Utilizes the nursing process and provides an opportunity for implementation of nursing care in a variety of obstetrical and women's health care clinical settings. *3 Cr. Spring.*

**NUR 350 Adult Response to Health Stressors II (B).** *Corequisite: NUR 351 must be taken concurrently.* Examines more complex adult client responses to stressors affecting body systems, including musculoskeletal, respiratory, gastrointestinal, renal and neurologic function. Emphasis is placed on methods that strengthen the lines of defense/resistance. *3 Cr. Spring.*

**NUR 351 Adult Response to Health Stressors II Clinical (B).** *Corequisite: NUR 350 must be taken concurrently. Course fee.* Clinical experiences

emphasize methods that strengthen the lines of defense/ resistance in clients from diverse backgrounds. 3 Cr. Spring.

**NUR 380 Issues in Women's and Men's Health (A, I, D, W).** *Cross-listed as WMS 380.* Examines various perspectives and issues related to the health care of women and men across the lifespan. Past and present historical, biological, psychosocial, political, cultural, religious, ethical, moral and legal issues affecting health care will be investigated. Developments an awareness about the roles men and women play in health and healing; providing a framework for appropriate decision making on health care issues, and exploring preventative and holistic health care. Topics include sexuality and sexually transmitted diseases, abortion, birth control methods, rape, violence in the family, eating disorders, substance abuse, depression, reproductive technology, pregnancy, healthy aging, health promotion, and interacting with the medical system. Includes discussion of relevant biological, sociological, psychological, cultural, religious, ethical, moral and legal factors that influence them. 3 Cr.

**NUR 440 Psychiatric - Mental Health Nursing (B).** *Corequisite: NUR 441 must be taken concurrently.* Examines the use of the nursing process in situations that require complex interpersonal skills. Focuses on the use of these skills in promoting the ability of clients to respond to stressors. Includes the provision of primary, secondary and tertiary interventions with clients who are experiencing violence, sexual dysfunction, crisis, and the major mental illnesses. 3 Cr. Every Semester.

**NUR 441 Psychiatric - Mental Health Nursing Clinical (B).** *Corequisite: NUR 440 must be taken concurrently. Course fee.* Clinical application of the concepts of mental health nursing. 3 Cr. Every Semester.

**NUR 442 Critical Care Nursing (B).** *Corequisite: NUR 443 must be taken concurrently. Course fee.* Implements secondary and tertiary preventions for the critically ill client. Includes topics such as health problems seen in emergency departments, intensive care units, burn centers and trauma units. 3 Cr. Every Semester.

**NUR 443 Critical Care Clinical (B).** *Corequisite: NUR 442 must be taken concurrently. Course fee.* Provides opportunities for implementing secondary and tertiary preventions for the critically ill client. 3 Cr. Every Semester.

**NUR 444 Community Health Nursing (B).** *Corequisite: NUR 445 must be taken concurrently.* Examines the provision of primary, secondary and tertiary preventions within the home health care

and public health domain. Utilizes the nursing process to promote optimal client stability. 2 Cr. Every Semester.

**NUR 445 Community Health Nursing Clinical (B).** *Corequisite: NUR 444 must be taken concurrently. Course fee.* Provides an opportunity for implementation of the nursing process in home and community settings. 2 Cr. Every Semester.

**NUR 446 Child and Adolescent Responses to Health Stressors (B).** *Corequisite: NUR 447 must be taken concurrently.* Examines the multiple stressors in the critically and chronically ill child and adolescent and their effects on the child, family and community. Examines the nursing process to promote optimal stability. 3 Cr. Every Semester.

**NUR 447 Child and Adolescent Responses to Health Stressors Clinical (B).** *Corequisite: NUR 446 must be taken concurrently.* Utilizes the nursing process in clinical settings to promoter optimal stability of children and adolescents experiencing stressors. 2 Cr. Every Semester.

**NUR 451 Contemporary Issues in Nursing Leadership and Management (A,I,W).** Examines leadership and management in nursing and involvement of this role in contemporary issues in nursing. Topics include: leadership and management roles, power in nursing, career choices, legal and ethical issues in nursing, controversial topics in health care, nursing educational issues, politics and gender. 3 Cr. Every Semester.

**NUR 471 Community Based Epidemiology (B).** Explores the various roles filled by community health nurses and the public health system. Entry-level epidemiology will be applied to appropriate clinical settings. Offers opportunities to develop public health awareness in an area of individual interest. Includes multiple independent learning projects. 3 Cr. Fall.

**NUR 472 Community Based Epidemiology Clinical (A).** *Corequisite: NUR 471.* Provides the RN-BSN student with clinical experiences in a variety of community settings. 2 Cr. Fall.

**NUR 473 Nursing Seminar I (B).** Examines the role of the baccalaureate educated RN and promotes professional development. Beginning skills to produce a final project related to clinical practice will be developed. Professional presentation and communication skills will be explored. 4 Cr. Fall.

**NUR 475 Nursing Seminar II (B).** Explore professional development of the baccalaureate prepared nurse in depth. A professional portfolio will be completed, along with a final evidence-based practice project related to clinical practice. 2 Cr. Every Spring.

**NUR 478 Problem Solving in Nursing (B).** Focuses on problem solving and decision making in nursing. Emphasizes synthesis of knowledge as it applies to the care of clients with multiple needs. Examines test-taking skills, relaxation and stress management techniques. Every semester, repeatable for two credits. *1 Cr. Spring and 1 Cr. Fall.*

**NUR 495 Senior Nursing Seminar (B).** *Prerequisites: NUR 341; both NUR 464 (may be taken concurrently), NUR 467 (may be taken concurrently).* Concentrated clinical course that includes 128 hours with an experienced RN from a local hospital or agency. This course provides the student with the opportunity to choose a select setting of their interest in order to further develop their clinical experience and assist in the transition to professional practice. *3 Cr. Every Semester.*

## DEPARTMENT OF PHILOSOPHY

**101 Hartwell**  
**(585) 395-2420**

*Chair and Professor:* Georges Dicker, PhD, University of Wisconsin; *University Professor:* Paul Yu, PhD, University of Michigan; *Professor:* Harold Greenstein, PhD, New York University; *Associate Professors:* Gordon Barnes, PhD, University of Wisconsin; Catherine McKeen, PhD, Rutgers University; *Visiting Assistant Professors:* Robert Kieffer, PhD, SUNY University at Buffalo; Benjamin Rider, PhD, University of Texas; *Lecturer:* Yvgenia Skorobogatov-Gray, PhD, Binghamton University (SUNY).

The Department of Philosophy promotes the ideals of impartiality, intellectual rigor and clarity of thought. Its curriculum is designed to contribute to the enrichment and refinement of students' analytical, conceptual and communication abilities. The study of philosophy develops rational self-consciousness and cultivates habits of critical thought. Examining the best writings in the history of philosophy provides a broader perspective from which to view one's place in nature, the world and society.

The study of philosophy is excellent preparation not only for a career as an academic philosopher, but also for careers in all fields that require clear, analytical thinking, writing, and speaking, including teaching and education, government, the ministry, business and management, publishing, and many other fields. Philosophy is also an excellent major for pre-law students.

### Major in Philosophy

Philosophy majors must earn a minimum of 30 credits in philosophy, 18 of which must come from six required courses, and at least 15 of which must come from upper-division courses.

**Specifically, the program requirements are as follows:**

	<b>Credits</b>
<b>I. Six required courses</b>	
PHL 101 Introduction to Philosophy	3
PHL 102 Introduction to Ethics	3
PHL 205 Modern Logic	3
PHL 304 Ancient Philosophy	3
PHL 305 History of Modern Philosophy	3
PHL 396 Seminar on Philosophical Problems	
or	
PHL 491 Seminar on Individual Philosophers	3
<b>II. Elective courses</b>	
Four PHL courses, at least two of which must be upper-division courses	12
<b>Total:</b>	<b>30</b>

**Minor in Philosophy**

Philosophy minors must complete 18 credits in philosophy, at least nine of which must come from upper-division courses.

Transfer credit is reviewed by the department chair on a course-by-course basis.

## PHILOSOPHY COURSES

**PHL 101 Introduction to Philosophy (A,G).**

*Cross-listed as HON 211.* Provides a general introduction to the study of philosophy, including discussion of major problems of philosophy, based on the writings of historical and contemporary thinkers. 3 Cr. *Every Semester.*

**PHL 102 Introduction to Ethics (A,G).** Provides for the study of major ethical systems in Western philosophy, including their intuitive, authoritarian, deontological, utilitarian, pragmatic or other justifications, through study of selected works of the chief moral philosophers. 3 Cr.

**PHL 103 Introduction to Philosophy of Religion (A,G).** Examines basic issues such as arguments for the existence of God, the coherence of the concept of God, the problem of evil, the relation between faith and reason, and the evidence of religious experience and miracles. 3 Cr. *Spring.*

**PHL 104 Critical Thinking (A,D,H).** Provides a study of the kinds of fallacious reasoning and arguments found in editorials, political statements, advertising, philosophical works, textbooks and statistics. Focuses on the functions of language, the construction of valid arguments, the avoidance of fallacy, and the relationships among opinion, belief, evidence and fact. 3 Cr.

**PHL 202 Logic (A,H).** Provides a study of deductive and inductive processes of reasoning, including the relation of logic to scientific inquiry and method, and the identification of fallacies in reasoning and discourse. 3 Cr.

**PHL 205 Modern logic (A).** Uses the mechanism of an artificial language to provide a systematic study of deductive reasoning. Students will learn to translate English sentences into an artificial language and construct formal proofs of validity for deductive arguments. Covers classical sentential logic. Other topics that might be introduced include: predicate logic, identity, and modal logic. 3 Cr. *Fall.*

**PHL 207 Asian Wisdom (A,O).** Explores the history and content of the ancient philosophical traditions of India, China and Japan. Our task will be both to outline and interpret the philosophical approaches of the Eastern schools of thought and

to become aware of the connections and disparities between the latter and the Western philosophical narratives. 3 Cr.

**PHL 208 Tai Chi and Chinese Culture (A,D,O).** Teaches Tai Chi in the context of, including biases against, Chinese culture (philosophy, medical theory, art, calligraphy). 3 Cr.

**PHL 304 Ancient Philosophy (A).** Provides a critical analysis of the central ideas of the ancient Greek philosophers, especially those of Plato and Aristotle. 3 Cr. *Fall.*

**PHL 305 History of Modern Philosophy (A).** Provides a systematic study of the views of major modern philosophers such as Descartes, Spinoza, Leibniz, Locke, Hume and Kant. 3 Cr. *Spring.*

**PHL 308 The Arts in Society (A,I).** Considers various issues concerning the arts and human values by examining the main arguments on all sides, and the philosophical underpinnings of those arguments. Includes issues such as moral criticism of the arts, censorship versus free expression, decisions about public art, government support of the arts, and the role of criticism. 3 Cr.

**PHL 321 Medical Ethics (A,I).** Using case studies, examines some of the complex ethical issues in medicine today: abortion on demand; euthanasia for defective newborns and for the terminally ill; medical experimentation and informed consent; psychosurgery and behavior control; genetic counseling and research; and allocation of medical resources. 3 Cr. *Spring.*

**PHL 322 Intermediate Logic (A).** Covers translation of English into propositional and quantified forms; construction and analyses of well-formed arguments using propositional and quantified calculi; and symbolization of relational expressions and their use in argument forms for understanding the nature of deductive systems. 3 Cr.

**PHL 323 Human Knowledge (A).** Offers a careful consideration of competing answers to basic philosophical questions such as: What is truth? What is the difference between belief and knowledge? Is knowledge based on reason or experience? How much force do skeptical arguments regarding sense perception, reason, memory and induction have? 3 Cr.

**PHL 326 Political Philosophy (A,D,I,W).** Studies major political theories in the Western tradition, and critically examines such salient questions as: Why should some people have political power over others? Why should people obey any government? What are the alternatives, if any, to a political society? *3 Cr.*

**PHL 332 Death and Dying (A,I).** Critically examines competing answers to controversial philosophical issues surrounding death and dying. Includes topics such as defining death, the morality and rationality of suicide, euthanasia, ethical problems of pain alleviation, and the rights of the terminally ill. *3 Cr.*

**PHL 333 God, Self and World (A).** Provides an introduction to certain basic metaphysical problems, such as the existence of God, freedom vs. determinism, the mind/body problem, personal identity, the problem of immortality, substance, universals, primary and secondary qualities. *3 Cr.*

**PHL 335 Feminism and Philosophy (A,D,I,W).** *Cross-listed as WMS 335.* Feminist theory and philosophy converge on some basic questions of enduring importance: questions concerning, e.g., personhood, knowledge and reality. Explores some varieties of feminism, such as liberal, radical, multicultural, postmodern and cyberfeminism. Investigates how these feminisms engage issues of contemporary moment, such as work equity, sexuality, pornography and technology, and examines the philosophical significance of these engagements. *3 Cr.*

**PHL 342 Business Ethics (A,D,I).** Studies ethical issues arising in business practice. Considers, for example, corporate responsibility, the nature of meaningful work, the morality of the marketplace, and competition. *3 Cr. Every Semester.*

**PHL 352 Dimensions of Mind (A).** Studies the nature of the mind from various philosophical perspectives. Considers phenomena such as consciousness, volition, intentionality, motivation and emotion. *3 Cr. Spring.*

**PHL 391 Tai Chi and Chinese Culture (A).** An examination of the theory and practice of Tai Chi, with special focus on its integration with Chinese philosophy, culture and art. *3 Cr.*

**PHL 396 Seminar on Philosophical Problems (A).** Studies specific philosophic problems and issues (e.g., justice, freedom, skepticism, etc.). Subject matter varies as topics change. *3 Cr. Spring.*

**PHL 397 Abortion Controversy (A,I).** Explores the moral issues involved in the controversy about anti-abortion and pro-choice stands on legalized abortion. Emphasis is placed on relevant moral principles and arguments with a consideration of the anthropological, psychological, medical, legal and social policy issues related to this controversy. *3 Cr.*

**PHL 414 Plato and Aristotle (A).** Examines selected dialogues of Plato and the thought of Aristotle as found in his major works. *3 Cr.*

**PHL 428 Philosophy of Art (A).** Critically examines competing answers to selected central questions in the philosophy of art using contemporary as well as historical writings. *3 Cr.*

**PHL 439 Practicum in Teaching Philosophy (A).** Allows students to assist philosophy faculty in lower-division courses. Their specific duties are determined by the supervising faculty member(s). Not repeatable for multiple credit for assisting with the same course. Graded exclusively on a Satisfactory/Unsatisfactory basis. *3 Cr.*

**PHL 491 Seminar on Individual Philosophers (A).** Provides an in-depth study of the writings of one or two major philosophers, such as Descartes, Hume, Kant, Dewey, Sartre and Rawls. Content varies with appropriate subtitles provided. May be repeated as subtitle varies. *3 Cr. Fall.*