## BRYN ATHYN COLLEGE

# Complete Course Catalog 2019-20

## Table of Contents

Undergraduate Courses	4
Anthropology	5
Biology	6
Business	11
Chemistry	16
Communication	17
Computer Science	18
Dance	20
Earth Science	22
Economics	23
Education	23
English	28
Experiential Education	31
Fine Arts	31
French	39
Geography	39
German	39
Greek	39
Hebrew	40
History	40
Human Society	45
Independent Studies	46
Interdisciplinary Studies	46
Internships	46
Latin	47
Mathematics	47
Music	
Nutrition	52
Philosophy	
Physical Education	

Physics	55
Political Science	56
Psychology	58
Religion	61
Science	67
Sociology	67
Spanish	68
Theater	68
Writing	70
Graduate Courses	72
Master of Arts in Religious Studies	72
Master of Divinity	76
Master of Special Education, Literacy Concentration	80
Academic Policies	
Veterans Affairs Benefits	83
Types of Benefits	83

### Undergraduate Courses

Students may take courses above their year level only with the permission of both the instructor and the appropriate department chair.

Descriptors in parentheses following a title indicate which skills or disciplines the course fills in the Core requirements:

- (EE) Experiential Education
- (EEC) Experiential Education Component
- (IL) Information Literacy
- (PP) Public Presentation
- (QR) Quantitative Reasoning
- (W) Writing Intensive
- (WC) Writing Capstone

#### Anthropology

#### Anthropology 110. An Introduction to Cultural Anthropology.

Introduction to the theories and methods of cultural anthropology, and to the concept of culture. Though not a world cultures course, focuses on the basic institutions of culture such as ritual, technology, and progress as predicates for modern human society.

3 Credits.

#### Anthropology/History 211. Artifacts, Archaeology, and Museums. (W)

Introduction to the theories and methods used to interpret how objects provide evidence for history and express a society's values, ideas, and attitudes. Includes examination of archaeological method and ethics, and the use of objects in a museum setting. Use of hands-on projects and visits to Bryn Athyn's historic district and other local sites.

3 Credits.

#### Anthropology 213. World Pre-History.

Using world archaeological sites as stepping stones, creates a narrative of prehistory from Australopithecus through the advent of urban civilization in the old and new worlds. Focuses on three general revolutions in human history: 1) the emergence of the genus Homo with all its modern attributes; 2) the development of agriculture and animal husbandry during the Neolithic; 3) the coming together of humans in cities and states, and the ramifications for human society.

Prerequisite: Anthropology 110 or instructor permission.

3 Credits.

#### Anthropology 240. Anthropology of Religion.

This course presents a theoretical perspective on religion as a cultural phenomenon. It explores the functional relationships within a variety of belief systems. It compares them across cultures and time, and, in particular, considers their intersections with subsistence strategies and political systems. Topics include: the roles of symbols and practitioners, myth and ritual, magic and cultic practice, & secularism and fundamentalism in traditional and world religions.

3 Credits.

#### Anthropology 260. Human Evolution.

Introduction to human evolution and physical anthropology. Areas include paleoanthropology, primatology, molecular anthropology (population genetics), and to some extent evolutionary biology. Specific issues covered include the primate roots of human behavior, brain and language evolution, new and classic fossil hominids, the origin of anatomically modern humans, and human biogenetic variations.

Prerequisite: Biology 122 or instructor permission.

3 Credits.

#### Anthropology 305. Topics in Anthropology.

Examination of a selected topic in anthropology. Specific title announced in the course bulletin when offered. May be repeated when different topics are offered. 3 Credits.

#### Anthropology 315. The Indus Civilization.

This seminar course focuses on northwest India and Pakistan from the beginnings of food production to the early Vedic Age. Explores what is known from archaeology and the early Vedic texts about the cultural history of the region, including the architecture, religion, material culture, and writing system of the Indus Civilization, as well as its trade relations with other urban centers of the greater Near East. Prerequisite: Anthropology 110 or instructor permission.

3 Credits.

#### Anthropology 320. Genocide.

Seminar course on genocides in the 20th century. Focuses primarily on the cases of Ottoman Armenia, The Holocaust, and Rwanda. Through primary and secondary literature, examines the cultural context, historical background and legal frameworks, denialist projects, and memorializations. Political and psychological ramifications in the descendant communities of victims and victimizers are considered, as well as reparation processes.

Prerequisite: Anthropology 110 or any history class, or instructor permission. 3 Credits.

#### **Biology**

#### Environmental Science 105. Introduction to Sustainability.

Introductory cross-disciplinary study of the principles of sustainability in the modern world. Topics include: the limits to economic growth, demography and its constraints on economics, ecological implications of human population growth, limits of energy consumption and production, and ecological principles in the modern world. This course and the related laboratory must be taken together.

3 Credits.

#### Environmental Science 105 Lab. Introduction to Sustainability Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 122. Introduction to Biology: Genetics and Evolution.

Introduction to principles of genetics and evolution; one of a two-course gateway series that is required for prospective biology majors. Includes Mendelian and non-Mendelian inheritance, quantitative genetics, evolution, natural selection, genetic drift, kin selection, speciation, molecular evolution, and phylogenetic analysis. Course concludes with a survey of the Kingdoms of life. This course and the related laboratory must be taken together.

3 Credits.

#### Biology 122 Lab. Introduction to Biology: Genetics and Evolution Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 123. Introduction to Biology: Molecular Biology.

The second of a two-course gateway series that is required for prospective biology majors. Biological concepts are illustrated by means of molecular biology, from storage and maintenance of biological information necessary for life to its expression in the organism to diverse applications in health, medicine and food production. Topics include a general introduction to the cell and its components, cell division and the cell cycle, DNA structure and synthesis, chromosome structure and organization, mutations and their repair, genetic engineering, transcription and its regulation, the genetic code, and translation of genetic information to proteins. This course and the related laboratory must be taken together.

Prerequisite: Chemistry 101L or High School Chemistry.

3 Credits.

#### Biology 123 Lab. Introduction to Biology: Molecular Biology Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 124. Introductory Biology for Nursing Students.

Introductory biology course for students accepted into the nursing program. The course provides an introduction to cell biology focusing on the structure and function of the plasma membrane and cellular organelles, the fundamentals of Mendelian and non-Mendelian inheritance, and the structure and function of the genetic material DNA, with an emphasis on the genetic code and how it is expressed into RNA and protein.

3 Credits.

#### Biology 210. Human Anatomy and Physiology I.

First trimester of a two-trimester sequence dealing with the structure and function of the human body and mechanisms for maintaining homeostasis within it. Includes the study of cells, tissues, fluid and electrolyte balance, acid-base balance and integumentary, skeletal, muscular and nervous systems. Identification of anatomical structures using a "virtual" cadaver and preserved animal specimens will be required in the laboratory. This course and the related laboratory must be taken together.

Prerequisites: High School Chemistry and Biology 122 and 123, with a grade of "C" or better in each. 3 Credits.

#### Biology 210 Lab. Human Anatomy and Physiology I Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 220. Human Anatomy and Physiology II.

Continuation of the study of the structure and function of the human body and the mechanisms for maintaining homeostasis within it. Includes the study of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, as well as the concepts of development and metabolism. Identification of anatomical structures using a "virtual" cadaver and preserved animal specimens will be required in the laboratory. Some hands-on dissection. This course and the related laboratory must be taken together.

Prerequisite: Biology 210 with a grade of "C" or better.

3 Credits.

#### Biology 220 Lab. Human Anatomy and Physiology II Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 225. Ornithology.

The study of the morphology, physiology and ecology of diverse groups of birds. Includes classification, systematics and biogeography of bird taxa. Emphasis on how the study of birds aids in the understanding of fundamental biological concepts, such as evolution; and how adaptive radiation shapes form and function. This course and the related laboratory must be taken together.

Prerequisites: Biology 122 and 123.

3 Credits.

#### Biology 225 Lab. Ornithology Lab.

Laboratory exercises and field trips introducing fundamental field techniques, especially those used in biodiversity surveys and experimental studies. This course requires a lab fee. This course and the related lecture course must be taken together.

1 Credit.

#### Biology 230. Genetics.

Study of the process of heredity at a more advanced level than Biology 122. A problem-solving, seminar-oriented course integrating principles of evolution, classical Mendelian genetics, non-Mendelian inheritance patterns, chromosome mapping and mutations, sex determination, extra nuclear inheritance, and the following subcategories of genetics: behavioral, population, evolutionary and conservation. Prerequisites: Biology 122 and 123.

3 Credits.

#### Biology 232. Cell Structure and Function.

Study of the structure-function relationship in cells. Illustration of molecular principles upon which cellular structure and function depend. Foundation course for all other molecular biology courses. Prerequisites: Biology 122 and 123 and Chemistry 110.

3 Credits.

#### Biology 235. Ecology.

Study of the physical, chemical, and biological processes that determine the distribution and abundance of plants, animals, and microbial life. Energy flow, food webs, adaptation of species, population dynamics, species interactions, nutrient cycling, and ecological succession. This course and the related laboratory must be taken together.

Prerequisites: Biology 122 and 123.

3 Credits.

#### Biology 235 Lab. Ecology Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 240. Botany.

Introductory study of plant diversity, form, and function. Topics include evolution, classification, structure, reproduction, development, and physiology in plants.

Prerequisites: Biology 122 and 123.

#### Biology 245. Zoology.

Exploration of the animal kingdom, including: systematics, anatomy, and physiology. Topics consist of basic concepts of zoology, diversity of major groups of invertebrate and vertebrate animals, evolutionary relationships, structure and function of vertebrate and invertebrate organ systems, and evolutionary development of organ systems. Includes a lab with hands-on activities focused on selected taxa. This course and the related laboratory must be taken together.

Prerequisites: Biology 122 and 123.

3 Credits.

#### Biology 245 Lab. Zoology Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Biology 250. Microbiology.

Introduction to the morphology, physiology, genetics, and ecology of bacteria and fungi, as well as the structure and replication of viruses. Overview of microorganisms, with emphasis on those organisms involved in the natural history of human disease. This course and the related laboratory must be taken together.

Prerequisites: Biology 122 and 123.

3 Credits.

#### Biology 250 Lab. Microbiology Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Business/Environmental Science 272. Drone Applications in Business and Science.

Principles of applications of new technology in all possible fields, taking advantage of new FAA rule 107 provisions. The course explores current legislation and FAA rules, current innovation in drone use, limits of current off-the-shelf technologies, creative problem solving and business plan development. 3 Credits.

#### Biology 310. Molecular Biology: DNA and Gene Expression.

In depth study on the structure and function of the genetic material, DNA, how it is replicated and how genes are regulated and expressed. Topics include the structure of DNA and chromosomes, DNA replication, DNA damage and repair, transcription, RNA splicing, translation, transcriptional regulation in prokaryotes and eukaryotes, and the structure and function of regulatory RNAs.

Prerequisites: Biology 230 and Chemistry 210.

3 Credits.

#### Biology/Chemistry 315. Principles of Biochemistry.

Protein structure, dynamics, folding, and methods of purification and analysis. Methods of enzymology and a review of representative enzyme mechanisms. Membrane structure and function and the operation of membrane proteins in the electron transport chain and oxidative phosphorylation. A special topic of protein science explored in student projects.

Prerequisites: Biology 232 and Chemistry 210.

#### Biology 340. Marine Ecology. (IL)

Study of factors that influence the distribution, abundance, and diversity of marine organisms. Topics include physical characteristics of marine and coastal habitats, larval recruitment, and community interactions. Habitats include open ocean rocky shore, tidal flats, beaches, mangrove, sub tidal areas, estuaries, and coral reefs.

Prerequisites: Biology 235 and Chemistry 110.

3 Credits.

#### Biology 355. Cancer Biology.

Focus on how cells and organs interact via biochemical signaling mechanisms. Special attention to the mechanisms that govern the cell cycle and how a disrupted cell causes cancer. Cancer and various treatments discussed.

Prerequisites: Biology 230 and Biology 232.

3 Credits.

#### Biology 373. Biological Laboratory Techniques: Molecular Biology.

Junior level biology laboratory course supporting Biology 230, 232, 310, 315, and 355. A mixture of theoretical and practical experience in techniques used in molecular biology, including PCR and cell-based cloning, nucleic acid hybridization, genomic structure analysis, proteomics, bioinformatics, protein expression and analysis, and culturing and identifying microbiological organisms. Laboratory reports and scientific writing skills integral. This course requires a lab fee.

Co-requisite or prerequisite: Biology 230 and Biology 232.

2 Credits.

#### Biology 380. Research Seminar. (IL, PP)

Exploration of the breadth of biology career paths and research options. Guest speakers from various biological and medical fields present their work and educational background. Students choose topics for senior project proposals and research methods for discipline specific literature searches. Senior project proposals with references are due by end of term. Two presentations are given in fulfillment of the Core public presentation requirement (PP). Discipline-specific resumes and C.V. developed. Course is for biology majors.

1 Ćredit.

#### Biology 490. Biology Seminar I. (IL)

Broadened exposure to active areas of biology and reading current literature. Students encouraged to read and present reviews of current literature related to their senior projects. Required of seniors in the biology major and open to seniors in the ID major who are studying biology.

1 Credit.

#### Biology 491. Biology Seminar II.

Review of current ethical issues in science. Integrity in biological research and publication; discussion of the use of humans and animals in research, intellectual property, and other topics. Required of seniors in the biology major and open to seniors in the ID major who are studying biology.

1 Credit.

#### Biology 492. Biology Seminar III.

Public presentation of undergraduate biological research. Required of seniors in the biology major and open to seniors in the ID major who are studying biology.

1 Credit.

#### Biology 495. Senior Project. (WC)

Independent research project or scholarly study under the supervision of faculty members. Topic chosen by mutual agreement between student and supervisor. Limited to and required of biology majors. Senior project proposals are required in the spring of junior year.

3 Credits.

#### Biology 298, 398. Biology Internship. (EE)

Credit and requirements variable. Proposals must be approved by head of major. Students may apply for Biology 298 after one year and at least two 200- or 300-level biology courses, and for Biology 398 after two years of study and at least three 200- or 300-level biology courses and Chemistry 110/111. Course may be repeated for credit. Internships at other institutions must be applied for and arranged by the student. Credit variable.

#### **Business**

#### Business 141. Accounting I.

Introduction to basic financial accounting principles, the accounting cycle, the preparation of financial statements, and the use of computer spreadsheets.

3 Credits.

#### Business 142. Accounting II.

Interpretation of financial statements and the use of accounting information as a tool for making business management decisions. Use of computer spreadsheets emphasized. Prerequisite: Business 141.

3 Credits.

#### Business/Psychology 202. Human Resource Management. (PP)

(Also known as industrial and organizational psychology.) Exploration of the application of psychology to the workplace environment, such as business, government, and non-profit organizations. Major areas of study include work motivation, teams and teamwork, personnel decision-making, performance appraisal, leadership, and diversity in terms of gender, race, and personality type. Attention given to New Church concepts of conscience, discriminatory charity, and use as they apply to adult employment in our current workforce. Prerequisite: any psychology course, and any business or economics course.

3 Credits.

#### Business/Computer Science 215. Management Information Systems.

This course examines how digital information can be stored and organized to benefit organizations. Topics include strategic use of information, ethical issues in handling information, software options, and concept maps for design. Tools used include spreadsheets, databases, SQL, and report writing software. Prerequisite: Computer Science 105 or permission of instructor.

3 Credits.

#### Business/Writing 220. Business Communications. (W)

Business Communications is a workplace-oriented course designed to help students develop and refine the written and oral skills necessary to communicate effectively in professional settings. Students will review the purpose and style of business writing and complete a variety of focused writing exercises based on work settings and scenarios. Students will plan, compose, and analyze letters, memoranda, and electronic messages. They will also prepare and deliver brief oral presentations, collaborate with others, and revise business communication.

Prerequisite: Writing 101.

3 Credits.

#### Business 254. Principles of Marketing.

Focus on customer behavior, promotion, channels of distribution, product, and pricing, with emphasis on formulating marketing plans and strategies in a global and culturally diverse environment. 3 Credits.

#### Business 256. Principles of Sales.

In this course, the student will learn about assessing customer needs, developing account relationships and implementing effective sales strategies. During the course students will return to the theme of approaching sales with honesty and integrity, both from a practical and moral perspective. This course will cover the broader role sales communication plays in bringing people and the products and services they need together, not just the narrow skills required to convince the customer to make a purchase.

Prerequisite: Communication 105. Recommended: Business 254.

3 Credits.

#### Business 257. Principles of Management.

Fundamentals of management including the contributions of F.W. Taylor, Peter F. Drucker, and W. Edwards Deming. Special attention to business ethics, leadership, the Quality Movement, and ISO Teamwork 9000 certification. Group projects, business seminars.

3 Credits.

#### Business 264. Sports Marketing.

This course will study the marketing efforts within the sports industry, including the understanding of the sports customer, and promotional and marketing strategies. Topics include fan behavior, ticketing, advertising, sponsorship, licensing, endorsements, public relations, hospitality, social media, and event management.

Prerequisite: any economics course. Bus254 and Bus267 recommended.

3 Credits.

#### Business 267. Introduction to Sports Management.

This course highlights the need for trained sport management professionals by examining the history of sport. This course also provides analysis of effective management strategies and the body of knowledge associated with pursuing a career as a manager in the sport industry. Functional management, strategic planning, decision making, leadership style, managing conflict and change, motivation of a workforce, and career opportunities in different sport environments will be explored.

Prerequisite: any science or any economics or any business principles course.

#### Business 268. Sports in Society.

This course will explore the connections among amateur sports, collegiate sports, professional sports, and American society; including how sports and American culture have influenced each other, and how understanding this influence can impact sports marketing. Issues of gender and race discrimination in American sports, as well as the economic impact of hosting professional sports franchises and publicly funded stadiums, will also be discussed.

3 Credits.

#### Business/Environmental Science 272. Drone Applications in Business and Science.

Principles of applications of new technology in all possible fields, taking advantage of new FAA rule 107 provisions. The course explores current legislation and FAA rules, current innovation in drone use, limits of current off-the-shelf technologies, creative problem solving and business plan development. 3 Credits.

#### Business 290. Internship Preparation Seminar.

This course will introduce the requirements for internships, including the learning plan, journal entries, final projects, and relation to academic study. Students will learn employment related skills including: networking, interviewing, resume creation, attendance requirements, professional appearance, professional conduct, confidentiality, and maintaining ongoing relationships.

1.5 Credits.

#### Business 301. Business Ethics. (Moral, PP)

The analysis of moral principles and their application to decision making in business. Includes an overview of philosophical and theological ethical theories, including New Church ethics. Major focus on the analysis of ethical concerns in actual case studies from business, involving issues such as downsizing, whistle-blowing, competition vs. cooperation, and social responsibility. Communication 105 or any other public presentation course is recommended before taking this course.

3 Credits.

#### Business 302. Corporate Social Responsibility.

This course includes application of New Church/Swedenborgian ethical responsibility in business strategic planning and management. Particular focus on corporate leaders who are using an ethical worldview when partnering with government regulators, donating to non-profits through foundations, or managing sustainable supply chains. Students will strengthen their teamwork skills in various class projects. Ethical reasoning theories are drawn from psychology and theology to explain the socially responsible actions of corporate leaders.

3 Credits.

#### Business 305. Business Seminar.

A seminar course featuring speakers from a variety of professional backgrounds. Students will be expected to interview and introduce these speakers and lead follow-up discussions on the material they present. May be repeated for credit.

1.5 Credits.

#### Business 320. Financial Management. (QR)

Introduction to business finance, the role of the chief financial officer, and financial tools used by management. Emphasis on management of revenue and expenses, application of basic financial concepts to the solution of organizational problems, analysis of the short and long-term financial needs of an organization, and selection of most feasible course of action to secure best possible financial outcome and allocation of resources. Topics of present value, stock and bond valuation, capital budgeting, financial forecasting, and capital structures also examined.

Prerequisite: Business 141.

3 Credits.

#### Business 321. Advanced Financial Management.

This course will explore advanced financial management with specific emphasis on assessing and managing risk, including: applications for insurance and securitization, various types of derivatives and the hedging of risk, the unique challenges associated with operating in foreign countries, and tools available to manage these extra risks.

Prerequisite: Business 320.

3 Credits.

#### Business 327. International Financial Management.

This course provides an overview of international financial markets as well as presenting key challenges often faced in international financial management. Topics include import and export financing, measuring and managing foreign exchange exposure, international financial markets and banking, issues with raising capital internationally, insurance and taxation issues.

Prerequisites: any economics course and Bus320, or permission of the instructor.

3 Credits.

#### Business 351. Introduction to Business Law.

Legal enforcement of obligations and the function of law in modern business. The establishment and enforcement of contractual obligations. The establishment of an agency relationship and its effect on third parties.

3 Credits.

#### Business 354. Marketing Research.

Review of methodologies for gathering and analyzing information to guide management in marketing decisions. Formulation of problem statements, identification of data sources, data collection, demining and applying the appropriate analysis technique, creation of actionable management reports understanding of how reports are used to make decisions and influence strategy.

Prerequisite: Business 254 and Mathematics 130.

3 Credits.

#### Business/Mathematics 380. Linear Models and Methods for Optimization. (QR)

Introduction to basic methods of operations research. Review of linear systems; linear programming, including the simplex algorithm, duality, and sensitivity analysis; formulation of integer programs; transportation and scheduling problems.

Prerequisite: Mathematics 240 and competence in programming. 3 Credits.

#### Business 381. Operations and Supply Chain Management.

In this course, the student will learn the foundational concepts behind converting raw materials, labor, and capital into the goods and services customers demand. Students will explore a variety of managerial techniques and computer technologies common to operations and supply chain management. Topics include inventory, quality and logistics control, transportation, facility layout, process planning, product and service design, forecasting and scheduling. These subjects will be approached from the operational and supervisory perspective.

3 Credits.

#### Business 390. Research Seminar. (IL)

For juniors in the Business Major. Focus on preparing to do the senior capstone project. Explore topics and research questions. Research scholarly sources related to a chosen topic. Formulate draft thesis statement based on interest and research.

2 Credits.

#### Business 493. Senior Literature Review.

General guidance in continuing research and review literature related to the chosen topic for the senior capstone project, Support for crafting a sound and interesting argument, resulting in an outline of main points for the project.

Prerequisite: Business 390.

2 Credits.

#### Business 494. Senior Seminar I.

For seniors in the Business Major. Focus on developing a spiritual perspective on the student's capstone project using Swedenborgian and other principles.

Prerequisite: Business 390.

1 Credit.

#### Business 495. Senior Capstone Project. (WC)

Capstone experience for the Interdisciplinary Major. Writing of the senior project based on the research and outline produced in Business 493.

Prerequisites: Business 493 and Business 494.

2 Credits.

#### Business 496. Senior Seminar II.

For seniors in the Business Major. Public presentation of senior project. Career planning and portfolio development. Pass/Fail.

Prerequisite: C- or better in Business 495.

1 Credit.

#### Business 298, 398, 498. Business Internship. (EE)

Proposals must be approved by Internship Director. Students may apply for this internship after being accepted into a business program. Students doing internships in the summer or fall are encouraged to take the internship preparation seminar, Bus290.

Credits and requirements variable.

#### Chemistry

#### Chemistry 101. Introduction to Chemistry.

Introduction to college chemistry. Course designed with two audiences in mind-students preparing for general chemistry, and non-science majors. No prior chemical knowledge assumed, but mathematical skills equivalent to Mathematics 100 expected. Topics covered include atomic theory, organization of matter, the mole concept, naming of chemical compounds, chemical bonding and reactions, phases of matter, and kinetics. Required of students who register for Chemistry 110 and have a math SAT score of 450 or lower (or the equivalent ACT score). This course has an associated laboratory that is not necessarily offered every time the course is offered. When taken together, they satisfy the Core science requirement. This course alone will not fulfill the requirement.

3 Credits.

#### Chemistry 101 Lab. Introduction to Chemistry Lab.

This course requires a lab fee. This course and the related lecture course must be taken together when both are offered.

1 Credit.

#### Chemistry 110. General Chemistry I.

First year chemistry course for science majors. Topics include atomic structure, quantum mechanics, electron configuration, chemical bonding, molecular geometry, and the periodic table, classifications of matter, stoichiometry, and reactions in solution, gases, and thermochemistry. First half of sequence with Chemistry 111. This course and the related laboratory must be taken together.

Prerequisite: One year of high school chemistry with a grade of C or better or Chemistry 101 or Earth Science 110. Any student who registers for this course and have a math SAT of 450 or lower (or the equivalent ACT score) must take Chemistry 101 prior to taking Chemistry 110. 3 Credits.

#### Chemistry 110 Lab. General Chemistry I Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Chemistry 111. General Chemistry II. (QR)

Continuation of Chemistry 110. Topics include intermolecular forces, physical properties of solutions, chemical kinetics, chemical equilibrium, acids and bases, solubility, thermodynamics, and electrochemistry. This course and the related laboratory must be taken together.

Prerequisite: Chemistry 110.

3 Credits.

#### Chemistry 111 Lab. General Chemistry II Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Chemistry 210. Organic Chemistry I.

Second year chemistry course for science majors. Topics include molecular orbital and hybrid orbital theory and bonding, chemical energetics, alkanes, alkenes, halo alkanes, alcohols, alkynes, dienes, stereochemistry, and classes of reactions and reaction mechanisms. Laboratory includes basic techniques in organic chemistry and computer based molecular modeling. First half of sequence with Chemistry 211. This course and the related laboratory must be taken together.

Prerequisite: Chemistry 111.

3 Credits.

#### Chemistry 210 Lab. Organic Chemistry I Lab.

Includes basic techniques in organic chemistry and computer based molecular modeling. This course requires a lab fee. This course and the related lecture course must be taken together.

1 Credit.

#### Chemistry 211. Organic Chemistry II.

Continuation of Chemistry 210. Topics include spectrophotometric identification of organic compounds, arenes, esters, epoxides, aldehydes and ketones, carboxylic acids and acid derivatives, and condensation reactions. Emphasis on biological applications of organic chemistry. This course and the related laboratory must be taken together.

Prerequisite: Chemistry 210.

3 Credits.

#### Chemistry 211 Lab. Organic Chemistry II Lab.

Includes synthetic techniques and computational chemistry. This course requires a lab fee. This course and the related lecture course must be taken together.

1 Credit.

#### Biology/Chemistry 315. Principles of Biochemistry.

Protein structure, dynamics, folding, and methods of purification and analysis. Methods of enzymology and a review of representative enzyme mechanisms. Membrane structure and function and the operation of membrane proteins in the electron transport chain and oxidative phosphorylation. A special topic of protein science explored in student projects.

Prerequisites: Biology 232 and Chemistry 211.

3 Credits.

#### Communication

#### Communication 105. Public Speaking. (PP)

Exposure to a variety of speaking situations designed to address inhibitions and develop self-confidence. Class work features impromptu and prepared speeches, as well as oral interpretation of literature and choral speaking. Work on voice and speech improvement as well as command of body language. 3 Credits.

#### Communication 130. Foundations of Graphic Design.

Introductory study of how to create and communicate graphic ideas effectively. Covers elements of design, spatial relationships, typography, and imagery as they apply to graphic communication for print and web. Students will develop graphic design skills (the ability to solve visual communication problems) by integrating Adobe Creative Suite software skills and foundational design concepts. Software instruction in basics of such programs as InDesign, Illustrator and possibly Photoshop.

3 Credits.

#### Communication 230. Intermediate Graphic Design.

Continuation of graphic design instruction and practice begun in Communications 130, with more emphasis given to software proficiencies. Students hone visual communication skills by using design, spatial relationships, typography and imagery to create graphic projects in Adobe Creative Suite programs such as Photoshop, InDesign, and Illustrator.

Prerequisites: Communications 130 or permissions from instructor. 3 Credits.

#### Communication 231. Fundamentals of Adobe InDesign.

In development.

Study of the fundamentals of Adobe InDesign CC—the latest version to Adobe InDesign software—a program used to design brochures, flyers, business cards, postcards, books, and material for digital consumption. InDesign allows users to insert and size graphics, add and manipulate text, create interactive forms, and package work for commercial printing. This course is designed to take students through the program step-by-step, fostering a working knowledge of InDesign for professional, digital communication purposes.

#### **Computer Science**

#### Computer Science 105. Introduction to Computer Systems.

Discussion of how computers and networks work; introduction to web page construction with HTML; introduction to programming with Python; introduction to spreadsheet and database design and queries. 3 Credits.

#### Computer Science 160. World Wide Web Development.

Introduction to the elements of web site design. The course includes technical aspects of web creation and design considerations for information delivery and usability.

Prerequisite: Computer Science 105 or familiarity with computers. 2 Credits.

#### Computer Science 180. Structured Programming.

Language elements and applications. Algorithm development. Introduction to object-oriented programming. Prerequisite: Computer Science 105 or other programming experience with permission of instructor. 3 Credits.

#### Computer Science 206. Introduction to Data Science.

Skills and tools in acquiring, organizing, parsing, manipulating, and preparing data for statistical analysis. Skills include classifying unstructured data, cleaning data, identifying useful questions, and simple analysis. Tools include Excel, Python, and Microsoft Business Intelligence software packages.

Prerequisite: Any Computer Science course.

3 Credits.

#### Computer Science 210. Additional Languages.

A guided self-study course in which students learn an additional language or the advanced features of a language they already know. May be taken, with different languages, up to three times.

Prerequisite: Computer Science 180 and permission of instructor.

1-3 Credits.

#### Business/Computer Science 215. Management Information Systems.

This course examines how digital information can be stored and organized to benefit organizations. Topics include strategic use of information, ethical issues in handling information, software options, and concept maps for design. Tools used include spreadsheets, databases, and report writing software.

Prerequisite: Computer Science 105 or permission of instructor.

3 Credits.

#### Computer Science 220. Introduction to Data Structures.

Stacks, Queues, Linked Lists, Trees, Heaps, Sorting, Searching, Complexity, Dynamic programming. Prerequisite: Computer Science 180.

3 Credits.

#### Computer Science/Mathematics 230. Statistics and Data Mining. (QR)

This course builds on what was learned in Mathematics 130 with an eye on big data sets. Topics include linear and multi regression analysis, classification methods including logistic regression, resampling methods such as the bootstrap, applications of decision trees, and unsupervised learning such as cluster analysis. A final project will encompass multiple analysis methods. Throughout the course, the programming language *R* will be used. Prerequisites: B- or better in Mathematics 130 or Mathematics 330.

3 Credits.

#### Computer Science/Mathematics 235. Discrete Structures.

Mathematical foundations for the analysis of computer algorithms. Recursive functions, sets, graph theory, and combinatorics.

Prerequisite: Computer Science 180 or competence with a structured programming language.

3 Credits.

#### Computer Science 260. World Wide Web Languages.

Companion course with Computer Science 160. Projects will involve JavaScript, PHP, and XML.

Prerequisite: Computer Science 180 or Computer Science 206.

Co-requisite: Computer Science 160.

1 Credit.

#### Computer Science/Mathematics 321. Numerical Methods.

Finite differences, interpolation, solutions of equations, numerical integration, curve fitting, linear equations, numerical solutions of differential equations.

Prerequisite: Mathematics 250 and competence in programming. Computer Science 180 recommended. 3 Credits.

#### Computer Science 298, 398. Computer Science Internship. (EE)

Proposals must be approved by Internship Director. Students may apply for this internship after completing Computer Science 180 or any higher-level course.

Credits and requirements variable.

#### Dance

#### Dance 120. Dance Technique.

A studio course in fundamental dance technique, including jazz dance, modern/contemporary dance, and ballet. The course focuses on proper alignment, execution, and the overall strength and flexibility specific to the dancer. The artistry and musicality of the dancer is explored through dance combinations, improvisation exercises, and analysis of famous pieces of choreography.

3 Credits.

#### Dance 130. Musical Theater Dance. (EEC)

Musical Theater Dance introduces students to a variety of dance styles used in American Musical Theatre. Students will learn tap and jazz dance technique as well as specific dances from Broadway musicals choreographed by Robbins, Fosse, Champion, and more. Includes an overview of the history of Broadway, specific to dance styles and choreographers. Course culminates in a final performance. Course may be repeated once for credit. Also serves as a PE course.

1.5 Credits.

#### Dance 131/231. Modern Contemporary Dance. (EEC)

Beginner (Dance 131) and Intermediate (Dance 231) course in contemporary modern dance. Students develop technique and body awareness, and deeper understanding of modern dance and its place in the art world. Explore the diversity and commonality of human experience and values through the medium of dance. Includes choreography projects and culminates in a public performance at the Fall Dance Concert. Course may be repeated once for credit.

Prerequisite for Dance 231: Dance 120, Dance 131, or instructor's permission. Also serves as a PE course. 3 Credits.

#### Dance 132/232/332. Jazz Dance. (EEC)

Beginner (Dance 132) and Intermediate (Dance 232) and Advanced (Dance 332) course in Jazz dance technique. Students learn jazz dance technique and develop creativity, flexibility, coordination, and rhythm. Dan 232 includes choreography projects, and both levels culminate in a public performance at the end-of-term concert. Course may be repeated once for credit.

Prerequisite for Dance 232: Dance 120, Dance 132, or instructor's permission. Also serves as a PE course. 3 Credits.

#### Dance 133/233. Tap Dance. (EEC)

Beginner (Dance 133) and Intermediate (Dance 233) course in tap dance. Introduction to and development of the fundamentals of tap dance technique. Emphasis is given to basic steps and terminology, building combinations, musicality, and coordination, leading to final performance. Course may be repeated once for credit.

Prerequisite for Dance 233: Dance 133 or instructor's permission. Also serves as a PE course. 1.5 Credits.

#### Dance 134/234. Ballet. (EEC)

Beginner (Dance 134) and Intermediate (Dance 234) course in ballet technique. Introduction to and development of the fundamentals of ballet technique and vocabulary, emphasizing alignment, stretching and strengthening, flexibility, kinesthetic awareness, line and movement phrases. This course culminates in a public performance at the end-of-term concert. Course may be repeated once for credit. Prerequisite for Dance 234: Dance 120, Dance 134, or instructor's permission. Also serves as a PE course. 3 Credits.

#### Dance 160/260/360. Dance Ensemble. (EEC)

A dance repertory course for the performing artist. Rehearsing and performing pieces choreographed by faculty and guest artists. Styles may include contemporary, jazz, hip-hop, ballet, and/or tap. Each student will be involved in several different pieces of choreography. Course culminates in public performance. Dance 260 includes collaboration on a choreography project or a solo choreography project. Dance 360 involves choreographing and teaching a group piece of choreography to the class to be performed at the end of term concert. Course may be repeated for credit.

1.5 Credits.

#### Dance 240. Creative Movement and the Young Child.

This course will explore ways in which children develop through creative movement activities based on developmentally appropriate practice. Special emphasis will be placed on integrating creative movement with other learning activities. Students will have the opportunity to work on projects that incorporate creative movement with their own areas of interest as potential teachers/caregivers. Students will also explore multicultural elements of dance and movement.

1.5 Credits.

#### Dance 241. History of Twentieth-Century American Dance.

Survey of concert dance forms (ballet, modern/contemporary, jazz/musical theatre, tap in America in the 20th century. Course includes readings, lectures, films, discussions, and analysis of individual styles and cultural trends. Course culminates in a research project on a specific dance form or choreographer, focusing on how the form or individual developed in relation to cultural trends.

3 Credits.

#### Dance 331. Advanced Modern Contemporary Dance. (EEC)

Students continue to develop as dancers through learning more complex technique, progressions, and combinations, as well as engaging in improvisational exercises. Emphasis is on increasing accuracy of articulation, range of movement, and moving the body as a cohesive unit. Includes critique of modern and contemporary dance choreography and culminates in a public performance. Course may be repeated once for credit.

Prerequisite: Dance 131/231 or instructor's permission. 3 Credits.

#### Dance 332. Choreography & Composition. (EEC)

Focuses on the process of creating original dance compositions. Explores the elements necessary to dance composition, such as time, space, energy, form, design, and dynamics through improvisational exercises, the manipulation of movement, and the development of critical and analytical thinking. Students will write extensively throughout the course in the form of personal reflections, critical analysis of readings, and reviews of performances. Students will compose a solo piece of choreography, accompanied by a statement of purpose for their piece and a reflective essay on the process, which will be performed at the end of the term. Prerequisites: Two terms of Dan 131 and/or 231 or instructor's permission.

3 Credits.

#### Dance 340. Pedagogy. (EEC)

The use of pedagogical principles for the conduct and organization of dance lessons in modern, jazz and ballet. This course covers instruction strategies, lesson planning, class management, motivation of students, class observations, and a teaching assignment.

Prerequisite: permission from the instructor. 3 Credits.

#### Dance 493. Senior Literature Review.

General guidance in continuing research and review literature related to the chosen topic for the senior essay. Support for crafting a sound and interesting argument, resulting in an outline of main points for the senior essay.

Prerequisite: Interdisciplinary Studies 390.

2 Credits.

#### Dance 298/398/498. Dance Internship. (EE)

Requirements variable. Proposals should be submitted to the Department Chair. Art internships are open to students in sophomore year or above who have completed at least two art, dance, or music courses. Credits variable.

#### Dance 495. Senior Essay. (WC)

Capstone experience for the Interdisciplinary Major. Writing of the senior essay based on the research and outline produced in Dance 493.

Prerequisites: Dance 493 and Interdisciplinary Studies 494.

2 Credits.

#### Dance 499. Senior Project.

Independent study toward a dance choreography project to be a companion to the Fine Arts Interdisciplinary Senior Essay. Limited to and required of fine arts interdisciplinary majors in a dance track.

Prerequisite: Dance 332.

Credit Variable.

#### Earth Science

#### Earth Science 110. Introduction to Physical Geology and Meteorology.

Introduction to mineralogy; igneous, sedimentary, and metamorphic petrology; rock cycle and structural geology. The evolution of continents Introduction to oceanography. The atmosphere and atmospheric motion, climate, and climatic zones. Earth as a part of the solar system. This course and the related laboratory must be taken together.

Prerequisite or co-requisite: Mathematics 101 (or placement out of Mathematics 101). 3 Credits.

#### Earth Science 110 Lab. Introduction to Physical Geology and Meteorology Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Earth Science 215. Geographical Information Systems.

Fundamentals of rapidly developing Geographical Information System (GIS) technology. The students learn applications for decision making, planning, and presentation of spatial data for many disciplines such as earth science, geography, health, ecology and history. Emphasis on data preparation, analysis and presentation. Includes lab exercises that illustrate the typical steps in a GIS project. ESRI's ArcView or QGIS, and Google Earth software will be used throughout the course.

Prerequisites: Computer Science 105 or proficiency with Excel and permission of instructor. Lecture and laboratory exercises will be combined in each session.

3 Credits.

#### **Economics**

#### Economics 131. Macroeconomics. (QR)

Study of the fundamentals of economic analysis with emphasis upon national output, employment, and price levels. Exploration of the monetary and financial system together with problems of economic stability. Special attention given to the role of government fiscal and monetary policy in managing the economy. Consideration of current issues such as economic growth, federal budget deficits, and the role of the Federal Reserve Bank. Course includes student-led seminars.

3 Credits.

#### Economics 132. Microeconomics. (QR)

Study of the fundamentals of economic analysis with particular emphasis upon consumer demand behavior and the output and pricing decisions of business firms under various market structures. Special attention given to the role of ethics in the behavior of business executives and consumers. Consideration of current issues such as health care, energy policy, and government intervention in the market. Course includes studentled seminars and group projects.

3 Credits.

#### Economics 231. Development Economics.

This course focuses on studying the process of economic growth and development in both developed and developing nations. Students will approach these economies by looking at empirical data, theoretical models of growth, emerging industries and their economic effects, the role of FDI, the effect of government and private capital and government trade policies.

3 Credits.

#### Economics 232. Intermediate Microeconomics.

An intermediate treatment of microeconomic thinking. Topics include consumer behavior, production, competition, externalities and the entrepreneurial function. This course will also explore the origins of economic theory.

3 Credits.

#### Education

#### Education 128. Introduction to the Theory and Practice of Education.

Aspects of a career in teaching are explored. Topics include: teaching as a profession, educational philosophies, best practices in classroom instruction, and garden-based learning. Students observe classes at the Bryn Athyn Church School, participate in at least three field trips to other schools, and gain basic gardening experience. Opportunities to develop presentation and storytelling skills. 3 Credits.

#### Education 201. Foundations of Education. (Worldviews)

Study of world views and associated theories that impact education. Examination of questions such as: What is the nature of reality? How do we know what we know? How do we determine what is worth knowing? What is of value? Focus on how a New Church philosophy of education affects teachers and students. 3 Credits.

#### Education 202. Moral Education. (Moral)

After exploring the origins of morality and how it is developed within the individual and society, this course focuses on how to best support moral, pro-social behavior in a school setting. Special attention will be given to the role of storytelling in moral education.

3 Credits.

#### Education 217. Language, Literacy, and Numeracy.

This course prepares students for their role in the early childhood classroom. Many opportunities for application of best practices. Includes theories of language development. Special attention given to emergent language and language-rich environments. Includes 1 credit hour of ELL instruction.

3 Credits.

#### Education 218. Literacy Instruction for Young Learners I.

This course exposes students to theory and practice in literacy instruction, pre-kindergarten through grade 4. Emphasis on emergent literacy, techniques and skills of teaching reading and language arts, evaluation and assessment. Includes 1 credit hour of ELL.

Prerequisite: Education 128 or Education 217.

3 Credits.

#### Education 219. Literacy for Young Learners II.

This course prepares pre-service teachers for teaching language arts in early childhood (pre-K to 4th grade). How to assess the work of young writers and design instruction to advance their composition skills. Best practices for addressing phonological awareness, decoding, fluency, vocabulary, comprehension, spelling, and handwriting.

3 Credits.

#### Education 271. Introduction to Early Childhood Education.

This course focuses on the basic knowledges, skills and dispositions that prepare students to teach in early childhood classrooms. Teaching young children from a background of New Church spiritual philosophy, major theories and cultural perspectives. Emphasis on DAP (developmentally appropriate practice); integration of learning goals with children's play; diversity in the classroom; and the process of building a collaborative model with family and community. Includes theory and practice of Garden-based Learning. 3 Credits.

#### Education 272. Child Development: Birth - Nine Year Olds.

Teachings about human development from the theology of Swedenborg are compared with major theories of child development. Emphasis on the sensory needs of early childhood and how to create a nurturing environment for physical, mental, and socio-emotional health.

3 Credits.

#### Education 274. Adolescent Growth and Development: Ages 8-18.

This course explores the physical, intellectual, emotional, and social development of children as they transition through middle childhood into adolescence. Emphasis on how development occurs in diverse contexts (home, school, and community); developmental theories and research that inform practice; and biological and neurological changes happening in the teenage brain.

Prerequisite: Education 128 or Psychology 101.

#### Education 322. Social Studies and the Young Child.

Emphasis on the skills and attitudes taught within social studies and developed in early childhood programs. Special attention to state standards as well as New Church competencies through the study of units, multicultural experiences, and the methods and materials for teaching social studies. Contains theory and practice of Garden-based Learning. Open only to third year students.

Prerequisites: Education 128 or 271.

3 Credits.

#### Education 323. Math and the Young Child.

Exploration of the content and methods of teaching mathematics Pre-K to 4th grade. Emphasis on a problem-solving approach to the teaching of math within the context of a developmentally appropriate curriculum. Students learn how to engage children in the subject through imaginative, musical, rhythmic, athletic, and artistic activities. This course is about how to teach math so it makes sense.

3 Credits.

#### Education 324. Science and the Young Child.

Students explore a variety of activities suitable for young children in the context of a garden-based curriculum and examine theories of cognitive development as they relate to the teaching of science. Emphasis on the nature of science, how young children perceive and conceptualize the world around them, and an inquiry approach to teaching science.

3 Credits.

#### Education 333. Seminar on Art and Creative Expression.

Concepts related to creativity in the arts and the many media areas used by children to express themselves are introduced. Topics include: concepts of creativity; facilitation of children's creative expression; appreciation of children's art processes and products. Particular attention to musical expression.

Prerequisites: Education 128 or 271.

1.5 Credits.

#### Education/Psychology 340. Educational Psychology.

Study of secular psychology as it is applied to children and adolescents in the classroom setting. Major areas of study include classroom management, learning, and motivation. Swedenborgian doctrines include innocence, charity, development of the rational mind, and conscience.

Prerequisite: Psychology 101 or Education 128.

3 Credits.

#### Education 402. Student Teaching. (EE)

Includes at least 12 weeks of combined observation and teaching in an early childhood education classroom setting, supervised by a teacher from Bryn Athyn College Education Department and by a classroom teacher in the cooperating school. Open only to seniors in the education major. 3-12 Credits.

#### Education 298, 398, 498. Education Internship. (EE)

Proposals must be approved by the Department Chair. Course may be repeated for credit. Credit variable.

#### Field Experience I: Observation.

Students will be assigned to a classroom for guided observation experience that relates to course work during the third year. Open to non-majors with permission from education department chair.

2.5 Credits.

#### Field Experience II: Exploration.

Students work under a classroom teacher's supervision tutoring children, facilitating small group conversations, supervising outdoor play, and monitoring classroom routines and procedures. FE II is taken in conjunction with all winter term courses of the third year and provides students with 120 hours of observation and practice teaching. FE II occurs every Tuesday and Thursday of the term. Not open to non-majors; third-year students only.

3 Credits.

#### Field Experience III: Pre-student Teaching.

A continuation of FE II, FE III gives students more independent practice in working with whole class instruction and integrating special needs and ELL students in their assigned classroom. Provides 120 hours of practice teaching hours. Not open to non-majors; third-year students only. 3 Credits.

#### Field Experience: Special Education.

This pre-student teaching course provides students the opportunity to observe in a special education setting and apply the knowledge and skills they have learned in their coursework. Students will gain hands-on experiences with exceptional children, experience the different types and levels of service delivery, and reflect on how, when, and why specific evidence-based practices are implemented. Student will start in the "Observation" phase and gradually take on increased responsibilities throughout the term. Prerequisites: Special Education 111 and permission of the instructor. Not open to non-majors; third-or fourth-year students only.

3 Credits.

#### Field Experience IV. Observation in Upper Grade Levels

For students intending to teach in the General Church school system. Students gain experience working with upper grade level students. Taken only with permission of the education department chair. Co-requisite: Psychology 204.

3 Credits.

#### Special Education 111. Introduction to Special Education.

An overview of key concepts, theories and practices of special education. Course begins with a role-playing game in which students learn about the milestone legislation, IDEA. Attention is given to the social and historical underpinnings of today's special education programming, as well as to the various types of learning needs in any given classroom. Students will learn to view "disabilities" from differing perspectives and gain appreciation for the variety of needs expressed in the human condition.

3 Credits.

#### Special Education 212. Supporting Students with Disabilities.

This course examines the characteristics and needs of students who are identified under the 13 federally defined categories of disabilities. Emphasis on investigating the complexity of these needs and the specially designed instruction that meets them. Research-based frameworks such as UDL and other strategies that support inclusionary practices within the life of the classroom will be addressed. Prerequisite: Special Education 111.

3 Credits.

26

#### Special Education 213. Family and Community Partnerships.

This course examines the importance of collaboration when serving students with various needs. Addresses the skills and knowledges needed by teachers and interdisciplinary team members. Strategies for collaborating with families, community agencies, educational staff, and other stakeholders will be explored. Students will develop skills for building effective teams, improving communication, problem-solving, advocating and decision-making.

Prerequisite: Special Ed 111.

3 Credits.

#### Special Education 312. Classroom Assessments.

This course addresses the effective use of assessment as part of classroom instruction, and as part of the eligibility determination process for special education services. Students will gain hands-on experience with administering and interpreting a variety of assessments and will learn how to appropriately adapt instruction based on assessment findings.

Prerequisite: Special Education 111 and permission of the education department chair.

3 Credits.

#### Special Education 313. Research-based Interventions.

This course examines models of effective specialized instruction in a variety of content areas, with a focus on literacy. Emphasis on using assessment data to inform and guide effective instruction and intervention. Exploration of multi-sensory methods and programs for addressing the needs of students with disabilities within the general education curriculum. Undergraduate students can earn graduate credit by completing additional coursework.

Prerequisite: Special Education 111 and permission of the education department chair. 3 Credits.

#### Special Education 331. Classroom Management and Behavioral Support.

Examination of what it means to lead and manage a differentiated classroom. Addresses classroom management skills of fostering a positive learning environment; planning and delivering assessment-driven instruction; implementing Positive Behavior Intervention and Support (PBIS); and conducting a Functional Behavioral Analysis (FBA).

3 Credits.

#### Special Education 334. Assistive Technology in the Classroom.

This course explores a variety of technologies used to assist persons with a wide range of exceptionalities. Universal Design for Learning is at the core of this course with a goal of adapting technology, instruction, and assessment to meet a range of student needs.

Prerequisites: Special Education 111 and permission of the education department chair.

#### **English**

Literature courses in this discipline fill the aesthetic requirement of the Core Program. 200-level English courses require Writing 101 as prerequisite. 300-level and higher require 200-level English.

#### English 105. Madness in Literature (Introductory Literature Seminar).

Study of how and why madness appears so often in fiction. Considerations include madness' symbolic values, use as a manipulative narrative tool, emotional impacts, relations to illness and genius, and changing appearances in literature from classical to contemporary works. Authors include Euripides, Gogol, Poe, Kafka, Plath, Christie, Palahniuk, and more.

3 Credits.

#### English 110. Worldviews & Literature (Worldview).

Introduction to six worldviews in the context of literary texts. Emphasis on how characters with differing worldviews interact with others and with their geographic and historical contexts. Emphasis on close readings and critical analysis.

3 Credits.

#### English 215. Great Books I. Classical Literature.

Study (in English) of selected texts from the Greeks and Romans, including works by such authors as Homer, Hesiod, the Greek dramatists, Virgil, and Ovid. Emphasis given to the themes of Classical mythology. Prerequisite: Writing 101.

3 Credits.

#### English 217. Great Books III. 19th and 20th Centuries.

Study (in English) of selected 19th- and 20th-Century texts, including works by such authors as Shelley, Forster, Flaubert, Henry James, Dostoevsky, and Tolstoy.

Prerequisite: Writing 101.

3 Credits.

#### English 218. American Literature I.

Chronological survey of American writers from colonial times to the late 19th century. Particular attention paid to themes such as nature, religion, freedom (or lack thereof), and the shaping of "American" values and identities. Authors include Hawthorne, Poe, Dickinson, Melville, Emerson, Thoreau, and Whitman, among others

Prerequisite: Writing 101.

3 Credits.

#### English 219. American Literature II.

Chronological survey of late 19th-Century and early 20th-Century American authors from Twain and the rise of Realism to Willa Cather, Edith Wharton, and Henry James.

Prerequisite: Writing 101.

3 Credits.

#### English 220. Virtue, Vice, and Visions: English Literature 650-1650.

Chronological survey of the development of English literature in England from the early medieval period through the mid-17<sup>th</sup> century. Lecture and discussion on such authors as Chaucer, Shakespeare, Marlowe, Donne, Jonson, and more.

Prerequisite: Writing 101.

## English 221. Storytelling, Humor, and Literary Expression: Highlights of English Literature 1660-1900.

Chronological survey of the development of English literature in England from the late 17th century through the early 20th century. Lecture, discussion, guest speakers, student reports or projects, research paper on a chosen period or author. Continuation of English 220; English 220 not prerequisite. Prerequisite: Writing 101.

2 G 1

3 Credits.

#### English 235. Shakespeare. (W)

In-depth study of selected Shakespearean tragedies, comedies, histories, and sonnets. Lectures and collateral readings with background of the Elizabethan world.

Prerequisite: Writing 101.

3 Credits.

#### English 245. Children's Literature.

Study of the textual characteristics of children's literature and the role this literature has played historically. Picture books, readers, stories, and adventure novels. May include authors such as Caxton, Grimm, MacDonald, Milne, and New Church writers. Written work includes projects and a children's story reflecting the trends studied.

Prerequisite: Writing 101.

3 Credits.

#### English 255. Post-Apocalyptic Fiction. (W)

Detailed study of modern depictions in literature of the end-of-days and the trending post-apocalyptic genre. Students evaluate texts under the literary constructs of plot and subplot, device, character, setting and author intent; enhance their understanding of the works through lenses of current events and social, political, and historical context; examine and discuss other mediums of the theme (television and film), including relevant analysis of other works in the genre, such as its Young Adult counterparts (*Hunger Games, Maze Runner, Divergent, Pure Trilogy, etc.*); and experiment with their own perceptions of the apocalypse via a creative project. Prerequisite: Writing 101.

3 Credits.

#### English 320. The English Language.

Study of the historical development of the language from Anglo-Saxon to Modern English, with focus on the culture and events that have shaped the language, and ways in which English has shaped cultures. Prerequisite: Any 200-level English course.

3 Credits.

#### English 360. Victorian Literature. (IL)

Study of selected literary figures of England from 1830 to 1900, with emphasis on trends in religion, philosophy, and science, and on the literary form of the novel.

Prerequisite: Any 200-level English course.

3 Credits.

#### English 365. Topics in Literature.

In depth examination of a selected literary theme, movement, genre, or author. Specific title announced in the course bulletin when offered. Topics will make use of a professor's area of expertise and research. May be repeated for credit when different topics are offered.

Prerequisite: Any 200-level English course.

3 credits.

#### English 367. The Modern Novel. (IL)

Study of selected early 20th-century novels. Emphasis on how these works reshape 19th-century forms and subjects to reflect changes (demographic, political, social) in the modern world. Includes such writers as James, Woolf, Faulkner, Hurston, and Hemingway.

Prerequisites: Any 200-level English course.

3 Credits.

#### English 370. Literature of the Past 4 Decades. (W)

Focus on American novels, with selected shorts stories and poems. Overarching theme of memory, consciousness, and the literary aftermath of social trauma (Slavery, WWII, Vietnam, 911). Prerequisite: Any 200-level English course.

3 Credits.

#### English 490. English Major Writing Project.

Writing project for the writing track of the English major. Independent work in criticism, fiction, or poetry, guided by an advisor. Involves student over a two-term period of the senior year.

3 Credits.

#### English 491. English Major Writing Project. (WC)

Completion of the senior writing project.

3 Credits.

#### English 495. Senior Seminar: Career Preparation.

Focus on professional transition to workplace or graduate school. Guest speakers and faculty present recent trends in English studies and in employment for English majors. Students propose (or present if completed) their capstone work as well as give evidence of facility in the software and technology skills required of BAC English graduates. Students network with alumni at a distance or in town to support an outreach effort requiring communication skills and fostering any aspect of the mission's focus on intellectual, moral, civil, and spiritual development.

1 Credit.

#### English 499. English Major Capstone Project (WC)

Writing project for the language and literature track of the English major. Supplemental to a 300-level English course, this credit involves extended independent research and writing beyond the scope of the course.

1 Credit.

#### English 298, 398, 498. English Internship. (EE)

Proposals must be approved by the head of major.

Prerequisites: For 298, any 200-level English/writing course. For 398 and 498, any two 200-level English/writing courses, or any one 300-level English course. Course may be repeated for credit. Credit variable.

#### **Experiential Education**

#### Experiential Education 198/298. Internship. (EE)

The internship course is open to students with a 2.5 GPA or above. It is a supervised, pre-professional experience with clear links to a student's academic program. It is conducted primarily or totally outside a regular course classroom, and for which a student earns academic credit. It is organized primarily around an assignment in a work-place situation in which students working under the direction of a supervisor learn hands-on professional skills.

The internship course requires a syllabus, reflective component, and an analytical component (e.g., essay, paper, or presentation). Individual syllabi are retained in the office of Internship. This course satisfies the EE requirement.

Course may be repeated for academic credit by arrangement. Credit variable.

#### Service Projects 1xx. (EE)

Students who participate in a Bryn Athyn College approved service project may apply to receive an EE credit waiver to the director of Experiential Education.

#### Leadership 130. Introduction to Leadership. (EE)

This course engages students in the basic tools necessary to become a successful leader. Students design a leadership project and review leadership theories. Students analyze leadership characteristics and target an area for their own strengthening. Students set measurable goals that stretch their capabilities through leadership challenges and homework assignments.

3 Credits.

#### Fine Arts

#### Fine Arts 101. Art History: Caves to Cathedrals (IL).

Introductory survey of art and architecture from Prehistory through the European Middle Ages, including Ancient Near Eastern, Egyptian, Greek, Roman, Late Antique, and Medieval art. This course also serves as an introduction to the methods and practices of Art History as an academic discipline. Classroom study is complemented by visits to Glencairn Museum.

3 Credits.

#### Fine Arts 102. Art History: Renaissance to Now (IL).

Introductory survey of art and architecture from the Renaissance era to the Present, including Renaissance and Baroque Art, Modern movements such as Impressionism and Post-Impressionism, Cubism, Dada, Abstract Expressionism and Pop-Art, and current examples in an ever-expanding canon. 3 Credits.

#### Fine Arts 103. Art of Asia, Africa, and the Americas.

Introductory survey of art and architecture of Asia, Africa, and the Americas, considering material as diverse as Shang dynasty bronzes and Song and Ming dynasty hand- and hanging-scrolls in China, early Buddhist art and architecture and later painted screens in Japan, Aztec, Mayan, and Incan art in Central and South America, bronzes from the Kingdom of Benin, and masks and sculpture from the various peoples of West Africa.

#### Fine Arts 112. Medieval Art and Its Revivals.

This course surveys the art of Medieval Europe, focusing on the evolution of sacred imagery and how it shapes and reflects the beliefs and perceptions of the period. Also covered are revivals of medieval style in nineteenth-century Europe and nineteenth- and twentieth-century America. Students study medieval objects in the collection of the Glencairn Museum.

#### Fine Arts 120. Metal Work I.

Introduction to basic metalworking techniques in fine metals, including cutting and piercing, soldering, chain links, and bezel settings.

This course requires a lab fee.

3 Credits.

3 Credits.

#### Fine Arts 122. Metal Forging.

Introduction to artistic ironwork concentrating on hand-forged, wrought iron using traditional techniques. Inspired by the magnificent examples in Glencairn and Bryn Athyn Cathedral.

This course requires a lab fee.

3 Credits.

#### Fine Arts 123. Forging Workshop

A four-day intensive summer workshop. Instruction in basic forging techniques and introduction to the metal work in Glencairn Museum and Bryn Athyn Cathedral. 1 Credit.

#### Fine Arts 125. Photography.

Introduction to the use of various cameras, darkroom techniques, alternative processing, and basic design. This course requires a lab fee.

3 Credits.

#### Fine Arts 126. Stone Carving Workshop

A five-day intensive summer workshop. Instruction in basic stone carving techniques and introduction to the stonework in Glencairn Museum and Bryn Athyn Cathedral.

1 Credit.

#### Fine Arts 128. Stained Glass Painting.

Introduction to traditional and innovative techniques in glass painting. Inspired by the magnificent examples in Glencairn and Bryn Athyn Cathedral.

This course requires a lab fee.

3 Credits.

#### Fine Arts 129. Stained Glass Painting Workshop.

A four-day intensive summer workshop. Instruction in glass painting techniques and introduction to the stained glass in Glencairn Museum and Bryn Athyn Cathedral. 1 Credit.

#### Fine Arts 130. Ceramics.

Introduction to clay work including hand building, wheel throwing, slip casting, glazing, and firing processes. Also form function and representation.

This course requires a lab fee.

#### Fine Arts 140. Drawing and Painting.

Introduction to basic techniques in drawing and painting. Oil painting project. Discussion of the development of the history of painting.

This course requires a lab fee.

3 Credits.

#### Fine Arts 141. Building Arts Foundation I.

Introduction to the Building Arts curriculum by focusing on fundamental design and drawing principles essential to all craft disciplines. Students learn to communicate ideas, design and execute projects through sketches, hand drawings and computer-generated drawings.

This course requires a lab fee.

3 Credits.

#### Fine Arts 151. Architectural Modeling.

This course provides opportunities for students to develop their visualization skills in architectural design by requiring them to make three-dimensional models of two-dimensional drawings. Students will be presented with a variety of architectural modeling scenarios and will be required to develop three-dimensional models using various materials such as paper, clay, and wood. Students work independently and in groups to complete design scenarios presented to them. Emphasis is placed on communication, accuracy, and craftsmanship in architectural modeling. The collection and models in the Glencairn Museum support these endeavors.

This course requires a lab fee.

3 Credits.

#### Fine Arts 155. Introduction to Craft Practice.

This course introduces students to the various building arts practiced at Bryn Athyn College – metal, glass, stone and wood. Students complete projects in all four disciplines learning the properties, techniques, and creatives possibilities of each. This introduction helps students choose a craft specialization for their major. (at present the two options are metal and glass).

This course requires a lab fee.

3 Credits.

#### Fine Arts/History 160. Art, Culture and History.

Examination of the art, culture, and history of a designated period and region. Special attention will be given to art as a form of religious and cultural expression. Serves as an intellectual foundation for Fine Arts/History 161: Study Abroad. Offered in conjunction with Glencairn Museum. 3 Credits.

#### Fine Arts/History 161. Art, Culture, and History: Study Abroad.

Participation in an academic study abroad trip (2-3 weeks) focused on the period and region studied in Fine Art/History 160. Students are required to present research completed in Fine Arts/History 160 on site. Offered in conjunction with Glencairn Museum.

Prerequisite: Fine Arts/History 160 in preceding term. Pass/Fail. 1 Credit.

#### Fine Arts 201. Classical Art. (IL)

Study of art and architecture from the Ancient Mediterranean, including work from Minoan and Mycenaean, Ancient Greek, Etruscan, and Roman cultures. Study of works in the collection of the Glencairn Museum. 3 Credits.

#### Fine Arts 202. Renaissance and Baroque Art. (IL)

Study of art and architecture from the Renaissance and Baroque eras of European history. Course content includes works by artists such as Cimabue and Giotto, Botticelli, Michelangelo and Leonardo, Bernini, Rembrandt, Rubens, Velazquez, and Poussin.

3 Credits.

#### Fine Arts 205. Introduction to American Architectural History.

An overview of architectural developments in the United States within the larger context of American ideals and historic events. Covers the progression of style and form. Introduces students to architectural concepts and terms. Special attention given to artists influenced by Swedenborg including Daniel Burnham, William Strickland, Harold T. Carswell, A. Page Brown, Theophilus Parsons Chandler, and Langford H. Warren. Students research and present a topic of their choice.

3 Credits.

#### Fine Arts 210. Art of the Nineteenth and Twentieth Centuries. (IL)

Examination of the architecture, sculpture, and painting of the late eighteenth, nineteenth, and twentieth centuries in Europe, England, and America. Special attention given to artists influences by Swedenborg, including Flaxman, Blake, Powers, Page, Gaugin, Inness, Pyle, and Burnham. 3 Credits.

#### Fine Arts 212. Medieval Art and Its Revivals.

This course surveys the art of Medieval Europe, focusing on the evolution of sacred imagery and how it shapes and reflects the beliefs and perceptions of the period. Also covered are revivals of medieval style in nineteenth-century Europe and nineteenth- and twentieth-century America. Students study medieval objects in the collection of the Glencairn Museum.

3 Credits.

## Fine Arts 213/313. Topics in Twentieth-Century Architecture: Bryn Athyn's National Historic Landmarks.

Study of the conception of Bryn Athyn Cathedral, Glencairn, Cairnwood, and Cairncrest within the context of architectural developments at the turn of the twentieth century. The course uses resources in the Cathedral, John Pitcairn Archives, Glencairn, and the Raymond and Mildred Pitcairn archives, from which the students do original research on a topic of their choice.

3 Credits.

#### Fine Arts 220. Metal Work II.

Further study in techniques used to shape, join, and color fine metals. Topics may include casting and fabrication techniques, enamel, hinges, the setting of cabochon and/or faceted stones. This course requires a lab fee.

3 Credits.

#### Fine Arts 222. Intermediate Metal Forging.

Focusing on architectural ironwork design and construction, this course refines the skills learned in FA 122. Includes opportunities for self-expression and creative thinking. Inspired by the magnificent examples in Glencairn and Bryn Athyn Cathedral.

This course requires a lab fee.

Prerequisite: FA 122.

#### Fine Arts 228. Intermediate Stained Glass Painting

Focusing on architectural stained glass design and construction, this course refines the skills learned in FA 128. Includes opportunities for self-expression and creative thinking, repair and restoration of historic glass. Inspired by the magnificent examples in Glencairn and Bryn Athyn Cathedral.

This course requires a lab fee.

Prerequisite: FA 128.

3 Credits.

#### Fine Arts 230. Intermediate Ceramics.

Further development of individual skills and sensitivities in the medium of clay.

This course requires a lab fee.

Prerequisite: Fine Arts 130.

3 Credits.

#### Fine Arts 232. Computer Assisted Design.

An introduction to two-dimensional computer aided drawing using AutoCAD and three-dimensional drawing using SketchUp. The course covers basic commands, file maintenance, creation of 2D drawings, isometric views and plotting. Student acquire the skills necessary to draw basic mechanical parts and architectural diagrams.

3 Credits.

#### Fine Arts 240. Intermediate Painting.

Introduction of more materials and techniques as well as more advanced use of concepts learned in Fine Arts 140.

This course requires a lab fee.

Prerequisite: Fine Arts 140.

3 Credits.

#### Fine Arts 241. Building Arts Foundation II.

This course builds upon skills acquired in FA141 Building Arts Foundation I and provides opportunities to practice design principles while further developing the hand skills essential to all craft disciplines. Students are presented with visual problems to solve that relate to various lecture topics. Students use preparatory drawings and models to communicate ideas then execute projects in a variety of materials. Students work independently and in groups to solve design challenges. Emphasis is placed on teamwork, accuracy, and craftsmanship. The collections and models in the Glencairn Museum support these endeavors.

This course requires a lab fee.

3 Credits.

#### Fine Arts 251. Integrating Art into a Child's Early Years.

By reading about the developmental states of children, discussing the issues involved with elementary art education, looking at examples of children's art, and actually doing projects, future teachers and caregivers will become confident in their ability to use art as one of their teaching methods.

This course requires a lab fee.

1.5 Credits.

#### Fine Arts 252. Introduction to Welding and Machine Work

This course introduces students to the procedures of operating equipment commonly found within an architectural metals shop environment. Students will be introduced to various welding techniques, along with the safe use of equipment such as lathes and mills, both individually and within a group setting. Emphasis will be placed on safety and craftsmanship.

This course requires a lab fee.

3 Credits.

#### Fine Arts 258. Stained Glass Survey.

This course covers the historical development of stained glass as both an art and architectural form. It focuses on studio practices and techniques and examines the contributions of prominent designers in the field. Close examination of specific pieces from the Glencairn Museum, Bryn Athyn Cathedral and other local venues give students direct access to medieval and twentieth-century examples. Students do original research and give a presentation on a topic of their own choice.

3 Credits.

#### Fine Arts/History 260. Art, Culture and History.

Examination of the art, culture, and history of a designated period and region. Special attention will be given to art as a form of religious and cultural expression. Serves as an intellectual foundation for Fine Arts/History 261: Study Abroad. Offered in conjunction with Glencairn Museum.

3 Credits.

#### Fine Arts/History 261. Art, Culture, and History: Study Abroad.

Participation in an academic study abroad trip (2-3 weeks) focused on the period and region studied in Fine Art/History 260. Students are required to present research completed in Fine Arts/History 260 on site. Offered in conjunction with Glencairn Museum.

Prerequisite: Fine Arts/History 260 in preceding term. Pass/Fail. 1 Credit.

#### Fine Arts/History 271. Introduction to Historic Preservation.

This course will introduce students to the basic theory and practice of historic preservation. Major topics include preservation terminology and concepts, architectural styles, and the history of the preservation movement in the United States, including advocacy, government's role in historic preservation, and emerging/contemporary issues in historic preservation. The Bryn Athyn Historic District and other historic structures in the local community will be used extensively as illustrations for topics throughout the course. This is not a methods and materials conservation course. Material is presented through lectures, guest lectures, class discussion and field trips.

3 Credits.

#### Fine Arts 278. Stained Glass Design

This course introduces students to the principles of stained glass design, using simple panels as examples. Topics covered include sizing, color selection, structural stability and pricing. Students design a series of stained glass panels based on hypothetical locations and client needs. Students present their designs for evaluation to a panel of reviewers.

Prerequisite: Fine Arts 128

## Fine Arts 282. Art History: Art of the World's Religions.

This course focuses on imagery and narrative in the art of the five world religions: Hinduism, Buddhism, Judaism, Christianity, and Islam. Attention is given to the representation of sacred narratives, theories and practices of representing various persons and/or aspects of the Divine, the prohibition of and justification for sacred imagery, and differences between aniconic and iconic modes of representation. Students work with primary source material, including religious texts (selections from translations of the Vishnu Purana, Buddhacarita, Tanakh, New Testament, Qur'an, and Writings of Swedenborg) and works of art from the Glencairn Museum.

3 Credits.

## Fine Arts 305. Special Topics in Building Arts.

An upper-level course taught by a visiting artisan. Students receive instruction from a professional working in the field of Building Arts. Topics vary depending on the instructor's specialization.

Prerequisite: Fine Arts 141: Building Arts Foundation; Fine Arts 155: Introduction to Craft Practice.

3 Credits.

## Fine Arts/History 308. The Art and Culture of Ancient Egypt.

Examination of ancient Egyptian culture as revealed through art and archaeology. Special attention given to art as a source of historical information. Topics include the influence of natural resources and the environment, principles of artistic representation, problems with interpreting evidence, the origin and nature of Egyptian hieroglyphic writing, and the Egyptian world view. Trip to the University of Pennsylvania Museum of Archaeology and Anthropology in Philadelphia. 3 Credits.

## Fine Arts 310. Art of the Nineteenth and Twentieth-Centuries. (IL)

Examination of the architecture, sculpture, and painting of the late eighteenth, nineteenth, and twentieth centuries in Europe, England and America. Special attention given to artists influenced by Swedenborg, including Flaxman, Blake, Powers, Page, Gauguin, Inness, Pyle, and Burnham. Prerequisite: Any IL art history course, preferably 200 level. 3 Credits.

## Fine Arts 312. FA 312 Introduction to Metal Design.

This course introduces students to the processes employed in the design and presentation of projects in architectural / ferrous metals – iron and steel. Responding to various scenarios, including both replication and the opportunity for original work, students plan and design projects in metal. Student work includes conceptual drawings and initial cost estimates. Students produce a detailed proposal for a project including finished drawings, material and labor estimates, and timetables for completion. Emphasis is placed on design and presentation, rather than execution of actual projects in metal.

Prerequisite: Fine Arts 122.

3 Credits.

# Fine Arts 313. Topics in Twentieth-Century Architecture: Bryn Athyn's National Historic Landmarks.

Study of the conception of Bryn Athyn Cathedral, Glencairn, Cairnwood, and Cairncrest within the context of architectural developments at the turn of the twentieth century. The course uses resources in the Cathedral, John Pitcairn Archives, Glencairn, and the Raymond and Mildred Pitcairn archives, from which the students do original research on a topic of their choice.

3 Credits.

## Fine Arts 322. Traditional Joinery Design and Production.

This course introduces students to the various techniques traditionally used to join ferrous metal components. Students learn traditional metal joinery techniques, including collars, riveting, slit and drifts, pass-throughs and forge welding. Students are required to produce various forms of joinery and demonstrate the ability to design and construct a metal piece from conceptual drawing to finished product. Emphasis is placed on safety, design and craftmanship.

Prerequisite: Fine Arts 122 and Fine Arts 222.

3 Credits.

## Fine Arts 342. Tool and Hardware Production and Design.

In this Building Arts course, students learn the techniques and processes involved in the production of tools and hardware. Students learn how to produce various tools commonly used in metal arts such as hammers, tongs, chisels, punches and drifts. Students also learn how to produce various forms of hardware such as locks, hinges, handles and pulls. In addition, students learn elements of jig design and construction and the technique of heat treating. Students demonstrate proficiency by designing and producing a series of tools and hardware pieces using the techniques learned in the class. Emphasis is placed on safety, design and craftmanship.

Prerequisite: Fine Arts 122 and Fine Arts 222.

3 Credits.

## Fine Arts 422. Blacksmithing – Small Scale Design and Production.

An upper-level course in the Building Arts program. Students produce small scale objects in ferrous metals of their own design. Students are responsible for all aspects of production, from initial concept and budgeting to execution of original designs. Students develop their portfolio of work with documentation of the processes throughout production. Students will present their projects for critique from the instructor and from external reviewers.

Prerequisite: Fine Arts 122 and Fine Arts 222.

3 Credits.

#### Fine Arts 493. Senior Literature Review.

General guidance in continuing research and review literature related to the chosen topic for the senior essay. Support for crafting a sound and interesting argument, resulting in an outline of main points for the senior essay.

Prerequisite: Interdisciplinary Studies 390.

2 Credits.

## Fine Arts 298/398/498. Fine Art Internship. (EE)

Requirements variable. Proposals should be submitted to the Department Chair. Art internships are open to students in sophomore year or above who have completed at least two art, dance, or music courses. Credits variable.

#### Fine Arts 495. Senior Essay. (WC)

Capstone experience for the Interdisciplinary Major. Writing of the senior essay based on the research and outline produced in Fine Arts 493.

Prerequisites: Fine Arts 493 and Interdisciplinary Studies 494.

#### Fine Arts 499. Senior Project.

Independent study toward a studio arts project to be a companion to the Fine Arts Interdisciplinary Senior Essay. Limited to and required of fine arts interdisciplinary majors in a studio art track.

Prerequisite: Fine Arts 399.

Credit Variable.

## French

## French 101. Introductory French I.

Introduction to the French language for students without previous experience. Emphasis is placed on communication and foundations of French grammar. French is the language of instruction. 3 Credits.

## French 102. Introductory French II.

Continuing introduction to the French language.

Prerequisite: French 101 or equivalent as determined by placement test. French is the language of instruction.

3 Credits.

## Geography

## Geography 110. World Regional Geography.

Study of world regions with emphasis on the geographic relationships—physical and cultural—that give them their character. Emphasizes the political and cultural formations of human societies. Focus on familiarity with map locations.

3 Credits.

#### German

#### German 101. Introductory German I.

Introduction to the German language for students without previous experience.

Emphasis is placed on communication and the foundations of German grammar. German is the language of instruction.

3 Credits.

## German 102. Introductory German II.

Continuing introduction to the German language.

Prerequisite: German 101 or equivalent as determined by placement test. German is the language of instruction.

3 Credits.

## Greek

## Greek 110. Beginning New Testament Greek I.

Introduction to the language of the New Testament. A study of the basic forms and syntax of Greek grammar.

#### Greek 111. Beginning New Testament Greek II.

Continuation of Greek 110. Prerequisite: Greek 110. 3 Credits.

## Greek 250. Readings in New Testament I.

Readings in the Gospel of John and the Book of Revelation. Prerequisite: Greek 111.

3 Credits.

#### Greek 251. Readings in New Testament II.

Readings in the synoptic gospels (Matthew, Mark and Luke).

Prerequisite: Greek 111.

3 Credits.

## **Hebrew**

## Hebrew 110. Beginning Hebrew I.

Introduction to the language of the Old Testament. A study of the basic forms and syntax of Hebrew grammar.

3 Credits.

#### Hebrew 111. Beginning Hebrew II.

Continuation of Hebrew 110, with graduated readings adapted from Genesis, Exodus, Deuteronomy, Joshua, Judges, and other books of the Old Testament.

Prerequisite: Hebrew 110 or equivalent as determined by placement test.

3 Credits.

#### Hebrew 250. Intermediate Hebrew.

Review of Hebrew grammar, followed by readings in the Old Testament with special attention to forms and syntax.

Prerequisite: Hebrew 111.

3 Credits.

## History

## History 112. The Viking World.

Study of the Viking Age, c. 750-1050 CE. This course examines the impact of Viking expansion in Europe as raiders, traders, conquerors, and settlers. Using written as well as archaeological sources, attention is paid not only to the chronology of events but also to the consideration of Norse values and beliefs, cultural practices and societal structures. Students participate in Glencairn Museum's Medieval Festival. 3 Credits.

## History 114. The Classical World. (IL)

Historical survey of ancient Greece and Rome from Mycenaean civilization to the fall of the Roman Empire in the west. Particular attention to cultural values, political trends, and the role of religion in Greek and Roman societies. Examination of textual and archaeological evidence. Guided development of a research paper.

## History 117. The Contemporary World.

Examination of the post-World War II era and its effect on societies around the globe. Includes survey of political and economic developments in the different regions of the world and thematic approach to the contemporary global situation. Current events discussions.

3 Credits.

## Fine Arts/History 160. Art, Culture and History.

Examination of the art, culture, and history of a designated period and region. Special attention will be given to art as a form of religious and cultural expression. Serves as an intellectual foundation for Fine Arts/History 161: Study Abroad. Offered in conjunction with Glencairn Museum.

3 Credits.

## Fine Arts/History 161. Art, Culture, and History: Study Abroad.

Participation in an academic study abroad trip (2-3 weeks) focused on the period and region studied in Fine Art/History 160. Students are required to present research completed in Fine Arts/History 160 on site. Offered in conjunction with Glencairn Museum.

Prerequisite: Fine Arts/History 160 in preceding term. Pass/Fail. 1 Credit.

## History 205. Topics in History.

Examination of a selected historical theme or time period. Specific title announced in the course bulletin when offered. May be repeated when different topics are offered. 3 Credits.

## History 207. Ancient Mesopotamia.

Examination of the history and society of ancient Mesopotamia (modern Iraq and the surrounding region) from the Neolithic period through the Persian Empire. Particular focus on Mesopotamian archaeology and texts as historical sources. Use of Glencairn Museum's Near Eastern collection.

3 Credits.

## Anthropology/History 211. Artifacts, Archaeology, and Museums. (W)

Introduction to the theories and methods used to interpret how objects provide evidence for history and express a society's values, ideas, and attitudes. Includes examination of archaeological method and ethics, and the use of objects in a museum setting. Use of hands-on projects and visits to Bryn Athyn's historic district and other local sites.

3 Credits.

## History 213. Conversion and Christianity in the Medieval North.

Examination of the conversion of medieval Northern Europe from Norse paganism to Christianity (c. 800 – 1300 CE) as understood in three periods: Pre-Christian, Conversion, and Christian. Consideration of multiple aspects pertaining to shifts in worldviews, values, and religious beliefs. Students analyze and interpret assigned primary sources.

#### History 215. Renaissance and Reformation.

Examination of the intellectual, religious, political, and cultural developments in European society from the fourteenth through the early eighteenth century, with special focus on the contributions of the Renaissance and Reformation to western civilization. Topics include the emergence and spread of Renaissance culture, the Renaissance state, the Protestant Reformation, and the wars of religion. Use of primary texts as historical sources.

3 Credits.

## History 216. The Making of Modern Europe, 1715-1918.

Study of political, social, economic, and cultural developments in the major European powers from the eighteenth century through World War I. Topics include the Industrial Revolution, the French Revolution, Romanticism, Nationalism, Modern Mass Society, Imperialism, and World War I. Lectures and class presentations.

3 Credits.

#### History 217. Nazi Germany.

Examination of the rise and fall of Nazi Germany under Adolf Hitler and a consideration of contributing historical, social, economic, and political factors. Particular focus on the impact on German society, individual choice, and philosophies underpinning Nazism: fascism, cult of personality, eugenics, anti-Semitism, social Darwinism.

3 Credits.

## History 225. Religion and Society in Colonial America 1607-1763.

Thematic exploration of the British colonies in North America with an emphasis on the role of religion in the establishment, structure, and development of key colonial societies. Consideration will be given to how and why Virginia, Puritan New England, and Quaker Pennsylvania, for example, differed from one another and yet contributed to a unified American identity by the middle of the 18th century.

3 Credits.

#### History 230. United States History 1763-1865.

Examination of the historical development of American society from the eve of the American Revolution through the Civil War. Particular focus on political ideology, national identity, and societal values with special attention given to the events leading up to the Revolution, the political ideologies of the founding fathers, and the causes of the Civil War.

3 Credits.

#### History 240. Ancient Israel.

Study of the ancient Israelites from the time of their formation as a social group through the destruction of the temple in Jerusalem by the Romans. Emphasis on government, religion, intercultural relationships between Israel and its neighbors, and the context of the Old Testament.

3 Credits.

#### History 245. The Middle East.

Surveys political, social, and cultural developments in the societies of the greater Middle East. Focus on the waxing and waning of selected Islamic Empires.

3 Credits.

#### History 248. The Medieval World.

Historical survey of medieval Europe from the fall of Rome through the fourteenth century. Particular focus on religion and the role of the church throughout the middle ages. Use of primary texts and Glencairn Museum's collections. Students participate in Glencairn Museum's Medieval Festival.

3 Credits.

#### History 257. Women in Classical Antiquity. (PP)

Examination of the social roles and experiences of women in ancient Greece and Rome using archaeological and textual evidence. Topics include stages of life, women's occupations, women's experiences in the household, religion, and public settings, women and the law, and women and medicine. Particular consideration of the challenges presented by the ancient evidence and of the distinction between ideological views and actual lived experiences.

3 Credits.

## Fine Arts/History 260. Art, Culture and History.

Examination of the art, culture, and history of a designated period and region. Special attention will be given to art as a form of religious and cultural expression. Serves as an intellectual foundation for Fine Arts/History 261: Study Abroad. Offered in conjunction with Glencairn Museum.

3 Credits.

## Fine Arts/History 261. Art, Culture, and History: Study Abroad.

Participation in an academic study abroad trip (2-3 weeks) focused on the period and region studied in Fine Art/History 260. Students are required to present research completed in Fine Arts/History 260 on site. Offered in conjunction with Glencairn Museum.

Prerequisite: Fine Arts/History 260 in preceding term. Pass/Fail. 1 Credit.

## History 270. Archives Theory.

Examination of the theory and practice behind the operation of archives and their role in society. Survey of fundamentals including archival history, controlled vocabularies, preservation, and access. 3 Credits.

#### Fine Arts/History 271. Introduction to Historic Preservation.

This course will introduce students to the basic theory and practice of historic preservation. Major topics include preservation terminology and concepts, architectural styles, and the history of the preservation movement in the United States, including advocacy, government's role in historic preservation, and emerging/contemporary issues in historic preservation. The Bryn Athyn Historic District and other historic structures in the local community will be used extensively as illustrations for topics throughout the course. This is not a methods and materials conservation course. Material is presented through lectures, guest lectures, class discussion and field trips.

3 Credits.

## History 276. Barbarians and the Fall of Rome.

Examination of the era that led to the misleading phrase: "the fall of Rome." This course investigates Rome's interaction with various barbarian groups and its evolving strategy in dealing with them. Considers the replacement of the western Roman empire by various successor states, the barbarian kingdoms, which eventually coalesced into early medieval Europe.

3 Credits.

## History/Sociology 290. Social and Religious Movements.

Exploration of selected social and religious movements. The history of these movements will be used to understand the sociological factors that contributed to their development, form, and impact. 3 Credits.

## History 305. Topics in History.

Examination of a selected historical theme or time period. Specific title announced in the course bulletin when offered. May be repeated when different topics are offered.

3 Credits.

## Fine Arts/History 308. The Art and Culture of Ancient Egypt.

Examination of ancient Egyptian culture as revealed through art and archaeology. Special attention given to art as a source of historical information. Topics include the influence of natural resources and the environment, principles of artistic representation, problems with interpreting evidence, the origin and nature of Egyptian hieroglyphic writing, and the Egyptian world view. Trip to the University of Pennsylvania Museum of Archaeology and Anthropology in Philadelphia. 3 Credits.

### History 310. Religion in Ancient Greece and Rome.

Investigates the nature of Greek and Roman religious practices and beliefs through a close study of primary texts and archaeological evidence. Examines the role of religion in Greek and Roman society. Introduction to various methodological approaches to the study of ancient religions. Consideration of the development of early Christianity and Judaism. Topics include sacrifice, gods and heroes, festivals, myth, oracles and divination, temples, and mystery cults.

Prerequisite: History 114 or Religion 283 or instructor permission. 3 Credits.

## History 311. Vengeance and Justice in Medieval Europe.

Exploration of intersecting notions of justice and vengeance in medieval European law, ca. 500 - 1500. Of special interest is the tension between customary, retributive forms of justice and the development of jurisprudence based on Christianity and ideals of Christian rulership. Includes a survey of select Old Testament and Roman laws.

3 Credits.

## Anthropology/History 312. European Folk and Fairy Tales.

An investigation of European folk and fairy tales and their relevance for understanding the societies that produced them. Provides a survey of major collections and introduces students to critical approaches to folk literature. Considerations of Hollywood adaptations and the continuing impact of folk and fairy tales on modern popular culture.

3 Credits.

#### History 315. Seminar on the Age of Enlightenment.

Exploration of the leading intellectual, socio-cultural, and political developments in Europe between the end of the Wars of Religion and the French Revolution (1648 and 1789). Focus on the rise of the modern. 3 Credits.

#### History 330. Twentieth-Century American History Seminar.

Selected topics affecting twentieth-century American society. Focus on economic, social, and political change in the post-World War II era.

## History 350. Swedenborg's Life and Time. (IL)

Exploration of the Swedish context of Swedenborg's intellectual and spiritual development, his call, and his revelatory works. Examines the geography, history, culture, and society of Sweden and the Baltic world in the eighteenth century.

3 Credits.

#### History 359. Death and Society in Ancient Greece.

Examination of ancient Greek attitudes and responses to death, including concepts of death, views of the afterlife, funerary rituals, and commemoration practices. Emphasis on what this evidence reveals about ancient Greek society, especially value systems, family relationships, social distinctions, gender, and law. Use of both archaeological and textual evidence.

3 Credits.

#### History 371. Heritage Interpretation.

Study of the theory and practice involved in interpreting historic and cultural heritage materials in order to reveal meanings and communicate messages. Includes consideration of interpretive planning, theme development, and visitor studies.

3 Credits.

## History 298, 398, 498. History Internship II. (EE)

Proposals must be approved by the appropriate department chair. History internships are open to students in second year or above who have completed at least two history courses.

Credit variable.

## **Human Society**

## Human Society 305. Topics in Human Society.

Examination of a selected theme or time period using history and social sciences lenses. Specific title announced in the course bulletin when offered. May be repeated when different topics are offered. 3 Credits.

#### Human Society 401. Capstone Seminar. (IL)

Students in the Human Society major engage in focused research for their capstone projects. The seminar setting provides instruction in related skills and offers a forum for support and the exchange of ideas. As part of the seminar, each student will generate a written research proposal, which will also be presented publicly. Each student also examines in depth a specific New Church concept related to the student's capstone project. Only open to Human Society majors.

3 Credits.

#### Human Society 402. Capstone Seminar II. (WC)

Students in the Human Society major write their capstone projects. The seminar setting provides instruction in related skills and offers a forum for support and the exchange of ideas. As part of the seminar, students present the results of their research publicly and design posters. Only open to Human Society majors. Prerequisite: HSoc 401.

## **Independent Studies**

In addition to the listed courses, academic departments offer independent studies in a variety of fields. The purpose of an independent study is to allow well-qualified students to study beyond the regularly offered courses. Independent studies are numbered 299 or 399, depending on the appropriate level. Academic departments are under no obligation to meet requests for independent studies. Students who undertake independent studies must be able to work independently between meetings with the instructor. A full set of guidelines for setting up an independent study is available at the College Office. Briefly, in order to qualify to take an independent study a student must:

- Have completed at least 33 credits with a GPA of 2.7 or better
- Submit a proposal to the department chair during the week prior to registration for the term in which the independent study is to occur.
- Submit an independent study card (signed by the department chair and instructor) to the College Office to be reviewed by the Dean of Academics.
- The student and the instructor will complete a syllabus which will be submitted to the College Office before or during registration.

## **Interdisciplinary Studies**

## Interdisciplinary Studies 390. Research Seminar. (IL)

For juniors in the Interdisciplinary Major. Focus on preparing to do the senior essay during senior year. Explore topics and research questions. Research scholarly sources related to a chosen topic. Formulate draft thesis statement based on interest and research. 2 Credits.

#### Interdisciplinary Studies 494. Senior Seminar I.

For seniors in the Interdisciplinary Major. Focus on developing a spiritual perspective on the student's capstone project using Swedenborgian and other principles.

Prerequisite: C- or better in Interdisciplinary Studies 390.

1 Credit.

#### Interdisciplinary Studies 496. Senior Seminar II.

For seniors in the Interdisciplinary Major. Public presentation of senior essay. Career planning and portfolio development. Pass/Fail.

Prerequisite: A passing grade on an interdisciplinary senior essay.

1 Credit.

## Internships

#### 298/398/498 Internships (in their academic areas) (EE)

Individually arranged career related internships. See the Major Department Head or Director of Internships for details.

## Latin

#### Latin 110. Beginning Latin I.

Introduction to the elements of Latin grammar and syntax to be used in translating classical authors and Swedenborg.

3 Credits.

## Latin 111. Beginning Latin II.

Continuation of Latin 110. Prerequisite: Latin 110.

3 Credits.

#### Latin 250. Swedenborg's Theological Latin I.

Intensive review of Beginning Latin, followed by varied readings in the Writings. Various styles of writing distinguished (expository, philosophical, descriptive, narrative). Special attention to non-Classical constructions.

Prerequisites: Latin 110 and 111 or approval of the instructor.

3 Credits.

### Latin 251. Swedenborg's Theological Latin II.

Continuation of Latin 250. Includes examination of original manuscripts and editions.

Prerequisites: Latin 110 and Latin 111 or approval of the instructor.

3 Credits.

## **Mathematics**

## Mathematics 095. Preparation for Quantitative Reasoning.

This course provides additional support for students enrolled in Math101. Topics include translating expressions, building equations, order of operations, and recognizing context. Credit from this course may not be used to satisfy degree requirements.

1 Credit.

## Mathematics 101. Introduction to Quantitative Reasoning. (QR)

Introduction to mathematical concepts to improve basic skills in computation, algebra, graphing, and quantitative applications. This course prepares students for other mathematics courses and courses involving quantitative reasoning. Topics include linear modeling, units of measure and currency, and statistical reasoning, and financial topics.

3 Credits.

## Mathematics 102. Understanding Mathematics in Society. (QR)

Review of mathematical topics with an emphasis on understanding why certain patterns appear. Topics include sets, number systems, geometry, and basic statistics and probability. Recommended for students in education and philosophy.

Prerequisite: Math 101 or appropriate score on placement test.

## Mathematics 115. College Algebra. (QR)

Algebraic topics designed to assist in the use of mathematics in science courses. Topics include exponents and radicals, rational expressions, inequalities, complex numbers, polynomial analysis and advanced factoring, rational functions and asymptotes, and quantitative reasoning applications. Because of duplication of subject matter, students may not receive credit for both Mathematics 115 and Mathematics 120.

Prerequisite: Mathematics 101 or appropriate score on placement test. 3 Credits.

#### Mathematics 120. Pre-calculus. (QR)

Course in college algebra designed to assist in the use of mathematics in science courses by reviewing the behavior of several families of simple and composite functions, and fitting these functions to data. Study of linear, exponential, power, logarithmic, polynomial, and rational functions. Includes quantitative reasoning applications. Because of duplication of subject matter, students may not receive credit for both Mathematics 120 and 124.

Prerequisite: Mathematics 101 or appropriate score on placement test. 4 Credits.

## Mathematics 124. Transcendental Functions. (QR)

Basic trigonometric functions, modeling periodic phenomena with trigonometric functions, exponential functions and models, exponential equations, and logarithms. When combined with Mathematics 115, these courses would be equivalent to typical pre-calculus course. Because of duplication of subject matter, students may not receive credit for both Mathematics 120 and 124.

Prerequisite or Co-requisite: Mathematics 115.

1.5 Credits

## Mathematics 130. Introduction to Statistics. (QR)

Introduction to data analysis, random variables and their distributions, correlation, and statistical inference. Statistical software used for graphing and data analysis. Independent research project. Recommended for students of business or the social and natural sciences.

Prerequisite: Mathematics 101 or appropriate score on placement test.

4 Credits.

### Mathematics 140. Elements of Calculus. (QR)

Derivatives with applications, exponential functions, integration with applications, and functions of several variables. Not recommended for students pursuing a degree in mathematics, engineering, or the physical sciences. Because of duplication of subject matter, students may not receive credit for both Mathematics 140 and Mathematics 150. Mathematics 140 does not fulfill prerequisite requirements for Mathematics 151. Prerequisite: Mathematics 115 or appropriate score on placement test. 3 Credits.

#### Mathematics 150. Calculus I.

Limits, differentiation, maxima-minima, related rates, Riemann sums, integration with applications, fundamental theorem of calculus, transcendental functions. Because of duplication of subject matter, students may not receive credit for both Mathematics 140 and Mathematics 150.

Prerequisite: B- or better in Mathematics 120 or Mathematics 124 or appropriate score on SAT or placement test.

#### Mathematics 151. Calculus II.

Methods and applications of integration, improper integrals, infinite series, Taylor polynomials, and parametric equations.

Prerequisite: Mathematics 150.

4 Credits.

## Mathematics 205. History of Mathematics. (IL)

The development of the major mathematical concepts from ancient times to the present, emphasizing alternate approaches to familiar methods. Students will complete an independent research project. Prerequisite: Mathematics 140 or Mathematics 150.

3 Credits.

## Computer Science/Mathematics 230. Statistics and Data Mining. (QR)

This course builds on what was learned in Mathematics 130 with an eye on big data sets. Topics include linear and multi regression analysis, classification methods including logistic regression, resampling methods such as the bootstrap, applications of decision trees, and unsupervised learning such as cluster analysis. A final project will encompass multiple analysis methods. Throughout the course, the programming language *R* will be used. Prerequisites: B- or better in Mathematics 130 or Mathematics 330.

3 Credits.

## Computer Science/Mathematics 235. Discrete Structures.

Mathematical foundations for the analysis of computer algorithms. Recursive functions, sets, graph theory, and combinatorics.

Prerequisite: Computer Science 180 or competence with a structured programming language. 3 Credits.

## Mathematics 240. Linear Algebra. (QR)

Vector spaces, matrices, linear transformations, systems of linear equations, determinants, and eigenvalue problems. Introduction to mathematical proofs.

Prerequisite: Mathematics 140, Mathematics 150, or Computer Science/Mathematics 230. 3 Credits.

#### Mathematics 250. Calculus III.

Functions of several variables, partial differentiation, multiple integration, vector calculus.

Prerequisite: Mathematics 151.

4 Credits.

## Mathematics 270. Formal Mathematical Reasoning.

An introduction to logical deductive reasoning and mathematical proof techniques in higher mathematics. Techniques include direct proof, contradiction, and induction. Topics include set theory and number theory. Emphasis throughout is on the communication of mathematics and developing abilities in proof writing. Prerequisite: Mathematics 150.

3 Credits.

#### Mathematics 311. Ordinary Differential Equations.

Linear, second-order, and systems of differential equations and Laplace transforms.

Prerequisite: Mathematics 151.

## Computer Science/Mathematics 321. Numerical Methods.

Finite differences, interpolation, solutions of equations, numerical integration, curve fitting, linear equations, numerical solutions of differential equations.

Prerequisite: Mathematics 250 and competence in programming. Computer Science 180 recommended. 3 Credits.

## Mathematics 330. Introduction to Probability Theory.

Topics include probability spaces, random variables, discrete and continuous distributions, joint distributions, correlation, and central limit theorems. Classical statistical inference will be introduced. This course has a computational component and can be used to fill a requirement in the Computer Science minor or ID area. Prerequisite: Mathematics 151. Mathematics 240 recommended.

3 Credits.

#### Mathematics 340. Abstract Algebra.

Introduction to the abstract concepts of groups, rings, and fields.

Prerequisite: Mathematics 240 or Mathematics 270.

3 Credits.

#### Mathematics 360. Advanced Calculus.

Formal definitions of limits, continuity, differentiation and integration. Prerequisites: Mathematics 151 and either Mathematics 240, Mathematics 270, or Computer Science/Mathematics 235. 3 Credits.

## Business/Mathematics 380. Linear Models and Methods for Optimization. (QR)

Introduction to basic methods of operations research. Review of linear systems; linear programming, including the simplex algorithm, duality, and sensitivity analysis; formulation of integer programs; transportation and scheduling problems. This course has a computational component and can be used to fill a requirement in the Computer Science minor or ID area.

Prerequisite: Mathematics 240 and competence in programming. 3 Credits.

## Mathematics 390. Research Seminar.

For juniors in the Mathematics Major. Focus on preparing to do the senior essay during senior year. Explore topics and research questions. Research scholarly sources related to a chosen topic. Formulate draft thesis statement based on interest and research.

1 Credit.

## Mathematics 493. Senior Literature Review.

General guidance in continuing research and review literature related to the chosen topic for the senior essay. Support for crafting a sound and interesting argument, resulting in an outline of main points for the senior essay.

Prerequisite: Mathematics 390 or Interdisciplinary Studies 390.

2 Credits.

## Mathematics 494. Senior Seminar I.

For seniors in the Mathematics Major. Focus on developing a spiritual perspective on the student's capstone project using Swedenborgian and other principles.

Prerequisite: C- or better in Mathematics 390.

## Mathematics 495. Senior Essay. (WC)

Capstone experience for the Mathematics or Interdisciplinary Major. Writing of the senior essay based on the research and outline produced in Mathematics 493.

Prerequisites: Mathematics 493 and either Interdisciplinary Studies 494 or Mathematics 494. 2 Credits.

#### Mathematics 496. Senior Seminar II.

For seniors in the Mathematics Major. Public presentation of senior essay. Career planning and portfolio development. Pass/Fail.

Prerequisite: A passing grade on the senior essay.

1 Credit.

#### Mathematics 499. Senior Project.

Independent study toward a mathematics project to be a companion to the Mathematics Senior Essay. Limited to and required of mathematics and mathematics interdisciplinary majors. Credit Variable.

## Music

#### Music 100. College Chorale.

Development and performance of choral repertoire from Renaissance to Modern. Instruction in the development of vocal techniques. Course may be repeated for credit.

1 Credit.

#### Music 101. Music Ensemble. (EE)

Development and performance of the classical string ensemble repertoire from Baroque to Modern. Private lessons, master classes, performance, and attending concerts. Audition is required. Upon acceptance, students expected to take all three terms. May be repeated for credit.

1.5 Credits.

#### Music 110. Introduction to Western Music.

Survey of the composers, styles, and genres from western civilization with a focus on developing listening skills and understanding.

3 Credits.

#### Music 113. Music Theory I.

Study of music theory and harmony, progressing from basic notation to advanced musical structures. Includes styles from the 18<sup>th</sup>-20<sup>th</sup> centuries.

3 Credits.

#### Music 114. Music Theory II.

Continuation of Music 113.

Prerequisite: Music 113 or permission of instructor.

3 Credits.

## Music 185. Private Music Lessons or Choirs.

Privately arranged music instruction. Instructor provides a written assessment of the student's progress at the end of the term. Private lessons are the financial responsibility of the student.

Prerequisite: Consent of division. Course may be repeated for credit.

#### Music 210. Music of Christianity.

Examination of the creation and use of sacred music in the context of Christianity, from the earliest church organizations through the numerous and diverse denominations of today.

3 Credits.

## Music 298/398/498. Music Internship. (EE)

Requirements variable. Proposals should be submitted to the Department Chair. Art internships are open to students in sophomore year or above who have completed at least two art, dance, or music courses. Credits variable.

## Nutrition

## Nutrition 110. Principles of Nutrition.

Principles of Nutrition explores how nutrients in food relate to human health and disease prevention. Topics discussed include current US dietary guidelines and recommendations, digestion and metabolism of major nutrients, nutrition at various stages of the life cycle (maternal, infant, childhood, adolescent, adulthood, later maturity), the relationship of socioeconomic status, culture, and religious practices to food choices, physical activity and nutrition, and the relationship of diet to health and disease. This course is especially beneficial for those who will be entering health-care or food related professions.

3 Credits.

## Philosophy

## Philosophy 101. Critical Thinking.

Development of students' reasoning skills through analysis and evaluation of arguments. Diagraming arguments, identifying mistakes in reasoning, and writing arguments. Emphasis on issues encountered in everyday experience and in courses across the curriculum, primarily through classical deductive logic. 3 Credits.

#### Philosophy 102. Introduction to Philosophy. (Worldviews)

Survey of some major philosophers and theories in metaphysics, epistemology, and the philosophy of religion.

3 Credits.

#### Philosophy 111. Introduction to Moral Philosophy. (Moral)

Survey of some major philosophers, problems (Euthyphro, relativism, egoism), and theories (aretaic, deontic, utilitarian) in moral philosophy. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

#### Philosophy 210. Ancient Philosophy.

Historical consideration of ancient Greek philosophy (with emphasis on Socrates, Plato, and Aristotle) or Roman philosophy (with emphasis on Cicero, Aurelius, and Seneca). Strongly recommended: Philosophy 101. Prerequisite: Philosophy 102.

## Philosophy 211. Modern Philosophy.

Historical consideration of modern and Enlightenment philosophy, including Descartes, Locke, Leibniz, Rousseau, and Voltaire. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

## Philosophy/Political Science 220. Political Thought. (Civil)

A consideration of political thinkers and theories, both ancient and modern, along with perennial issues in politics, such as justice, authority, liberty, order, equality, power, law, and forms of government. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

## Philosophy 310. Topics in Contemporary Philosophy I.

Exploration of themes and problems in contemporary philosophy. Readings from analytic, continental, postmodern, or neo-pragmatist philosophers in areas such as the philosophy of ethics, politics, language, mind, law, science, religion, or other sub-fields. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

## Philosophy 311. Topics in Contemporary Philosophy II.

Complement to Philosophy 310, but may be taken independently. Topics and emphases change periodically. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

#### Philosophy 320. Swedenborg's Philosophy I.

Swedenborg's cosmology. Consideration of 18th-century cosmological concepts (Descartes, Leibniz, and Wolff) and Swedenborg's unique answers to the issues raised. Particular emphasis on Swedenborg's Principia and the Infinite. Cosmological views developed in the Doctrines of the New Church and by New Church students of Swedenborg.

3 Credits.

## Philosophy 321. Swedenborg's Philosophy II.

Swedenborg's thought upward from the human body in his "search for the soul." Main text taken from the sections on Series and Degrees and The Human Soul in *The Economy of the Animal Kingdom*, terminating in applications in *The Rational Psychology*.

3 Credits.

## Philosophy 330. Advanced Moral Philosophy.

Exploration of themes and problems in ethics, such as the role of emotions in moral life, the relationship between happiness and moral life, the intersection of philosophy and law, the relationship between spirituality and morality, and a variety of current moral issues. Historical and contemporary philosophical texts, as well as passages from Swedenborg's theological and philosophical works used.

3 Credits.

## Philosophy 331. Organic Forms.

Correspondences of the human body compared with other human organisms: cells, societies, and the mind. Illustrations from natural science, social studies, and psychology.

Prerequisite: Philosophy 330, or Philosophy 102 and Philosophy 111 and laboratory science course. 3 Credits.

## Philosophy 340. Bioethics. (Moral)

A philosophical exploration of the ethical issues pertaining to the application of biological information and technology to the generation, alteration, preservation, and destruction of human life and aspects of our environment. Issues to be considered include: reproduction, euthanasia, genetic screening and therapy, experimentation with human and animal subjects, bio enhancement, ownership and nature, distributive justice, and integrity in publication.

Prerequisite: Philosophy 102 and any 100-level Biology course.

3 Credits.

## Philosophy 493. Senior Literature Review.

General guidance in continuing research and review literature related to the chosen topic for the senior essay. Support for crafting a sound and interesting argument, resulting in an outline of main points for the senior essay.

Prerequisite: Interdisciplinary Studies 390.

3 Credits.

## Philosophy 495. Senior Essay. (WC)

Capstone experience for the Interdisciplinary Major. Writing of the senior essay based on the research and outline produced in Philosophy 493.

Prerequisites: Philosophy 493 and Interdisciplinary Studies 494.

3 Credits.

## **Physical Education**

#### Physical Education 103. Life and Health.

Introduction to personal and social health problems we all face today. This course provides information that helps the student understand and investigate these health problems further. Scientific knowledge is presented from a variety of disciplines, such as, medicine, psychology, physiology, and sociology. Non-repeatable. 1 Credit.

#### Physical Education 110. Tennis.

Instruction in basic and intermediate individual skills. Practice in singles and doubles tennis play, including game strategy, rules, and etiquette. Course may be repeated once for credit.

1 Credit.

#### Physical Education 112. Team Sports for Fun.

A survey of a range of team sports including for example, soccer, volleyball, lacrosse, ultimate, basketball, floor hockey. Student interest accommodated. Course may be repeated once for credit.

1 Credit.

#### Physical Education 120. Physical Fitness for You.

Student-designed individual program based on theoretical and practical fitness concepts. Workouts during class twice a week in the fitness center. Course may be repeated once for credit.

1 Credit.

## Physical Education 127. Kickboxing and Self-Defense.

Basic instruction in a power-punching, non-choreographed martial arts workout. Emphasis on proper technique and execution of skills. Each class includes a total-body warm-up and cool-down/stretching period. Course may be repeated once for credit.

1 Credit.

#### Physical Education 129. Badminton.

Basic instruction in skill techniques, rules, strategies, and competition in badminton. Course may be repeated once for credit.

1 Credit.

#### Physical Education 130. Archery.

Basic instruction in skill techniques, rules, strategies, and competition in bow archery. Enrollment limited to eighteen students. Course may be repeated once for credit.

1 Credit.

## Physical Education 133. Yoga.

Introduction to yoga course. Variety of yoga (poses) including standing poses, twists and forward bends, arm-balancing, back bending and inversions. Open to all abilities. Course may be repeated once for credit. 1 Credit.

## Physical Education 170. Frisbee Sports.

This 1 credit PE course is both an introduction to the fundamental skills and strategies of organized Frisbee play and a course designed to further develop individual skills for the beginning player. Frisbee requires development of the following individual skills: throwing/passing/catching, running/cutting and marking. In addition, students will gain an understanding of elementary team and personal strategies in offense and defense.

1 Credits.

#### Physical Education 180. Foundations of Physical Education.

This course gives the prospective teacher of Health and Physical Education (HPE) insight into this area, including the historical, philosophical, and sociological principles with a survey of the latest research and literature in the field. Lifetime health benefits related to proper nutrition and exercise physiology examined. The course is designed for students who are planning a career in education, health, or physical education. Non-repeatable.

1 Credit.

## **Physics**

#### Physics 180. General Physics I: Mechanics. (QR)

An algebra and trigonometry-based physics course that provides an overview of mechanics, thermodynamics and vibrations, primarily for students interested in majoring in biology (including pre-med), psychology or chemistry, rather than engineering or mathematics. Emphasis is on examples and applications rather than derivations. Credit is only awarded for one of Physics 180 or Physics 210. This course and the related laboratory must be taken together.

Prerequisite: Math 125 or equivalent.

#### Physics 180 Lab. General Physics I: Mechanics Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Physics 181. General Physics II: Electricity and Magnetism. (QR)

Continuation of Physics 180 with an overview of electricity, magnetism, light and optics. Credit is only awarded for one of Physics 181 or Physics 211. This course and the related laboratory must be taken together.

Prerequisite: Physics 180, 210 or equivalent.

3 Credits.

#### Physics 181 Lab. General Physics II: Electricity and Magnetism Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

## Physics 210. Principles of Physics I. (QR)

Calculus-based course providing an introduction to rigid body mechanics, gravity, waves, and heat. Problem and laboratory assignments complement the lectures. This course and the related laboratory must be taken together.

Co-requisite or Prerequisite: Mathematics 150.

3 Credits.

## Physics 210 Lab. Principles of Physics I Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

#### Physics 211. Principles of Physics II. (QR)

Continuation of Physics 210. Calculus-based introduction to classical electricity, capacitance, current, resistance, and circuits. Also magnetism, inductance, electromagnetic oscillations, optics, and introduction to modern physics. This course and the related laboratory must be taken together.

Co-requisites or Prerequisites: Mathematics 151 and Physics 210.

3 Credits.

## Physics 211 Lab. Principles of Physics II Lab.

This course requires a lab fee. This course and the related lecture course must be taken together. 1 Credit.

## **Political Science**

## Political Science 101. Introduction to Politics and Governance. (Civil)

Examines the discipline of political science and the concepts involved in the study of politics and governance. Surveys regime types and the role and function of political institutions and organizations. Focus on the potential for thinking about civic and political issues from a religiously-informed perspective. 3 Credits.

#### Political Science 210. American Government and Politics. (PP)

Examination of the American political system focusing on founding principles, national governmental institutions, and contemporary issues. Readings from original documents and historical and contemporary authors.

Prerequisite: Political Science 101, History 230, or instructor permission. 3 Credits.

## Political Science 211. Comparative Government. (Civil)

Introduction to the comparative study of the politics of nations. Examines the underlying principles, machinery, and effectiveness of selected governments around the world, and ramifications for their societies. 3 Credits.

#### Political Science 212. International Relations.

Examination of historical and theoretical foundations for thinking about international relations. Topics include: peace and conflict, international law, intervention, and terrorism. Recommended: Political Science 101 or History 117.

3 Credits.

## Philosophy/Political Science 220. Political Thought. (Civil)

A consideration of political thinkers and theories, both ancient and modern, along with perennial issues in politics, such as justice, authority, liberty, order, equality, power, law, and forms of government. Strongly recommended: Philosophy 101.

Prerequisite: Philosophy 102.

3 Credits.

## Political Science 232. Issues in American Foreign Policy. (W)

Consideration of American foreign policy through an examination of dominant themes and a series of case studies highlighting both levels of analysis and decision-making theories.

Prerequisites: Political Science 101, History 117, or instructor permission.

3 Credits.

## Political Science 260. Law and American Society.

An introduction to the American legal system examining the basic tenets of the American Legal system, including theories of jurisprudence and an examination of the Constitution as the framework for our legal system. Students will explore how laws are created and enforced through the court systems, legislatures, and administrative agencies. The course includes an introduction to legal research, case briefing, and mock trial. 3 Credits.

## Political Science 318. Politics and Religion in America.

This course examines the connection between religious beliefs and institutions and political beliefs and institutions. It begins by exploring the influence of religion and religious attitudes during the founding of the republic and then surveys the broad scope of religious influences in contemporary American political life. 3 Credits.

## Political Science 348. Politics and Religion in the Middle East.

Comparative examination of politics and religion in selected Middle Eastern states. Focus on national identities, political ideologies and institutions, as well as political cultures of societies in the region. Consideration of key issues facing the region.

Prerequisite: Political Science 211, Religion 295, or instructor permission.

## Political Science 298, 398, 498. Political Science Internship. (EE)

Requirements variable. Proposals should be submitted to the appropriate Department Chair. Political Science internships are open to students in sophomore year or above who have completed at least two political science courses.

## Psychology

## Psychology 101. Introductory Psychology.

Introduction to basic constructs of psychology including scientific methodology, the brain, consciousness, memory, identity, learning, motivation, intelligence, and the nature of mental illness. Relevant New Church doctrines analyzed and compared to secular theories of psychology.

3 Credits.

## Psychology 102. Worldviews and History of Psychology. (Worldview)

Survey of six major psychological worldviews. Analysis of worldviews in terms of their history, key people, main concepts, and major contributions to the field of psychology in modern times. Three themes addressed for each worldview: "What is the good life?", "What remedies are available when things go wrong for human beings?", and "Is this a Theistic worldview?" 3 Credits.

#### Psychology 201. Abnormal Psychology.

Examination of mental disorders as classified by the medical model, including schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, dissociative disorders, disorders of childhood, eating disorders, and personality disorders. Critical analysis of the principles and philosophy of the medical model, as well as the physiological underpinnings of certain disorders. Alternative views for the conceptualization of mental disorders explored.

Prerequisite: Psychology 101 or department chair permission. 3 Credits.

#### Business/Psychology 202. Human Resource Management. (PP)

(Also known as industrial and organizational psychology.) Exploration of the application of psychology to the workplace environment, such as business, government, and non-profit organizations. Major areas of study include work motivation, teams and teamwork, personnel decision-making, performance appraisal, leadership, and diversity in terms of gender, race, and personality type. Attention given to New Church concepts of conscience, discriminatory charity, and use as they apply to adult employment in our current workforce. Prerequisite: any psychology course, and any business or economics course.

3 Credits.

#### Psychology 203. Personality Theory.

Examination of both classical and current theories of personality. Focus on understanding terms and concepts of personality as well as their application to situational contexts.

Prerequisite: Psychology 101 or department chair permission. 3 Credits.

## Psychology 204. Human Development: Lifespan.

Study of human development, focusing on the most significant changes that occur across the lifespan. Topics include theories of physical-motor, cognitive, language, creative, social, emotional, moral, and spiritual development.

Prerequisite: Psychology 101 or department chair permission.

## Psychology 205. Social Psychology. (PP)

Study of behavior and cognition in social contexts. Topics include aggression, altruism, influence, love, prejudice, and conformity. Swedenborgian concepts of love, charity, and obedience analyzed. Public Presentation skills emphasized.

Prerequisite: Psychology 101 or department chair permission.

3 Credits.

## Psychology 220. Cognitive Psychology.

Survey of contemporary theories and research concerned with the structure and processes of the mind. The course will view cognitive psychology as the coordinated operation of mental processes within a multi-component memory system. Topics include attention, memory, the role of emotion, problem solving, and concept formation.

Prerequisite: Psychology 101 or department chair permission.

3 Credits.

## Psychology 230. Psychology and Spirituality.

Examinations of psychological research and theories about people's attitudes, motivations, behaviors, thoughts and feelings in a variety of spiritual settings. Investigations of how therapists address spiritual matters in counseling sessions. Consideration of the psychological experience of the Swedenborgian belief in the afterlife, regeneration, charity, conscience, and the relationship between God and humans.

Prerequisite: Psychology 101 or department chair permission.

3 Credits.

## Psychology 285. Positive Psychology: The Science of Living Happily. (EE)

Positive Psychology is the scientific study of human happiness, well-being, and strength of character. This course takes an empirical and experiential approach to help students use the science of thriving and resilience to enhance their lives and others. Topics covered include positive thinking, character strengths, values, goal setting, wellness, the mind-body connection, self-esteem, and serving others in their relationships. No prerequisite required. Three credits and fulfills CORE requirement in Social Sciences. May not be repeated for credit.

3 Credits.

## Psychology 301. Counseling and Clinical Psychology.

Examination of psychological theories that inform the skills of counselors and clinical psychologists in various professional settings. Topics include psychological theories, the roles of the counselor, listening skills, case conceptualization, treatment methods and intervention strategies. Consideration of what it means to incorporate individual values and spirituality into treatment.

Prerequisite: Two psychology courses or department chair permission.

3 Credits.

## Psychology 305. Physiological Psychology. (IL)

Exploration of the neural basis of behavior and motivation. Emphasis on the structure, functions and disorders. Topics include memory, emotion, learning, addictions, conscience, states of mind, and self-regulation. Consideration of Swedenborgian view of the brain, mind, and the soul. Information Literacy skills emphasized.

Prerequisite: Psychology 101 and either Biology 122 or department chair permission.

#### Psychology 307. Psychological Measurement.

Introduction to the principles that underlie the development, use, and interpretation of psychological assessment tools. Topics include: Test construction, survey development, scoring, assessment interpretation issues, and psychological assessment applications in industrial, educational, clinical, and research setting. Students will examine the potential and limitations of tests of intelligence, aptitude, achievement, interest, and personality. Additionally, psychological assessment will be discussed in terms of social, legal, and ethical concerns.

Prerequisite: Psychology 101 and two other psychology courses, or department chair permission. 3 Credits.

## Psychology 320. Introduction to Experiments in Psychology.

Introduces students to experimental design in psychology with careful attention to terminology, methodology, strengths, and limitations of research. Additionally, students are exposed to classic experiments in the areas of social, abnormal, cognitive, developmental, and neuropsychology. Serves as precursor to the Psychology Capstone and should be completed spring term of junior year. Pass/Fail.

1 Credit.

## Education/Psychology 340. Educational Psychology.

Study of secular psychology as it is applied to children and adolescents in the classroom setting. Major areas of study include classroom management, learning, and motivation. Swedenborgian doctrines include innocence, charity, development of the rational mind, and conscience.

Prerequisite: Psychology 101 or Education 128.

3 Credits.

## Psychology 341. Human Development: Adult Altruism. (EE, Moral)

Exploration of psychological theories about moral development, character strengths, altruism, optimism, flourishing, flow, generosity and spiritual maturity. Major emphasis on the states of adults over 18 years of age. Examination of Swedenborgian doctrinal principles regarding adult human development: regeneration, opening of the rational mind, developing a new will, acquiring wisdom, and leading a life of useful service to the neighbor. Ethical reasoning skills emphasized.

Prerequisite: Two psychology courses.

3 Credits.

#### Psychology 380. Seminar in Forensic Psychology.

Covers topics related to the application of psychology to the legal system. Topics include criminal motivation, deception, violence, sociopathy, mental illness and crime, gang behavior, effects of substance abuse, and gender differences in criminals. Includes a Swedenborgian perspective on conscience and moral/spiritual motives.

Prerequisite: Students must be accepted psychology majors, psychology interdisciplinary majors, or psychology minors at the junior level of study. Applied. 3 Credits.

#### Psychology 382. Seminar in Death and Dying.

Introduces students to the growing field of death and dying in psychology. Explores context and meanings of death, ethical decision-making at the end of life, constructs of bereavement, end of life counseling, and special populations to include pediatric death, celebrity death, near-death experiences, and traumatic bereavement. Prerequisite: Students must be accepted psychology majors, psychology interdisciplinary majors, or psychology minors at the junior level of study. Clinical.

3 Credits.

## Psychology 385. Seminar in Positive Psychology.

This 300-level seminar offers an introduction to positive psychology, which is the scientific study of the practices and traits that lead to well-being, focusing primarily on the individual level, but also including the institutional level. Students explore the history of positive psychology and what it contributes to the larger field of psychology, tackling thorny questions, such as what is happiness? Should it be measured and/or deliberately promoted? And how do these topics relate to New Church teachings about overall well-being? Students taking this class should be prepared to practice several positive interventions during the term and offer personal reflections about their impact. In order to support the psychology department's focus on information literacy, peer-reviewed journal articles will be provided as readings in addition to the course textbook. Students must be accepted psychology or interdisciplinary majors or psychology minors at the junior year of study. Permission of the instructor is otherwise required.

3 Credits.

## Psychology 490. Research Methods in Psychology. (IL)

First capstone course for the psychology major. The investigation of psychology as a science with a focus on the qualitative and quantitative approaches to research in the area of psychology. It examines strategies for establishing validity in descriptive, relational, and experimental design in the framework of ethical research. Emphasis will be placed on critical reading and analysis of previously published scientific research. Students receive practice in designing, conducting, analyzing, interpreting the results of research studies, and writing reports in APA style. Students prepare proposal for Senior Essay.

Prerequisites: Psychology 101, Psychology 320, and Mathematics 130. Students must be accepted psychology majors.

3 Credits.

## Psychology 491. Senior Research Seminar. (WC)

Capstone for seniors in the psychology major. Independent work on Senior Essay guided by an advisor. Information Literacy and Writing Skills emphasized.

3 Credits.

## Psychology 492. Senior Seminar.

Capstone for seniors in the psychology major. Public presentation. Critical analysis of ethics in psychology. Career planning and portfolio development. Pass/Fail.

1 Credit.

## Psychology 298, 398. Psychology Internship. (EE)

Proposals must be approved by the head of the Psychology area. Psychology internships are open to students in sophomore year or above who have completed two psychology courses. Requirements are available from director of internships.

Credit variable.

## Religion

## Religion 101. Introduction to New Church Doctrines. (Doctrinal)

Foundation course. Basic survey of the doctrines of the New Church. Presupposes little or no formal background in the study of the doctrines.

3 Credits.

## Religion 110. Introduction to Systematic Theology. (Doctrinal)

A comprehensive overview of New Church doctrine. Emphasis on core doctrines of the Lord, faith and charity, the Word, the afterlife, the mind, Divine providence, judgment, and marriage. Presupposes a moderate familiarity with New Church teachings.

3 Credits.

#### Religion 115. Introduction to New Church Doctrine on Life After Death. (Doctrinal)

New Church teachings on the life after death studied in their own context, as well as related material, which may include a comparison of teachings from other religions and cultures on the subject, as well as reference to the near death experience. Some version of Swedenborg's *Heaven and Hell* will be the central focus. 3 Credits.

## Religion 123. Introduction to the Old and New Testaments. (Scriptural)

Introduction to the various parts of the Bible, the history of the Israelites and Jews, the geography of Palestine, with an emphasis on the different methods of biblical interpretation, with special emphasis on New Church interpretation.

3 Credits.

## Religion 125. The Holy Scripture. (Doctrinal)

The symbolic nature of the Word and the spiritual meaning within. The importance of the literal meaning and its interpretation. The Word in heaven and the church. Dual expressions in the Word. Heresies. The Lord and the Word. The Word in very ancient times. The universal church. The necessity of revelation. Illustrations drawn throughout from the Old and New Testaments. Text: *The Doctrine of the Sacred Scripture*. 3 Credits.

## Religion 205. God, Man, and Creation. (IL, Doctrinal)

Study of how the Lord created the spiritual and natural worlds, with emphasis on humans as the purpose of creation. Vital relationships between the Creator and His creation, with the special role played by humans. Focus on teaching about form, order, degrees, influx, and conjunction.

Text: Divine Love and Wisdom.

3 Credits.

#### Religion 210. Divine Providence and Human Prudence. (IL, Doctrinal)

The laws and fundamental principles by which the Lord governs creation. How the Lord removes evil from people while preserving their freedom. How the Lord brings good out of evil. Eternal life as the goal of providence. How providence uses natural conditions to serve this end. Why providence operates in secret. Text: *Divine Providence*.

3 Credits.

#### Religion 215. The Lord. (Doctrinal)

Introduction to New Church teachings about the Lord. Who is the God of the Biblical testaments? What was Jesus Christ's life on earth about? Special focus on seeing the Lord in the Scriptures, in scholarship, and in the teachings for a New Church.

3 Credits.

#### Religion 220. The Torah. (Scriptural)

Detailed study of Genesis to Deuteronomy in their historical and cultural context. Discussion of translations, certain critical theories, and other related ideas. Treatment of the literal meaning in relation to its higher meanings and other doctrinal considerations.

## Religion 221. The Histories and Prophets of the Old Testament. (Scriptural)

Detailed study of Joshua to 2 Kings, Psalms, and Prophets viewed in their historical and cultural context. Discussion of the difference between prophesy and history, relevance to modern life, and the significance of the literal meaning.

3 Credits.

## Religion 222. The Gospels. (Scriptural)

Detailed study of the four individual Gospels with attention to similarities and distinctions, historical context, and relationship to the Old Testament. Examination of the literal meaning and its significance to the modern life. Special attention to the nature of the First Advent and the testimony concerning Jesus Christ. 3 Credits.

## Religion 223. The Apocalypse. (Scriptural)

The Last Judgment on the human race, with analogy to spiritual crisis in the individual. The spiritual functions and impact of imagery in the book of Revelation and in the memorable relations in the Apocalypse Revealed. Text: *The Apocalypse Revealed*.

3 Credits.

5 Credits.

## Religion 225. Spiritual Interpretation of the Bible. (Scriptural)

The Bible is more than a book of stories and laws. Exploration of the deeper symbolic meanings reveal that it is a story about individual spiritual development and growth. Addressing both Scriptures and personal application, with emphasis on the use of Swedenborg's science of correspondences, students uncover the hidden depths of a variety of biblical stories, which elucidate particular insight and meaning to individual spiritual growth and life.

3 Credits.

#### Religion 260. Evangelization. (Applied)

Introduction to the doctrine of evangelization, the philosophy and application of Church growth principles, and practical instruction in how to present the doctrines to inquirers. Exploration of the changing values of Western culture and the ways the Church can effectively respond to a new generation of seekers. The purpose and process of evangelization, and how to share the teachings of the New Church with confidence and care. 3 Credits.

#### Religion 270. New Church Religious Practices. (Applied)

Both doctrinal study and practical application of teachings relating to New Church religious practices, using the Old and New Testaments and the theological Writings of Emanuel Swedenborg as source material. Special focuses on daily reading of the Word and prayer, on private and public worship, on the steps of repentance, and on the use and importance of Holy Supper.

3 Credits.

#### Religion 271. Moral and Spiritual Life. (Applied)

Various approaches to morality. The spiritual foundation of moral virtues and moral living. Consideration of civil, moral, and spiritual questions dealing with both individual and institutional conduct, such as revolution and the rule of law, the relation of church and state, spiritual and natural freedom, war, race relations, ethics in business and labor, the use of alcohol and drugs, and responsibility for others.

3 Credits.

## Religion 272. Advanced Religious Ethics. (Applied)

Advanced study of the Ten Commandments as they appear in the religious writings of Hinduism, Buddhism, Judaism, Christianity, Islam, and other world faiths. Study of the literal and spiritual level of each commandment using selected texts from sacred and secular sources. Students encouraged to draw connections between the various levels of the commandments and their own lives.

3 Credits

## Religion 273. Religion and Marriage (W. Doctrinal)

New Church doctrine concerning marriage. Includes the Divine origin of marriage; the nature of masculinity and femininity; the state of married partners after death; betrothals and weddings; separation and divorce; the role of the Ten Commandments in marriage; states of discord and coldness; adultery and other sexual disorders. Text: Conjugial Love.

3 Credits.

## Religion 278. Exploring Romantic Relationships. (Applied)

Contemporary marriage education and relationship enhancement programs are studied in the light of New Church teachings. Focuses on the work of John Van Epp (preparation for marriage), John Gottman (making marriage work) and Tony Robbins (six human needs), but also touches on other marriage education programs.

3 Credits.

## Religion 283. Pre-Christian Religious History. (Comparative)

Survey of the history of pre-Christian religions emphasizing the rise, development, and fall of religions from ancient times to Biblical Israel. Topics include the character of revelation and the response to it in each successive religion, the origin of mankind, the origin of evil, and the rise of monogamy and polygamy, of monotheism and polytheism, and of idolatry in the ancient world.

3 Credits.

## Religion 284. Christian Religious History. (Comparative)

Thorough grounding in Christian history. Survey of the personalities, theological and doctrinal issues, and events of Christianity. Christian divisions and present world-impact. Comparison with New Church perspective.

3 Credits.

## Religion 285. The Modern Christian Church. (Comparative)

Challenged in and since the eighteenth century by philosophy, science, and changes in culture, the Christian Church had to respond to increasing pressure to adjust or become obsolete. This course traces the development of Liberal and Conservative schools of thought that led to different solutions to these challenges, explores the influence of Emanuel Swedenborg's theological writings on Christian thought, and focuses primarily on developments in Christianity in American life, culture, and politics. 3 Credits.

#### Religion 293. Comparative Contemporary Religions. (Comparative)

Survey of world religions as they are practiced today. Religions studied include Hinduism, Buddhism, Judaism, Christianity, Islam, and the New Church. This course includes three required week-end field trips to various religious centers.

#### Religion 295. Islam. (Comparative)

Study of Islam: Muhammad and the origins of Islam, the Qur'an and Hadith, theology and practices, sects and schools. Comparison with New Church perspective.

3 Credits.

## Religion 296. Eastern Religious Thought/Hinduism. (Comparative)

Introduction to Eastern Religious Thought with a focus on the *Bhagarad Gita*, considered one of the most revered of the Hindu scriptures, and one of the most important religious classics in the world. Course includes an in-depth study of the literal and symbolic levels of the *Gita*, a comparison with Western thought in general and with New Church thought in particular. 3 Credits.

## Religion 301. Topics in New Church Theology (Applied).

Selected topic of study with a focus on the Heavenly Doctrines. 3 Credits.

#### Religion 305. Universal Doctrines of the New Church I. (Doctrinal)

Systematic survey of the universal theology of the New Church: God the Creator, the Lord the Redeemer, the Holy Spirit, the Holy Scripture and Ten Commandments, and Faith. Text: *True Christian Religion*. 3 Credits.

#### Religion 306. Universal Doctrines of the New Church II. (W, Doctrinal)

Continuation of Religion 305. Topics include faith, charity, free will, repentance, reformation and regeneration, imputation, baptism, and the holy supper. Special focus on the Second Advent and the New Church: what does God's coming entail? Text: The True Christian Religion. 3 Credits.

#### Religion 310. Studies in Arcana Coelestia. (W, Doctrinal)

Study of Emanuel Swedenborg's first publication of theology for a New Church. The course provides an overview of the work's spiritual exegesis of Genesis and Exodus--from the first mythopoeic stories of creation to the Israelites' escape from slavery in Egypt. Special focus on the Abram story and how the narrative of Jehovah's call to humankind contains an ancient picture of our relationship with a Human God. 3 Credits.

#### Religion 311. Continuation of Studies in Arcana Coelestia. (W, Doctrinal)

Study of Emanuel Swedenborg's first publication of theology for the New Church. The course provides an overview of the work's spiritual exegesis of Genesis and Exodus-from the first mythopoeic stories of creation to the Israelites' escape from slavery in Egypt. Special focus on the Moses story, and how the narrative of Jehovah's call to humankind contains an ancient picture of our redemption process. 3 Credits.

#### Religion 315. The Spiritual World. (W, Doctrinal)

The nature, structure, life, and phenomena of the spiritual world. Consideration of the philosophical implications of the creation of that world and consideration of other beliefs about heaven and hell. 3 Credits.

## Religion 320. Judgment, Providence, and Human Society. (PP, Applied)

Study of the spiritual process of judgment, both personal and societal, and the roles human choice and Divine Providence play in judgment. Attention given to the role of judgment in human history, the judgments that have occurred, and the changes judgment brings. The books of the Heavenly Doctrines Last Judgment and Continuation of the Last Judgment will be read in full. 3 Credits.

## Religion 330. Sacred Geometry. (Applied)

Study of the principles underlying the Divine order inherent in natural forms and the application of those principles to the symbolic meaning of number and geometric form in art and architecture. Classical architecture explicitly invoked symbolic geometric principles in design. The doctrine of correspondence connects the ancient understanding of symbolism to New Church ideas about the order of the cosmos. Topics include: qualitative number, symbolic proportions, and the doctrines of order, influx, degrees, form, and correspondences. Combination of classroom lecture with compass and straight-edge constructions. 3 Credits.

## Religion 335. The Human Mind. (Rel335 W is W, Applied)

Study of what the doctrines of the New Church teach about the structure and function of the human mind and how it relates to the brain. The discrete degrees of the mind. The faculties of will and understanding, their relationship and interplay.

3 Credits.

## Religion 370. Topics in Applied Theology. (Applied)

Content may vary from year to year. Consideration of the light shed by the doctrines of the New Church on the ethical and underlying philosophical concerns of different areas of study and occupations.

3 Credits.

## Religion 372. Spiritual Development for Educators (Applied)

This course is primarily designed for educators who are currently (1) working in an elementary or secondary school setting, or (2) planning to work in an educational setting. Each week, students will have the opportunity to reflect on the many challenges that come up within educational settings that prevent them from being the loving, wise, and useful educators they hope to be. Students will have the opportunity to reflect on their feelings, thoughts, and actions in the light of one of the Ten Commandments and, when appropriate, share their experiences with classmates.

Prerequisite: Students must be juniors or seniors majoring in education 3 Credits.

## Religion 380. History of New Church Doctrine. (IL, Applied)

Survey of the development of doctrinal thought in the history of the New Church. Considerations of various and divergent interpretations. The evolution of ideas and their impact on the Church. Reflection on the intellectual heritage of the Church from an historical perspective. Extensive research in New Church collateral literature.

3 Credits.

#### Religion 490. Religion Senior Project I. (WC)

For religion majors. One term is required. May be repeated for a second term with the consent of the division head.

## Religion 491. Religion Senior Project II.

For religion majors. One term is required. May be repeated for a second term with the consent of the division head.

3 Credits.

## Religion 298, 398, 498. Religion Internship. (EE, Applied)

Proposals must be approved by the head of division. Course may be repeated for credit. Credit variable.

## Science

## Science 170. Introduction to Undergraduate Science Research.

Undergraduates work under the supervision of a faculty member on the faculty member's research project. Enrollment is by selection made by the sponsoring science faculty member and the science department chair. Students may be interviewed as part of the selection process. Interested students should check with the science department chair about available positions. Open to qualified college and high school students. Prerequisites: college students must have grades of B or better in at least two college science courses; high school students must have a grade of B or better in at least four high school science or math courses, and have completed at least two years of high school.

1 Credit.

## Sociology

## Sociology 110. Introductory Sociology.

Introduction to the discipline of sociology and a sociological perspective for understanding human behaviors and the structure of human societies. Discussions apply a sociological perspective to topics such as social class, gender, race and ethnicity, culture, work, and social movements in order to understand how individual lives and social groups are shaped by social structures, cultural understandings and distributions of power. 3 Credits.

#### Sociology 212. Marriage and the Family.

Analysis of marriage and the family as fundamental institutions of human society. An exploration of the history of marriage and the family, as these institutions moved from traditional patterns focused on family dictates and necessity to modern patterns focused on individual choice and freedom.

3 Credits.

#### Sociology 218. Topics in Sociology: Ethnicity and Race.

Survey of ethnicity and race as a recognized sub-field in sociology and key factor in understanding human society.

3 Credits.

## History/Sociology 290. Social and Religious Movements.

Exploration of selected social and religious movements. The history of these movements will be used to understand the sociological factors that contributed to their development, form, and impact. 3 Credits.

## Sociology 305. Topics in Sociology.

Examination of a selected topic in sociology. Specific title announced in the course bulletin when offered. May be repeated when different topics are offered. 3 Credits.

## Sociology 321. History of Social Theory.

Exploration of the context of the development of social theory with particular attention to the different nature of the roots of theory in Europe and America.

3 Credits.

## Sociology 340. Seminar in the Sociology of Religion.

Exploration of the relationship between the ideational and organizational components of religion and the major social variables, including gender, class, power, race and nationality. Historic and current religions and religious movements, including the New Church, examined both theoretically and empirically. 3 Credits.

## Spanish

## Spanish 101. Introductory Spanish I

Introduction to the Spanish language for students without previous experience. Emphasis is placed on communication and the foundations of Spanish grammar. Spanish is the language of instruction. 3 Credits.

## Spanish 102. Introductory Spanish II

Continuing introduction to the Spanish language.

Prerequisite: Spanish 101 or equivalent as determined by placement test. Spanish is the language of instruction.

3 Credits.

## Spanish 201. Intermediate Spanish I

Intermediate Spanish is designed to build upon a student's prior Spanish education. The course concentrates on four skills areas: listening, speaking, reading and writing, and is augmented by a wide array of cultural readings and film selections. The grammatical focus is the use of the preterite and imperfect verb tenses. Prerequisite: Spanish 102 or equivalent as determined by placement test. Spanish is the language of instruction.

3 Credits.

## Theater

#### Theater 110. Introduction to Performance Arts.

Study and practice of elementary acting, movement, and voice skills. Students examine verbal and nonverbal communication in solo and group performance, along with scene and script analysis. Improvisation and work on studied pieces, leading to a final performance. Study of the history and philosophy of performance styles from the ancient Greeks to the Elizabethans and modern theorists (Stanislavski, Artaud, Brecht, et. al.). 3 Credits.

## Theater 120. Set Design and Production. (EE)

Hands-on introduction to scene design and production. Overview of the elements of scene design with emphasis on the process of designing a set. Research, sketching, drafting, model building, color application, and actual set construction within a budget. Students required to understand and use all of the equipment in the theater as it pertains to the design and will work with the play's director using the Mitchell Performing Arts Center as the classroom and will participate as a member of the run-crew for the winter Bryn Athyn College production. Final project involves the construction of the actual set. Course may be repeated once for credit.

Credit variable.

#### Theater 130. Set Design and Production. (EE)

Continuation of Theater 120: building and dressing the set from the designer drawings and elevations created in the fall. Finalizing of the design, including color elevations and prop design. Students required to understand and use all of the equipment in the theater as it pertains to the completion of the design using the Mitchell Performing Arts Center as the classroom. Once the set is complete, the class shifts and will work with the play's director and will participate as a member of the run-crew for the winter Bryn Athyn College production. Final project involves the construction of the actual set and running of the show. Course may be repeated once for credit.

Credit variable.

## Theater 150. Dramatic Performance. (EEC)

Students involved in the casts or technical aspects of certain dramatic productions may sign up for this course. Exposure to a variety of acting techniques, including the specialized work needed for productions that might range from Shakespeare's plays, to foreign plays in translation, to musicals. Script analysis, oral interpretation of character, performance movement, dance, and vocal techniques. Variable credit based on the student's involvement. 5-12 hours weekly in rehearsals/classes leading to a finished production. Course may be repeated once for credit.

1-3 Credits.

## Theater 210. Original Performance: Theater as Spiritual Practice.

Builds on fundamental acting skills of Theater 110. Examines archetypal patterns found worldwide in myths, stories, plays and sacred ritual. Students explore archetypes in their own lives by writing, acting in, and producing original plays.

Prerequisite: Theater 110, Theater 120, or permission of instructor.

3 Credits.

## Theater 220. Set Design II. (EE)

Further practice in scene design and production including a more nuanced study of the elements of design with emphasis on the process of designing and making a scale model. Work with the play's director using the Mitchell Performing Arts Center as the classroom and participation as a member of the run-crew for the winter Bryn Athyn College production. Final project involves the construction of the actual set. Prerequisite: Thea120.

3 Credits.

#### Theater 250. Advanced Dramatic Performance. (EE)

Students involved in the cast of the Bryn Athyn College theatrical production may sign up for this course. Students will work specifically with acting and performance techniques, characterization work, scene study, and script analysis while preparing for the annual play. They will also do some independent work. Specialized work needed for the specific production may include vocal training, dialect work, dance, etc. Variable credit based on the student's involvement. 5-12 hours weekly in rehearsals/classes leading to a finished production. Course may be repeated once for credit.

1-3 Credits.

## Writing

## Writing 100. Academic Writing.

Development of academic writing skills in preparation for Writing 101. Intensive grammar, spelling, and punctuation instruction and practice, in conjunction with an introduction to the structure and process of academic writing. Required only for provisionally admitted first-year students before advancement to Writing 101.

3 Credits.

## Writing 101. Expository Writing. (W)

Development of informative, critical, and persuasive writing. Emphases on grammatical control, precision of language, consideration of audience, rhetorical strategies, revision, information literacy, and articulation, development, and support of thesis. Three to five formal essays total, including substantial revision. Individual conferences with instructor to discuss student's writing. Required of first year students. Non-native speakers who want to take Writing 101 in their first year need permission of the Language and Literature department chair.

3 Credits.

#### Writing 202. Writing About Literature. (W, IL)

Analytic study of 2-3 literary genres, with emphases on writing and research. Assumes basic skills in writing and information literacy covered in Writing 101. Three papers, including substantial revision. One longer paper and its research process require locating, evaluating, and incorporating multiple secondary sources. Individual conferences with instructor to discuss student's writing. Required of sophomores. Prerequisite: Writing 101.

3 Credits.

## Writing 211. Creative Writing. (W)

Workshop approach to various forms of creative writing, with emphasis determined by year and instructor. Students explore and recreate the defining qualities of selected genres. Individual conference in addition to inclass instruction and workshops. Grade of B- or better in Writing 101 or permission of instructor. 3 Credits.

## Writing 212. Creative Nonfiction Writing (W)

Study of contemporary creative nonfiction—the use of traditional literary devices to express factual content. Workshop-style course includes the creative memoir, the humorous anecdote, artistic biography, and the personal interview. Course also addresses imaginative text-messaging, effective emailing and the art of blogging. Students read representative writers, critique each other's papers, and learn about the ethics of public discourse, especially in relation to the opportunities and challenges of the digital revolution and the World Wide Web.

Prerequisite: Writing 101.

3 credits.

## Writing 213. Advanced Rhetoric and Composition. (W)

Intensive study of writing for students interested in developing rhetorical skills in composition. Attention both to concepts of classical rhetoric and to issues arising in the context of contemporary cultural environments and communications practices.

Prerequisite: Writing 101.

## Business/Writing 220. Business Communications. (W)

Business Communications is a workplace-oriented course designed to help students develop and refine the written and oral skills necessary to communicate effectively in professional settings. Students will review the purpose and style of business writing and complete a variety of focused writing exercises based on work settings and scenarios. Students will plan, compose, and analyze letters, memoranda, and electronic messages. They will also prepare and deliver brief oral presentations, collaborate with others, and revise business communication.

Prerequisite: Writing 101.

3 Credits.

## Writing 311. Advanced Creative Writing Workshop. (W)

Workshop for in-depth study of the craft of writing. Students will concentrate on one genre (poetry, fiction, or drama) and produce a polished portfolio of their work. Workshop sessions provide opportunity for rigorous and supportive feedback on works in progress with the goal of helping class members produce their best writing.

Prerequisite: Writing 211 or 213.

## Graduate Courses

## Master of Arts in Religious Studies

## **Core Courses**

## Religious Studies 510. Methodological Approaches to Religious Studies-An Introduction.

This course is an introduction to research methods that are of value in investigating topics in religious studies. Includes particular focus on scriptural hermeneutics and historical methods.

3 Credits.

## Theology 514. Doctrine of the Lord.

The essential nature of the Divine, the incarnation and glorification, the Lord's temptations and presence with the human race through the Divine Human.

3 Credits.

#### Theology 518. Doctrine of the Word.

The nature of inspiration and revelation, including the structure and interrelationship of the Old Testament, New Testament and the Writings, and the role of the literal and spiritual sense.

3 Credits.

Religious Studies 598. Thesis I.

Religious Studies 599. Thesis II.

## **Church History**

## Church History 584. Christian Church History.

Growth of the Christian Church from its primitive beginnings through its decline, the Reformation through modern developments. Emphasis is on the history of the various teachings of the Lord, and how these both reflected the times they were devised in, and how they have impacted the development of the Church. 3 Credits.

#### Church History 585. Modern Church History 1750 to the Present.

A study of the Christian Church in the wake of the Last Judgment, covering the modern and postmodern eras, examining theological and institutional trends of churches in response to the development of science and philosophy in the light of the increase of freedom of thought and action in Western culture. Guiding questions for the course ask, "How has the Last Judgment affected the continued development of the Christian Church?", and, "Can the Christian Church remain relevant in the trajectory of the modern era?" 3 Credits.

# Church History 587. Divine Presence over Five Dispensations.

History of the Lord's presence over the five dispensations or churches from creation to the present. Course explores the Most Ancient, Ancient, Israelitish/Jewish, Christian and New Churches in relation to how the Lord has accommodated to the changing spiritual needs of humanity. Studying the five churches in consecutive order demonstrates why the New Church is "new" and why it is conceived of as the last, or "crown" of all the churches.

1.5 Credits.

# **History**

# History 515. Seminar on the Age of Enlightenment.

Exploration of the leading intellectual, socio-cultural, and political developments in Europe between the end of the Wars of Religion and the French Revolution (1648 and 1789). Focus on the rise of the modern. Can be co-enrolled with History 315, with permission of instructor and program director. 3 Credits.

# History 550. Swedenborg's Life and Times.

Exploration of the Swedish context of Swedenborg's intellectual and spiritual development, his call, and his revelatory works. Examines the geography, history, culture, and society of Sweden and the Baltic world in the eighteenth century.

Can be co-enrolled with History 320, with permission of instructor and program director. 3 Credits.

# **Philosophy**

# Philosophy 520. Swedenborg's Philosophy I.

Swedenborg's cosmology. Consideration of 18th-century cosmological concepts (Descartes, Leibniz, and Wolff) and Swedenborg's unique answers to the issues raised. Particular emphasis on Swedenborg's Principia and the Infinite. Cosmological views developed in the Doctrines of the New Church and by New Church students of Swedenborg.

Can be co-enrolled with Philosophy 320, with permission of instructor and program director. 3 Credits.

# Philosophy 521. Swedenborg's Philosophy II.

Swedenborg's thought upward from the human body in his "search for the soul." Main text taken from the sections on Series and Degrees and The Human Soul in The Economy of the Animal Kingdom, terminating in applications in The Rational Psychology.

Can be co-enrolled with Philosophy 321, with permission of instructor and program director. 3 Credits.

# Psychology

# Psychology 501. Counseling and Clinical Psychology.

Examination of psychological theories that inform the skills of counselors and clinical psychologists in various professional settings. Topics include psychological theories, the roles of the counselor, listening skills, case conceptualization, treatment methods and intervention strategies. Consideration of what it means to be a New Church therapist. Students participating in the optional lab will receive the fourth credit. Can be co-enrolled with Psychology 301, with permission of instructor and program director. 3 Credits/4 Credits with optional lab.

# **Religious Studies**

# Religious Studies 541. Ancient Word Studies.

Exploration of the concept of an "Ancient Word"—a physical, or perhaps symbolic, text which served as the first written revelation for a pre-historical culture. Special focus on the first 11 chapters of Genesis, parallel origin myths of the world, and the "lost book" motif.

3 Credits.

# Religious Studies 572. Spiritual Development and the Educator

Exploration of the many challenges that come up within the work of education and focus on the tools that enable one to do that work lovingly, wisely, and usefully in the light of the Ten Commandments. The course includes study of the principles or the Decalogue as they are manifested comparatively across world religions. 3 Credits.

# Sociology

# Sociology 540. Seminar in the Sociology of Religion.

Exploration of the relationship between the ideational and organizational components of religion and the major social variables, including gender, class, power, race and nationality. Historic and current religions and religious movements examined both theoretically and empirically, including the New Church. Can be co-enrolled with Sociology 340, with permission of instructor and program director. 3 Credits.

# Theology

#### Theology 501. The Heavenly Doctrines as Systematic Theology.

Introduces the students to the major doctrines presented in the theological Writings of Emanuel Swedenborg or Heavenly Doctrines along with their core teachings, to the relationship among the major doctrines, to fundamental terms in the Heavenly Doctrines, to important ideas about and arising from the Heavenly Doctrines, and to important perspectives on theology in general and on the Heavenly Doctrines in particular. Seminar.

3 Credits.

#### Theology 505. Universal Doctrines of the New Church I.

Systematic survey of the universal theology of the New Church: God the Creator, the Lord the Redeemer, the Holy Spirit, the Holy Scripture and Ten Commandments, and Faith. Text: True Christian Religion. Can be co-enrolled with Religion 305, with permission of instructor and program director. 3 Credits.

# Theology 506. Universal Doctrines of the New Church II.

Continuation of Theology 505. Faith, charity, free will, repentance, reformation and regeneration, imputation, baptism and the holy supper, the second advent, and the New Church. Text: True Christian Religion.

Can be co-enrolled with Religion 306, with permission of instructor and program director. 3 Credits.

# Theology 513. Transitions, Perspectives of Death and Resurrection.

This course explores the nature of death and resurrection from three perspectives: sociological, psychological and theological. Questions related to the role of society in the death experience, of the psychological states leading to and from death, and the Swedenborgian teaching on the resuscitation process. This course is a good prelude to Theology 515 the Spiritual World.

1 Credit.

# Theology 515. The Spiritual World.

The nature, structure, life and phenomena of the spiritual world. Consideration of the philosophical implications of the creation of that world and consideration of other beliefs about heaven and hell. Can be co-enrolled with Religion 315, with permission of instructor and program director. 3 Credits.

#### Theology 520. Regeneration.

Overview of the states of regeneration, covering heredity evil, remains, repentance, temptations, conscience, forgiveness, and charity.

3 Credits.

#### Theology 522. The Doctrine of Life.

Placed against the backdrop of the Ten Commandments, this course examines the nature and practice of religion, the reason why sins outlined in the Ten Commandments should be rejected, and the role of human choice and freedom in this process.

1.5 Credits.

# Theology 524. Conjugial Love.

The essential spiritual nature of marriage, preparation for it, its progressive states and challenges, and various disorders which are destructive of marriage.

3 Credits.

# Theology 525. The Last Judgment, the Second Coming, and the New Church.

Consummation of the first Christian Church. The process of the Last Judgment. The Second Coming and its relation to the Doctrines of the New Church. The New Church and True Christianity. Can be co-enrolled with Religion 320, with permission of instructor and program director. 3 Credits.

# Theology 526. The Human Mind.

The nature and degrees of the adult human mind as a vessel receptive of the Divine. Can be co-enrolled with Religion 335, with permission of instructor and program director. 3 Credits.

#### Theology 563. The Old Testament.

A topical approach to the Old Testament considering major doctrinal themes in the letter of different books of the Old Testament, different styles within these books, the context of this revelation, and historical issues related to the Old Testament texts.

3 Credits.

# Theology 564. The New Testament.

The characters of the Four Gospels, their inspiration, differences, major themes present in the individual Gospels and in the overall dispensation. There will be some attention to historical context, including a look at the Acts and Epistles.

3 Credits.

#### Theology 570. Studies in the Arcana Coelestia.

Introduction to the celestial, spiritual and spiritual-historical meanings of the Word. The ancient churches. The representation of Abraham, Isaac, and Jacob. The Exodus. This course aims for a general knowledge of the first published works of the Doctrines of the New Church, and includes selected readings of approximately 500 pages.

Can be co-enrolled with Religion 310, with permission of instructor and program director. 3 Credits.

#### Theology 580. History of New Church Doctrine.

Seminar in the development of doctrinal thought in the history of the New Church. Considerations of various and divergent interpretations. The evolution of ideas and their impact on the Church. Reflection on the intellectual heritage of the Church from an historical perspective. Extensive research in New Church collateral literature.

Can be co-enrolled with Religion 380, with permission of instructor and program director. 3 Credits.

#### Theology 599. Independent Study.

An opportunity to explore subject matter which is not covered in the curriculum. Based on approval and availability of faculty.

3 Credits.

# Master of Divinity

# **Courses**

#### Business 864: Pastoral Business.

The focus of this course will be an exploration of management and administrative activities, societal and legal obligations, budgeting and financial affairs, volunteer and employment issues, outreach and marketing functions, mission accountability, responsibilities to stakeholders, fund and friend raising, plus community relations from the perspective of a religious organization. In addition, the course will explore operational and long term planning along with the implementation of strategic initiatives to fulfill the organization's mission while improving efficiency and effectiveness.

Seminar

#### Church History 687: New Church History.

Chronological and topical study of the rise and early development of the New Church in Europe and North America. The rise of the Academy movement and the development of the General Church of the New Jerusalem. Consideration of selected issues in modern church history. Emphasis on the history of doctrine. Seminar.

# Communication 716: Topics in Communication I. (5 classes)

Communication is one of the most important activities we engage in as humans. It is how we connect with the LORD, each other, and our world. As a pastor, learning to communicate effectively is essential. This course will explore communication topics and their practical application. Topics will include the role of persuasion in communication, listening skills, and available communication tools for pastors. The course will also address leadership and how to lead through change. A significant portion of the course will deal with structuring an effective oral message.

Seminar.

# Counselling 845: Introduction to Pastoral Counseling II.

Focus of class will be furthering the development of emotional intelligence, and strengthening the listening and attending skills developed in PT 844. There will be a focus on applying skills in situational contexts and life transitions. Examples include death and loss, divorce, grief, illness, parenting, addiction and mental illness. This will be practiced in small groups and role plays looking for applications to real life pastoral situations.

Seminar.

#### Experiential Learning:

Theologs spend an average of three hours a week for 30 weeks a year, in their Service Learning Assignments. Usually there is a change in assignment every ten weeks. The assignments involve interacting with people as aides to ordained and non-ordained leaders in this community. All of the assignments give the theologs direct experience relating to people in settings that are similar to what they will encounter, once they themselves are ordained ministers. Students are assessed by onsite supervisors and their classroom professor on nine connecting skills. They are rated as demonstrating an Excellent, Good, Sub-par or Destructive level for each of the nine skills. Students meet as a group once a week for about an hour to receive coaching from their professor, who possesses advanced training and skills in this area. Service Learning is usually part of the curriculum for first and second year theological students, for a total of 6 terms. Workshop

#### Homiletics 911: Principles of Exposition.

The primary purpose of this course is to learn the principles of expounding the Sacred Scripture to see its spiritual sense, as these principles are taught in the theological Writings of Emanuel Swedenborg. Students will learn to apply these principles. They will also be introduced to the theory and practice of sermon writing. Seminar.

#### Homiletics 921: Sermons from Old Testament Texts.

Theory and practice of sermon writing. Sermons will be from various styles in the Old Testament: from a made-up historical story, from an actual historical story, from a psalm. Workshop.

# Homiletics 922: Children's Talks.

Philosophy, preparation and presentation of children's talks. Workshop.

#### Homiletics 923: Sermons from the Prophets and New Testament Texts.

Theory and practice of sermon writing. Sermons will be from the Prophetical style of the Old Testament, and from various styles in the New Testament. Workshop.

# Pastoral Theology 851: Liturgics: Doctrinal Foundations.

Introductory course exploring the doctrinal underpinnings of ritual in the General Church of the New Jerusalem (GCNJ). We explore the development of liturgical practice in the New Church from its earliest days to the present. Topics include "external and internal worship," the role of ritual in worship, houses of worship and their symbolism. Workshop.

# Pastoral Theology 852: Liturgics: Orders of Services for Worship.

A practical course on constructing an order of service, examining the place and use of music, singing, the letter of the Word, prayer, lessons, the children's talk, sermon and benediction. There will be a major emphasis on developing a familiarity with the liturgy and practice of leading worship according to the standard General Offices, as well as contemporary, informal and home settings. The aim of this course is to prepare students to be able to comfortably lead a service in a variety of settings before their Candidate experience requires them to do so.

Workshop.

# Theology 601. Heavenly Doctrines as Systematic Theology.

An introductory course required of all Theological School students. Its purpose is to provide for the students the framework, the context, and the direction of the Theological School program. It introduces the students to the major doctrines presented in the Heavenly Doctrines along with their core teachings, to the relationship among the major doctrines, to fundamental terms in the Heavenly Doctrines, to important ideas about and arising from the Heavenly Doctrines, and to important perspectives on theology in general and on the Heavenly Doctrines in particular.

# Theology 614: Studies on the Glorification: I.

The Lord's childhood. Acquisition of knowledge. Early temptations. The first rational. Divine perception. The Divine Rational. Inmost temptations. Based on the reading of Arcana Coelestia, chap. 12-22.

Seminar.

#### Theology 616: Studies on the Glorification: II.

The conjunction of good and truth in the Lord's Divine Rational. Conception and birth of the Divine Natural. Appearances of truth. The glorification of the Natural. Mediate good. The conjunction of natural truth with spiritual good, and of the Divine good natural with the good of truth. Based on the reading of Arcana Coelestia, chap. 23-33.

Seminar.

# Theology 620. The Revelation Given to the New Church.

The nature of the theological Writings given to the New Church through Emanuel Swedenborg. Its relationship to former revelations. Approaches to forming a doctrine for the church in response to the new revelation. The nature and role of that doctrine. Seminar.

## Theology 626: Themes in the Old Testament.

The character of the Old Testament, seen in the light of the theological Writings of Emanuel Swedenborg (the "Heavenly Doctrine"). The nature of its inspiration and its place in the history of revelation. A look at the major themes in the literal sense that are the basis for its spiritual meaning. Seminar.

# Theology 642. The Human Mind and its Regeneration.

The human mind as a vessel created by the Lord to receive and respond to Him, and ultimately to fulfill His end in creation: a state of conjunction between human beings and Himself, i.e. heaven. Structure and faculties of the mind, influx of life into the mind. The greater part of the course focuses on the Lord's work of regenerating human beings for heaven and the role of human beings in cooperating with it. Stages and states of regeneration, from birth to the final formation of a person's ruling love ("Book of life"). Seminar.

### Theology 668: The Apocalypse and Last Judgment.

Using the book of Revelation and the Apocalypse Revealed as guides, this course explores the process of the Last Judgment in 1757. Particular emphasis is placed on the Biblical correspondences that describe the states of the church and individuals in the Christian era, and how these states led to the downfall of the Christian Church and the establishment of the New Church.

Seminar.

# Theology 695: Dissertation Writing.

The goal of the dissertation, required of all degree students, is to demonstrate the student's ability to present and explain doctrine. The dissertation begins with an approval of the topic selected by the student at the close of the second term of his penultimate year. This is followed by a one term workshop in the spring, offering instruction and guidance on the process of developing the topic. In the workshop students independently explore their topic, and convene to share and discuss findings with the instructor and class. The student is given a personal advisor for the dissertation, who works with him to its completion by February of his final year.

Workshop and Independent Study.

#### Theology 710: Pastoral Orientation.

Introductory study of the doctrine of the priesthood, with emphasis on the origins, the uses of, and the workings of ministry. Sections on love of salvation of souls, conscience and effect of evil on the priesthood. Workshop.

# Theology 841: Church Government I.

An analysis of the doctrine and its application in pastoral and overall church governance. How to lead a church congregation. A consideration of issues such as government by influx, counsel and assembly, the history of governance in the New Church, the relationship of the priesthood and laity, and the relationship of the General Church and the Academy.

Two-term Workshop.

# Theology 842: Church Government II.

An analysis of the doctrine and its application in pastoral and overall church governance. How to lead a church congregation. A consideration of issues such as government by influx, counsel and assembly, the history of governance in the New Church, the relationship of the priesthood and laity, and the relationship of the General Church and the Academy.

Two-term Workshop.

# Workshop 720: Speech I: Public Speaking and Interpersonal Communication.

Introduction to communications theory: Self as communicator, communication process, perception in communication, and effective communication—qualities and barriers. Emphasis on applications to professional work of the priest.

Workshop.

# Workshop 724: Speech II: Concepts in Interpersonal Communication.

Introduction to oral interpretation of literature. Advanced interpersonal communication theory and skills development.

Workshop.

# Master of Special Education, Literacy Concentration

# **Courses**

#### Special Education 500. Spiritual Perspective on Special Education.

How do we move beyond the labels that are required for securing special education services and meet students for who they are as human beings? This course explores the lens through which we view students. It provides tools for helping educators to see the whole student instead of seeing just someone with a disability. By working on our own attitudes and assumptions, we can transform our classrooms into places where students of all abilities can thrive.

1 Credit.

# Special Education 511. Contemporary Issues.

This course is designed to provide students with a general understanding of the history of education of individuals with disabilities and the development of special education law and policy over time. It presents current issues and trends highlighting the goals and challenges of special education today. Additionally, a foundation of major disability categories and factors that contribute towards under-and over- representation of diverse students in special education will be addressed.

3 Credits.

# Special Education 512. Family and Community Partnerships.

This course provides the knowledge and skills to form useful, collaborative relationships with families, paraeducators, service providers, and other educators to best serve the needs of children with disabilities. Students will learn to implement federal and state mandates for special education and related services to develop effective school programs. High-Leverage Practices (HLP) related to collaboration will be emphasized. Additionally, students will explore procedures for developing, implementing and evaluating (a) instructional accountability between general and special education personnel and programs, (b) roles and responsibilities (c) interdisciplinary team planning including families (d) coordinating, educating and supervising paraeducators, and (e) general management responsibilities associated with instruction of children and youth with disabilities.

3 Credits.

# Special Education 513. Research-Based Intervention Strategies.

The focus of this course is to look at models of effective specialized instruction in a variety of content areas, with a particular focus on literacy interventions. Students will study means by which teachers and schools collect assessment data to inform and guide effective instruction for all children, in particular those who experience significant learning challenges. Students will examine the most current research, related High-Leverage Practices (HLP), and various models of both in-classroom and out-of-classroom multi-sensory intervention techniques. Students will identify an area of research related to language-based learning disabilities and explore possible research questions in preparation for SpEd 600 Graduate Capstone. 4 Credits.

# Special Education 520. Educational Assessment.

In this course, standardized and functional assessments are emphasized. Students are introduced to educational assessment procedures, including norm-referenced, criterion-referenced, and curriculum-based assessments. An emphasis is placed on gathering information to answer specific referral questions, and the use of assessment tools, which meet legal and ethical guidelines. Students will learn to measure an individual's present level of performance, interpret the data and provide recommendations for instruction, by creating assessment driven learning goals and objectives. High-Leverage Practices (HLP) related to assessment are emphasized.

3 Credits.

# Special Education 534. Universal Design for Learning and Assistive Technology.

This course is designed to introduce the principles of Universal Design for Learning (UDL) and incorporation of assistive technology to accomplish UDL, in meeting needs of all children in an inclusive classroom environment. It will provide hands-on, application experiences to utilize these principles in a variety of settings through multiple strategies and devices. Through the creation of a website portfolio, the course will enable students build a resource of tools for themselves and others. 2 Credits.

# Special Education 550. Methodologies: Specially Designed Instruction for High-Incidence

This course introduces the assessment and identification processes for understanding and serving children with high-incidence disabilities. Students will explore initial instructional and behavioral interventions necessary for meeting the needs of children with high incidence disabilities, with a focused introduction to children identified with language-based learning disabilities. Curriculum resources and High-Leverage Practices (HLP) related to instruction will be emphasized for the development and implementation of individualized education plans.

3 Credits.

#### Special Education 560. Foundations for Literacy.

Students will examine the essential components of literacy instruction: phonemic awareness, phonics, fluency, vocabulary development and comprehension and its connection to writing. Students will learn the foundations of the reading process, developmental levels, theories, models, and instructional strategies to support all children's literacy development, with an emphasis on children identified with language-based learning disabilities.

3 Credits.

# Special Education 570. Social-Emotional Development for Students with Language-Based Learning Disabilities.

In this course, students will develop an understanding of Social and Emotional Learning (SEL) as an essential consideration in child development. An overview of the concept of Social and Emotional Learning (SEL) and related High-Leverage Practices (HLP) will be provided with an emphasis on developing individualized strategies and establishing a supportive classroom culture.

3 Credits.

# Special Education 585. Comprehensive Literacy Instruction for Students with Language-Based Learning Disabilities.

In this course students will develop skills to implement a comprehensive approach to literacy instruction. Students will explore evidenced-based instructional methods, study strategies, and technology that supports the integration of literacy instruction across the curriculum for children with language-based learning disabilities. An emphasis on supporting this population in inclusive settings through high-leverage collaborative practice will be provided. Additionally, students will explore literature relevant to their research questions formulated in SpEd 513 in preparation for SpEd 600 Graduate Captsone. 3 Credits.

# Special Education 690. Graduate Capstone.

This course provides students an opportunity to complete a study on a topic of interest related to language-based learning disabilities. Capstone projects may involve quantitative or qualitative data collection or syntheses of literature. Early in the course, students refine research questions generated in SpEd 513. After questions are clearly delineated, students learn methods of data collection that will assist in answering their questions. Finally, students develop and present their key findings to the class. 3 Credits.

#### Special Education 691. Student Teaching in Special Education.

This course provides the student with practical experiences as a special education teacher. These experiences include systematically designing and delivering effective, goal-driven instruction, utilizing various sources of student assessment data, creating a safe and responsive learning climate that promote social-emotional learning, and implementing collaboration skills to work with major stakeholders to ensure student learning. 3 Credits.

#### Special Education 692. Teacher Residency in Special Education.

This course provides the student with practical experiences as a special education teacher. These experiences include systematically designing and delivering effective, goal-driven instruction, utilizing various sources of student assessment data, creating a safe and responsive learning climate that promote social-emotional learning, and implementing collaboration skills to work with major stakeholders to ensure student learning. 6-9 Credits.

# **Academic Policies**

# **Veterans Affairs Benefits**

Students seeking Veteran's Affairs (VA) education benefits need to submit their Certificate of Eligibility (COE) for educational benefits to the institution's VA School Certifying Official (SCO) prior to the beginning of the trimester in which they will be attending. A "Certificate of Eligibility" may be any documentation provided by the VA that serves as verification of an individual's eligibility to benefits under chapter 31 or chapter 33 such as a statement of benefits from the Department of Veterans Affairs' (VA) website, e-Benefits, or a VAF 28-1905 form.

Certification of enrollment is done by the SCO once the student's schedule is finalized (at the conclusion of the "drop" period) for the term.

# Certification Requirements:

- Students must follow a Bryn Athyn College degree plan. Only courses that apply to their declared degree plan will be approved for benefits.
- Students must provide an official transcript from all previously attended post-secondary schools by the end of the first trimester. This includes non-accredited institutions and the student's military transcript (if not a spouse/dependent).
- Students must notify the institution's SCO upon registration each trimester in order to request certification. Certification of enrollment is not automatic.

During the time period after the student's COE for benefits has been received, the SCO has certified the student's enrollment for the term and the institution is awaiting the funds to be sent from the VA, the institution may not impose any penalties, such as late fees, nor deny the student any services such as access to classes, library, or other institutional facilities.

There is however further expectation of any payment that is due which is the difference between the student's total financial obligation and the total amount of VA educational benefits they will receive. For example, if a student's tuition expense is \$10000 for the term and their entitled to 70% in VA educational benefits, (\$10000 X 70% = \$7000) their further expectation of payment to be paid by the billing due date would be \$3000, (\$10000 - \$7000 = \$3000).

# Types of Benefits

#### Chapter 33 – Post 9/11 GI Bill

This benefit is for service members who have served on active duty for at least 90 days (either all at once or with breaks in service) on or after September 11, 2001, or received a Purple Heart on or after September 11, 2001, and were honorably discharged with a service-connected disability, or are a dependent child using benefits transferred by a qualifying Veteran or service member. Service members with at least 3 years of

active duty are eligible to receive 100% of funding level. Benefits will be prorated for those with less than 3 years of service.

For more information, visit <a href="https://www.benefits.va.gov/gibill/post911">https://www.benefits.va.gov/gibill/post911</a> gibill.asp

This benefit also has an option that allows service members to transfer all or some of their unused benefits to their spouse and/or dependent children. The Department of Defense (DoD) determines if you may utilize this benefit. Once approved, the new beneficiaries must apply for benefits through the VA.

For more information, please visit <a href="https://www.benefits.va.gov/gibill/post911">https://www.benefits.va.gov/gibill/post911</a> transfer.asp

# Chapter 35 – VA Education Benefits for Survivors' and Dependent

This benefit provides educational assistance to the spouse and/or children of a Veteran or service member

Dependents' Educational Assistance (DEA) – Provides educational assistance to the surviving spouse and/or child of a Veteran or service member who has died in the line of duty after September 10,2001, is missing in action or was captured in the line of duty by a foreign government or power, or as of December 23, 2006, is permanently and totally disabled due to a service-connected disability.

For more information, please visit <a href="https://www.va.gov/education/survivor-dependent-benefits/dependents-education-assistance/">https://www.va.gov/education/survivor-dependent-benefits/dependents-education-assistance/</a>

Fry Scholarship – This scholarship is for children and dependents of Veterans or active-duty service members who died in the line of duty on or after September 11, 2001.

For more information, please visit <a href="https://www.va.gov/education/survivor-dependent-benefits/fry-scholarship/">https://www.va.gov/education/survivor-dependent-benefits/fry-scholarship/</a>

# Chapter 1606 – Montgomery GI Bill Selected Reserve (MGIB-SR)

This program is for members of the Selective Reserve and National Guard who have enlisted or re-enlist in the select reserve with an obligation to serve 6 or more years on or after July 1, 1985. In order to be eligible for this benefit, the member will have had to complete their IDAT (initial date active training). A Notice of Basic Eligibility (NOBE) form should be obtained from one's unit and provided to the school. Chapter 1606 expires once a service member has separated from the reserves. This benefit pays directly to the student.

For more information, visit <a href="https://www.benefits.va.gov/gibill/mgib">https://www.benefits.va.gov/gibill/mgib</a> sr.asp

# Chapter 31 – Vocational Rehabilitation

This program is for Veterans and service members who have a service-connected disability that limits their ability to or prevents them from working. Veterans should meet with their Vocational Rehabilitation Counselor to develop an education plan. This benefit may cover the entire cost of tuition and fees.

To contact a Vocational Rehabilitation Counselor, visit <a href="https://www.benefits.va.gov/vocrehab/eligibility">https://www.benefits.va.gov/vocrehab/eligibility</a> and entitlement.asp

# Department of Defense Tuition Assistance (DoD-TA)

Bryn Athyn College of the New Church has signed the Memorandum of Understanding (MOU) with the Department of Defense (DoD), for students to utilize the TA program. Each branch of the military and the National Guard administer the program and determine the eligibility requirements and the amount of assistance available; the service member must apply for the program and receive an approval before starting classes.

For additional information on Tuition Assistance for each branch visit https://www.military.com/education/money-for-school/tuition-assistance-ta-program-overview.html

# Institutional Withdrawal Refund Policy for DoD-TA Recipients:

Bryn Athyn College is a trimester-based school; therefore, an academic year consists of three enrollment periods referred to as terms.

TA funds are earned on a proportionally during each enrollment period or term as a student attends classes, unearned funds, are funds that have not been incurred based upon when a student ceases to attend.

In adhering to the DoD's guidelines, if a student receiving TA funds does not begin attendance for the term at the institution, 100% of funds received will be returned directly to the military service, not the student. In the case where a student has been attending classes but for any reason withdraws during the term any unearned TA funds which are calculated on a proportional basis through at least the 60% point in time of the term for which the funds were provided will be returned directly to the military service, not the student.

For additional information about education benefits offered by the VA visit the U.S. Department of Veterans Affairs website at <a href="https://www.benefits.va.gov/gibill/">https://www.benefits.va.gov/gibill/</a>

#### **Questions? Please Contact:**

Ms. Kimberly Clark
Director of Financial Aid & Primary SCO
267-502-2567
Kimberly.Clark@brynathyn.edu
Brickman 121

Ms. Maddie Berger
Bursar & Secondary SCO
267-502-2493

Madeline.Berger@brynathyn.edu
Brickman 114