# BRYN ATHYN COLLEGE

2020-21
Undergraduate
Course Bulletin

# Table of Contents

Academic Reminders and Requirements	(
Fall Term 2020-21 Undergraduate Course List	8
Fall Term 2020-21 Undergraduate Courses	11
Biology	11
Business	12
Chemistry	13
Communication	13
Computer Science	14
Dance	14
Earth Science	14
Economics	14
Education	15
English	10
Experiential Education	17
Fine Arts	17
Geography	18
History	18
Human Society	19
Independent Studies and Honors Contracts	20
Interdisciplinary Studies	20
Internships	20
Latin	20
Mathematics	20
Music	21
Philosophy	21
Physical Education	22
Political Science	22
Psychology	22
Religion	24
Sociology	25

Spanish	25
Theater	25
Writing	25
Winter Term 2020-21 Undergraduate Course List	27
Winter Term 2020-21 Undergraduate Courses	30
Anthropology	30
Biology	30
Business	31
Chemistry	32
Communication	33
Computer Science	33
Dance	33
Economics	34
Education	34
English	35
Experiential Education	35
Fine Arts	36
Hebrew	37
History	37
Human Society	37
Independent Studies and Honors Contracts	39
Internships	39
Latin	39
Mathematics	39
Music	40
Philosophy	40
Physical Education	41
Physics	41
Political Science	41
Psychology	42
Religion	43
Spanish	44

Theater	44
Writing	44
Spring Term 2020-21 Undergraduate Course List	45
Spring Term 2020-21 Undergraduate Courses	48
Anthropology	48
Biology	48
Business	49
Chemistry	50
Communication	51
Computer Science	51
Dance	51
Economics	52
Education	52
English	53
Experiential Education	54
Fine Arts	54
Hebrew	55
History	55
Independent Studies and Honors Contracts	56
Interdisciplinary Studies	56
Internships	56
Mathematics	57
Music	58
Nutrition	58
Philosophy	58
Physical Education	59
Physics	59
Political Science	59
Psychology	60
Religion	61
Theater	62
Writing	62

# BRYN ATHYN COLLEGE CALENDAR FOR ACADEMIC YEAR 2020-21: ONE HUNDRED and FORTY-FOURTH ACADEMIC YEAR

#### **2020**

			<u>2020</u>
June	1	Monday	Summer Session Begins
July	30	Thurs	Summer Session Ends
September	2	Wed	Faculty Retreat
1	3	Thurs	Start-of-year Faculty and Staff Meeting
			Fall Term
September	7	Mon	Labor Day holiday
осртствег	8	Tues	New students (US and International) arrive on campus
	8-9	Tues-Wed	Orientation for new students
	9	Wed	Returning students arrive on campus
	9	Wed	Open advising for all students
	9	Wed	7:00 pm: President's Welcome (dessert) for all students
	10	Thurs	Fall Term classes begin
October	9	Fri	Charter Day (no classes)
October	21-30	Wed-Fri	Registration for Winter Term
	26	Mon	No classes
November	18	Wed	Final day of Fall Term classes
November	19	Thurs	Reading day
	20	Fri	Exams begin
	24	Tues	Fall Term ends after Tuesday exams
	25	Wed	Residence Halls close at 9:00am for all students
	23	Wed	residence Trans close at 7.00am for an students
			<u>2021</u>
			Winter Term
January	3	Sun	Resident students return
	4	Mon	Winter Term classes begin
	18	Mon	Martin Luther King, Jr. holiday (no classes)
February	3-12	Wed-Fri	Registration for Spring Term
March	11	Thurs	Final day of Winter Term classes
	12	Fri	Reading day
	15	Mon	Exams begin
	17	Wed	Winter Term ends after Wednesday exams
	18	Thurs	Residence Halls close at 9:00am for all students
			Spring Term
March	28	Sun	Resident students return
March	29	Mon	Spring Term classes begin
	2)	Mon	opining Term classes begin
April	2	Fri	Good Friday holiday (no classes)
	5-9	Mon-Fri	Phase I Registration
	12-16	Mon-Fri	Phase II Registration
May	3-7	Mon-Fri	Phase III Registration
	31	Mon	Memorial Day Holiday (no classes)
June	4	Fri	Final day of Spring Term classes
	7	Mon	Exams begin
	9	Wed	Final day of exams
	10	Thurs	Residence Halls close at 9:00am for all non-graduating students
	11	Fri	6:30 pm: Graduation Reception
	12	Sat	2:00 pm: Graduation
	12	Sat	Residence Halls close at 9:00pm for all students
	16	Wed	End-of-Year Faculty and Staff Meeting and
			End-of-Year Faculty and Staff Gathering

### Academic Reminders and Requirements

Make sure you have a tentative academic plan before you see your advisor to register for classes. Your advisor can provide information and perspectives that may help you make decisions, but it is your academic program. It is your responsibility to ensure it is the program you want and need.

To be full-time, choose 9-14.5 credits each term that advance you toward degree or feed your interests. Full-time students must take at least 9 credits each term. However, to stay on track for a graduation in four years and maintain full eligibility for student loans, you will need to complete 31 credits per year. Full-time tuition covers up to 15 credits per term, but credits over 14.5 are considered overload. Additional payment is necessary for 15.5-17 credits. Overload credits (15-17) require approval by the Dean of Academics. See the *Student Handbook* for more details: <a href="https://brynathyn.edu/wp-content/uploads/2016/02/UndergraduateStudentHandbook.pdf">https://brynathyn.edu/wp-content/uploads/2016/02/UndergraduateStudentHandbook.pdf</a>.

While progressing toward your degree, keep the following requirements in mind:

### First Year Requirements

- Two religion courses (100-level) during the year including passing Religion 101 or 110
- Writing 101 (and Writing 100 for provisional admits and those with SAT reading score below 450)
- Math 101 (if SAT math score below 500)
- To advance to second year status, you must complete residency requirements and at least 31 credits.

### **Second Year Requirements**

- Two religion courses during the year
- Writing 202
- Application to a major by end of the fifth full-time term
- To advance to third year status, you must complete residency requirements and at least 62 credits.

### Third Year Requirements

- One religion course (not 100-level)
- Submit a Roadmap to Graduation checklist with assistance of advisor
- To advance to fourth year status, you must complete residency requirements and at least 93 credits, and be accepted into a major program.

### Fourth Year Requirements

- One religion course (not 100-level)
- To be eligible to graduate, you must complete all major, core, and residency requirements, and at least 124 credits (some majors may require more).

### Course Recommendations by Intended Major

In addition to the residency requirements listed above, students interested in the following majors should take, if possible and academically prepared, the courses listed below in their first year.

- Biology: Bio122 & 122L, Bio123 and 123L, Chem101, Chem110 and 110L, Chem111 and 111L, Math130, Bio 232 or Bio250
- **Business:** Econ 131 or 132, Phil101, Math130, Comm105, Bus141
- **Building Arts:** FA101, FA102, FA122, FA128, FA140, FA141, FA120 or 125 or 130
- Education: Ed128, ESci110, Geog110, any 100-level History course, two math courses, Phil102

- English and Communications: Comm 105; Comm130 or 230; Writ 202 (if eligible); Eng 105 and/or 110 (if taken twice or in combination can satisfy 200-level lit)"
- **Fine Arts ID:** FA 101 or 102
  - O Studio Arts Track: one studio or art history course
  - O Dance ID: one dance course (other than ensemble), Dan120
- Human Society: any three of: Anth110, Geog110, any 100-level History, PSci101, Soc110
- Math ID: Math150, Math151, Math250 or 311 (if B or better in Math151), one course in mathrelated field such as computer science, physics, or economics
- Philosophy ID: Phil101, Phil102
- **Psychology:** Psyc101, Bio122 and 122L, Math130, Psyc201 or 203, Psyc204 or 220, and 9 credits in either education, sociology, or anthropology
- Religion: Rel110, Rel205, Phil102, Phil11

For more information on a particular major or the Core Program, please see the information available in the BAC Academic Programs Bulletin (https://brynathyn.edu/wp-content/uploads/2019/04/2019-20-BAC-Programs.pdf), or the major worksheets (https://brynathyn.edu/academics/undergraduate/majors/).

### **Graduation Applications**

If you are planning to graduate this May, print and complete the graduation application (https://brynathyn.edu/academics/undergraduate/major-and-minor-forms/).

### **Student Online Registration Instructions**

First-year students must complete registration through their advisor. Second-year students and higher are eligible to perform their own registration during open registration sessions, assuming there are no financial holds on their accounts. Exact dates for open registration will be communicated by the registrar. To complete your own registration, follow these instructions

- Go to: https://www.BrynAthynSonis.com
- Login and click on "Students"
- Enter your PIN and ID (PIN is case sensitive, ID requires leading zeroes)
  - o If you forget your ID or PIN, click the link on login page
- Click on "Academics" and select Registration
- Select "View All" to see course list
- Register for a course by clicking on the number in the "spaces" column
- After selecting courses, click on "Continue Registration Process"
- Review courses and, if correct, click "Continue"
- Finalize by clicking "Return" button.
- If a course is full, you can add yourself to a wait list by clicking the number in the "wait" column

#### Notes:

You will need to see your advisor if you want to:

- audit a course
- conduct an independent study
- complete an internship
- take more than 14.5 credits
- drop a course after the first week of the term

Your advisor will guide you through the process of setting up an independent study, internship, or credit overload. Note that students and advisors will be unable to register for internships or independent studies

through the online registration system. Internships and independent studies will be registered by the Registrar once the appropriate paperwork has been completed.

## Fall Term 2020-21 Undergraduate Course List

As of 8/12/2020. (Independent Study and Internship courses not listed).

COURSE	TITLE	CREDITS	INSTRUCTOR
Bio122(1)	Introduction to Biology: Genetics and Evolution	3	Bryntesson, A. Fredrik
Bio122(2)	Introduction to Biology: Genetics and Evolution	3	Bryntesson, A. Fredrik
Bio122L(0)*	Introduction to Biology: Genetics and Evolution Lab (W)	1	McMackin, Grace Rose
Bio122L(1) *	Introduction to Biology: Genetics and Evolution Lab (W)	1	McMackin, Grace Rose
Bio122L(2) *	Introduction to Biology: Genetics and Evolution Lab (W)	1	Evans, Stella R.
Bio122L(3) *	Introduction to Biology: Genetics and Evolution Lab (W)	1	McMackin, Grace Rose
Bio210(0)	Human Anatomy and Physiology I	3	Higgins, Ed
Bio210L(0) *	Human Anatomy and Physiology I Lab	1	Higgins, Ed
Bio210L(1) *	Human Anatomy and Physiology I Lab	1	Higgins, Ed
Bio315(0)	Principles of Biochemistry	3	Higgins, Ed
Bio373(0) *	Biological Laboratory Techniques: Molecular Biology	2	Evans, Stella R.
Bio373(1) *	Biological Laboratory Techniques: Molecular Biology	2	Evans, Stella R.
Bio490(0)	Biology Seminar I (IL)	1	Evans, Stella R.
Bus/Wrt220(0)	Business Communications (W)	3	Rogers, Elizabeth
Bus141(0)	Accounting I	3	King, Ethan
Bus254(0)	Principles of Marketing	3	Swiski, Mark D.
Bus305(0)	Business Seminar	1.5	King, Ethan
Bus320(0)	Financial Management (QR)	3	Waltrich, Christopher
Bus493(0)	Senior Literature Review	2	King, Ethan
Bus494(0)	Senior Seminar I	1	Synnestvedt, Dan
Chem101(0)	Introduction to Chemistry	3	Nudy, Louis R.
Chem210(1)	Organic Chemistry I	3	Nudy, Louis R.
Chem210L(0) *	Organic Chemistry I -Lab	1	Higgins, Ed
Chem210L(1) *	Organic Chemistry I -Lab	1	McMackin, Grace Rose
Comm105(0)	Public Speaking (PP)	3	Bernhardt, Suzanne
CSci105(0)	Introduction to Computer Systems	3	Simonetti, Neil
Dan160/260/360+	Dance Ensemble (EEc)	1.5	Bostock, Jessica
Dan493	Senior Literature Review	2	Bostock, Jessica
Econ131(0)	Macroeconomics (QR)	3	Nash, Scott
Ed202(0)	Moral Education (Moral)	3	Rose, Angela N.
Ed217(0)	Language, Literacy, and Numeracy	3	Phillips, Nina Gunther
Ed271(0)	Introduction to Early Childhood Education	3	Phillips, Nina Gunther
Ed322(0)	Social Studies and the Young Child	3	Phillips, Nina Gunther
Ed324(0)	Science and the Young Child	3	Rose, Angela N.
Ed402(0)	Student Teaching (EE)	12	Phillips, Nina Gunther
Eng218(0)	American Literature I	3	King, Kristin
Eng367(0)	The Modern Novel (IL)	3	King, Kristin
Eng495(0)	Senior Seminar: Career Preparation	1	King, Kristin
ESci110(0)	Introduction to Physical Geology and Meteorology	3	Potapov, Eugene R.

ESci110L(0) *	Principles of Physical Geology: Lab	1	Potapov, Eugene R.
ESci110L(1) *	Principles of Physical Geology: Lab	1	Potapov, Eugene R.
FA/Hist271(0)	Introduction to Historic Preservation	3	Karas, Natalie
FA102(0)	Art History: Renaissance to Now (IL)	3	Kline, Jonathan D.
FA140(0) *	Drawing and Painting	3	Gyllenhaal, Martha
FA212(0)	Medieval Art and its Revivals	3	Kline, Jonathan D.
FA240(0) *	Intermediate Painting	3	Gyllenhaal, Martha
FA328	Glass Dynamics	3	Nelson, Stephen R.
FA342(0)	Tool and Hardware Production and Design	3	Holzman, Warren
FE1(0)	Field Experience I: Observation	2.5	Rose, Angela N.
FESpEd(0)	Field Experience in Special Eduation	3	Wong, Sarah
Geog110(0)	World Regional Geography	3	Yardumian, Aram
Hist112(0)	The Viking World	3	Lawing, Sean
Hist286(0)	The Witch-Hunt in Early Modern Europe	3	Lawing, Sean
Hist305(0)	Reacting to the Past: Revolution	3	Rose, D. Greg
HSoc401(0)	Capstone Seminar I (IL)	3	Yardumian, Aram
ID494(0)	Senior Seminar I	1	Synnestvedt, Dan
Lat250(0)	Swedenborg's Theological Latin I	3	Frazier, Scott Innes
Math095(2)	Preparation for Quantitative Reasoning	1	Genzlinger, Maret
Math101(2)	Introduction to Quantitative Reasoning (QR)	3	Simonetti, Neil
Math140(0)	Elements of Calculus (QR)	3	Simonetti, Neil
Math150(1)	Calculus I	3	Bongers, Caira
Math150L(0)	Calculus I Lab	1	Bongers, Caira
Math150L(1)	Calculus I Lab	1	Bongers, Caira
Math240(0)	Linear Algebra (QR)	3	Bongers, Caira
Math493(0)	Senior Literature Review	2	Bongers, Caira
Math494(0)	Senior Seminar I	1	Synnestvedt, Dan
Mus100(0)	College Chorale	1	Bier, Graham
PE103(0)	Life and Health	1	Bryntesson, Hilary J.
PE180(0)	Foundations of Physical Education	1	Jones, Scott
Phil/PS220(0)	Political Thought (Civil)	3	Synnestvedt, Dan
Phil102(0)	Introduction to Philosophy (Worldview)	3	Latta, Marcy
Phil493(0)	Senior Literature Review	3	Synnestvedt, Dan
PSci210(0)	American Government and Politics (PP)	3	Rose, D. Greg
Psyc101(1)	Introductory Psychology	3	Frey, Kurt
Psyc201(0)	Abnormal Psychology	3	Rogers, Kiri K.
Psyc205(0)	Social Psychology (PP)	3	Frey, Kurt
Psyc212(0)	Health Psychology	3	Rogers, Kiri K.
Psyc285(0)	Positive Psychology: The Science of Living Happily (EE)	3	Nash, Laura
Psyc490(0)	Research Methods in Psychology (IL)	3	Cavallo, Fernando
Rel101(2)	Introduction to New Church Doctrines (SpDoc)	3	Schnarr, Grant
Rel101(3)	Introduction to New Church Doctrines (SpDoc)	3	Glenn, Coleman
Rel101(4)	Introduction to New Church Doctrines (SpDoc)	3	Schnarr, Grant
Rel101(5)	Introduction to New Church Doctrines (SpDoc)	3	Glenn, Coleman
Rel110(0)	Introduction to Systematic Theology (SpDoc)	3	Frazier, Scott Innes
Rel210(0)	Divine Providence and Human Prudence (IL) (SpDoc)	3	Genzlinger, Matthew
Rel215(0)	The Lord (SpDoc)	3	Glenn, Thane

Rel278(0)	Exploring Romantic Relationships (SpAppl)	3	Silverman, Ray
Rel372(0)	Spiritual Development for Educators (Applied)	3	Silverman, Ray
Rel335(0)	The Human Mind (SpAppl)	3	Cole, Stephen
Soc110(0)	Introduction to Sociology	3	Rogers, Kiri K.
Span101(0)	Introductory Spanish I	3	Diaz, Elena
SpEd111(0)	Introduction to Special Education	3	Dalcin, Donette
SpEd331(0)	Classroom Management and Behavioral Support	3	Ballard, Kelly M.
Thea110(0)	Introduction to Performance Arts	3	Bostock, Jessica
Writ100(0)	Academic Writing	3	Anderson, Kimberly
Writ101(0)	Expository Writing (W)	3	Anderson, Kimberly
Writ101(1)	Expository Writing (W)	3	Hoffman, Chandra
Writ101(2)	Expository Writing (W)	3	Glenn, Thane
Writ202(0)	Writing About Literature (W) (IL)	3	Latta, Marcy
Writ202(3)	Writing About Literature (W) (IL)	3	Cooper, Robin

<sup>+</sup>This course is offered on multiple levels. All students must register on the 100 level.

\*This course requires a lab fee.

The College administration will make every effort to offer the courses listed, but reserves the right to cancel courses if necessary.

### Fall Term 2020-21 Undergraduate Courses

### **Biology**

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

The first of a two-course gateway series that is required for prospective biology majors. Introduction to principles of genetics and evolution. Includes evolution, natural selection, cell division and the cell cycle, chromosomes, Mendelian and non-Mendelian inheritance, the Hardy-Weinberg principle, how selection, migration and genetic drift influence evolution, kin selection, mechanisms of speciation, and the last common ancestor and the tree of life. The course concludes with a section on development and evolution. 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 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, 122L, 123, and 123L. 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/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, Chemistry 210, and 210L. 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, bioinformatics, protein expression and analysis, and culturing microbiological organisms. Laboratory reports, lab notebooks, and scientific writing skills integral. This course requires a lab fee.

Co-requisites or prerequisites: Biology 230 and Biology 232. 2 Credits.

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

Broadened exposure to active areas of biology and reading current literature. Students are required to read and present 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.

#### **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/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 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 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.

#### 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.

### 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 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 and 111L.

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.

Prerequisite: Chemistry 111 and 111L.

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, Chemistry 210, and 210L.

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.

### **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.

#### Dance

#### 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 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.

#### 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.

### **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.

#### Education

#### 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 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 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 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 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.

#### 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: 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.

#### 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 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.

### **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 English courses require a 200-level English as prerequisite.

#### English 218. American Literature I.

Chronological survey of American writers from colonial times to the mid 19th century. Particular attention paid to themes such as nature, religion, freedom, slavery, 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 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.

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

Focus on professional transition to workplace or graduate school. Guest speakers 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.

### **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.

#### Fine Arts

#### 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 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 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 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.

#### 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 328. Glass Dynamics.

This advanced Building Arts course teaches the uses of glass outside architectural applications. Course content includes structural composition and production of glass including float, colored and tempering processes. Further topics may include warm glass techniques and hot glass applications, along with modern techniques of decal and digital printing on glass.

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.

### 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.

### 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.

#### 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 286. The Witch-Hunt in Early Modern Europe.

Examines the witch-hunting phenomenon – that is, the prosecution and execution of persons accused of witchcraft – which occurred in Europe and by extension its colonies (e.g. New England) during the period 1450-1750 resulting in thousands of deaths. A consideration of the witch-hunt's intellectual underpinnings, its religious, social, political, legal dimensions, as well as its after-life in contemporary culture. Extensive use of primary sources.

3 Credits.

#### History 305. Topics in History: Reacting to the Past – Security and Self-Determination

Students take part in two historical role-playing games informed by classic texts about events in 1945: the Yalta summit between the leaders of the Grand Alliance in WWII and the decisions surrounding Indian independence from the British Empire. Focus on developing skills—speaking, writing, critical thinking, problem solving, leadership, and teamwork— in order to prevail in elaborate and complicated simulations. 3 credits.

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 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.

### **Independent Studies and Honors Contracts**

In addition to the listed courses, departments may offer independent studies and honors contracts in a variety of fields. The purpose of these 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, and honors contract courses are designated with a trailing H, such as Math205H. Academic departments are under no obligation to meet requests for independent studies and honors contracts. Students who undertake independent studies must be able to work independently between meetings with the instructor. In order to qualify to take an independent study or honors contract, a student must:

- Have completed at least 31 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 or honors contract is to occur.
- Submit an independent study card or honors contract card (signed by the department chair and instructor) to the College Office to be reviewed by the Dean of Academics.
- Create a syllabus together with the instructor and submit it to the College Office before or during registration.

### **Interdisciplinary Studies**

#### 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.

### **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.

3 Credits.

#### Latin

#### 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.

#### **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.

#### 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 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.

4 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.

#### 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.

### **Philosophy**

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

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

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.

#### 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.

### **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 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.

#### **Political Science**

#### 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.

#### 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.

### 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 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.

#### 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 212. Health Psychology

Health psychology examines how psychological states influence physical health in a variety of ways. The three central issues of focus in this course are the promotion and maintenance of health (e.g., how psychological factors influence health-promoting and health compromising behaviors), the development of illness (e.g., how psychological factors influence the development and progression of disease), and the treatment of illness (e.g., how psychological factors influence the management of illness).

Prerequisite: Psychology 101

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 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 and Mathematics 130. Students must be accepted psychology majors. 3 Credits.

#### 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, marriage, and repentance. Presupposes a moderate familiarity with New Church teachings.

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 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 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 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.

### 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.

### **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.

### **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.

### 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 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 four 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 second-year students. 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.

# Winter Term 2020-21 Undergraduate Course List

As of 8/12/2020. (Independent Study and Internship courses not listed).

COURSE	TITLE	CR ED	INSTRUCTOR
Anth 240(0)	Anthropology of Religion	ITS	Yardumian, Aram
Anth240(0) Bio123(0)	Introduction to Biology: Molecular Biology	3	Bryntesson, A. Fredrik
Bio123L(0)*	Introduction to Biology: Molecular Biology  Lab	1	McMackin, Grace Rose
Bio123L(1) *	Introduction to Biology: Molecular Biology Lab	1	McMackin, Grace Rose
Bio220(0)	Human Anatomy and Physiology II	3	Higgins, Ed
Bio220L(0) *	Human Anatomy and Physiology II Lab	1	Higgins, Ed
Bio220L(1) *	Human Anatomy and Physiology II Lab	1	Higgins, Ed
Bio230(0)	Genetics	3	Bryntesson, A. Fredrik
, ,		3	Potapov, Eugene R.
Bio235(0)	Ecology		
Bio235L(0) *	Ecology Lab	1	Potapov, Eugene R.
Bio235L(1) *	Ecology Lab	1	Potapov, Eugene R.
Bio495(0)	Senior Project (WC)	3	Higgins, Ed
Bus/CSc215(0)	Management Information Systems	3	Marselis, Cindy Joy
Bus256(0)	Principles of Sales	3	Swiski, Mark D.
Bus264(0)	Sports Marketing	3	Shute, Dick
Bus301(0)	Business Ethics (Moral)(PP)	3	King, Ethan
Bus301(1)	Business Ethics (Moral)(PP)	3	King, Ethan
Bus321(0)	Advanced Financial Management	3	Staff,
Bus495(0)	Senior Capstone Project (WC)	2	Rogers, Elizabeth
Chem110(1)	General Chemistry I	3	Higgins, Ed
Chem110L(0) *	General Chemistry I -Lab	1	Evans, Stella R.
Chem110L(1) *	General Chemistry I -Lab	1	McMackin, Grace Rose
Chem211(0)	Organic Chemistry II	3	Nudy, Louis R
Chem211L(0) *	Organic Chemistry II: Lab	1	Nudy, Louis R
Comm105(0)	Public Speaking (PP)	3	Bernhardt, Suzanne
Comm130(0)	Foundations of Graphic Design	3	Mill, Carl
CSci180(0)	Structured Programming	3	Simonetti, Neil
Dan160/260/360(0)+	Dance Ensemble (EEc)	1.5	Bostock, Jessica
Dan231/331(0)	Modern Contemporary Dance. (EEC)	3	Bostock, Jessica
Dan495(0)	Senior Essay (WC)	2	Bostock, Jessica
Econ132(0)	Microeconomics (QR)	3	King, Ethan
Ed218(0)	Literacy Instruction for Young Learners I	3	Phillips, Nina Gunther
Ed272(0)	Child Development:Birth to Age Nine	3	Rose, Angela N.
Ed323(0)	Math and the Young Child	3	Rose, Angela N.
Eng235(0)	Shakespeare (W)	3	Cooper, Robin
Eng320(0)	The English Language	3	Glenn, Thane
FA103(0)	Art of Asia, Africa, and the Americas	3	Kline, Jonathan D.
FA122(0) +*	Forging	3	Holzman, Warren
FA128(0) +*	Stained Glass I	3	Staff,
FA130(0) *	Ceramics	3	Orthwein, Christina
FA222(0) +*	Intermediate Forging	3	Holzman, Warren
FA228(0) +*	Intermediate Stained Glass Painting	3	Staff,

FA422(0)	Blacksmithing - Small Scale Design & Production	3	Holzman, Warren
FA499	Senior Project	3	Staff
FE2(0)	Field Experience II: Exploration	3	Phillips, Nina Gunther
Heb110(0)	Beginning Hebrew I	3	Frazier, Scott Innes
His/Ant312(0)	European Folk and Fairy Tales with History	3	Lawing, Sean
Hist114(0)	The Classical World (IL)	3	Closterman, Wendy
HSoc402(0)	Capstone Seminar II (WC)	3	Lawing, Sean
Lat251(0)	Swedenborg's Theological Latin II	3	Frazier, Scott Innes
Math115(0)	College Algebra (QR)	3	Genzlinger, Maret
Math130(0)	Introduction to Statistics (QR)	3	Bongers, Caira
Math130L(0)	Introduction to Statistics Lab	1	Bongers, Caira
Math130L(1)	Introduction to Statistics Lab	1	Bongers, Caira
Math151(0)	Calculus II	4	Simonetti, Neil
Math495(0)	Senior Essay (WC)	2	Bongers, Caira
Mus113(0)	Music Theory I	3	Staff,
PE129(0)	Badminton	1	Sheaffer, Dave
PE133(0)	Yoga	1	Ritter, Kristin Suzanne
Phil101(0)	Critical Thinking	3	Synnestvedt, Dan
Phil102(0)	Introduction to Philosophy (Worldview)	3	Synnestvedt, Dan
Phil102(1)	Introduction to Philosophy (Worldview)	3	Latta, Marcy
Phil111(0)	Introduction to Moral Philosophy (Moral)	3	Latta, Marcy
Phil495(0)	Senior Essay	3	Synnestvedt, Dan
Phys210(0)	Principles of Physics I (QR)	3	Blair, Max
Phys210L(0) *	Principles of Physics I - Lab	1	Blair, Max
Phys210L(1) *	Principles of Physics I - Lab	1	Blair, Max
PSci101(0)	Introduction to Politics and Governance (Civil)	3	Hodgell, Reid
PSci101(1)	Introduction to Politics and Governance (Civil)	3	Hodgell, Reid
PSci260(0)	Law and American Society	3	Rogers, Elizabeth
Psyc101(0)	Introductory Psychology	3	Frey, Kurt
Psyc204(0)	Human Development: Lifespan	3	Frey, Kurt
Psyc301(0)	Counseling and Clinical Psychology	3	Rogers, Kiri K.
Psyc380(0)	Seminar in Forensic Psychology	3	Rogers, Kiri K.
Psyc491(0)	Senior Research Seminar (WC)	3	Frey, Kurt
Psyc492(0)	Senior Seminar	1	Nash, Laura
Rel101(1)	Introduction to New Church Doctrines (SpDoc)	3	Silverman, Ray
Rel115(0)	Introduction to New Church Doctrine on Life After Death	3	Schnarr, Grant
Rel125(0)	The Holy Scripture (SpDoc)	3	Cole, Stephen
Rel205(0)	God, Man, and Creation (IL)(SpDoc)	3	Glenn, Coleman
Rel210(0)	Divine Providence and Human Prudence (IL) (SpDoc)	3	Genzlinger, Matthew
Rel221(0)	The Histories and Prophets of the Old Testament	3	Frazier, Scott Innes
Rel296(0)	Eastern Religious Thought/Hinduism (SpComp)	3	Silverman, Ray
Rel310(0)	Studies in Arcana Coelestia (W)(SpDoc)	3	Glenn, Thane
Rel490(0)	Religion Senior Project I (WC)	3	Frazier, Scott Innes
Span102(0)	Introductory Spanish II	3	Diaz, Elena
SpEd212(0)	Supporting Students with Disabilities	3	Dalcin, Donette F.
SpEd312(0)	Classroom Assessments	3	Phillips, Nina Gunther
Writ101(0)	Expository Writing (W)	3	Hoffman, Chandra

Writ101(1)	Expository Writing (W)	3	Anderson, Kimberly
Writ202(0)	Writing About Literature (W) (IL)	3	Latta, Marcy

<sup>+</sup>This course is offered on multiple levels. All students must register on the 100 level.

<sup>\*</sup>This course requires a lab fee.

The College administration will make every effort to offer the courses listed, but reserves the right to cancel courses if necessary.

## Winter Term 2020-21 Undergraduate Courses

### Anthropology

#### 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/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.

### **Biology**

#### 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, DNA and RNA structure, DNA replication, chromosome structure and organization, the genetic code, transcription, translation and proteins, gene mutations and DNA repair, regulation of gene expression in prokaryotes and eukaryotes, epigenetics, cancer and the regulation of the cell cycle, recombinant DNA technology, CRISPR-Cas, applications of genetic engineering and biotechnology, genetically modified foods, DNA forensics, and gene therapy. 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 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 and 210L.

#### 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 230. Genetics.

Study of the process of heredity at a more advanced level than Biology 122. The course covers concepts of cell division (cell cycle, mitosis & meiosis), fundamental and extended Mendelian genetics, chromosome mapping in eukaryotes and prokaryotes, the genetics of sex determination and sex chromosomes, chromosomal mutations, extranuclear inheritance; developmental genetics, quantitative genetics, and the genetics of populations and evolution.

Prerequisites: Biology 122, 122L, 123, and 123L.

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, 122L, 123, and 123L.

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 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.

#### **Business**

#### 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 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.

#### 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 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 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.

### Chemistry

#### 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 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 and 210L.

#### 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.

Prerequisite: Chemistry 210 and 210L.

1 Credit.

#### 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.

### **Computer Science**

#### 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.

#### 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.

#### Dance

#### Dance 131/23/331. 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 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.

#### **Economics**

#### 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.

#### Education

#### 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 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 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.

#### 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.

#### 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.

#### 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.

### 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 English courses require a 200-level English as prerequisite.

#### 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 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.

### **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.

#### Fine Arts

#### 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.

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 128. Stained Glass I.

Introduction to stained glass techniques, including cutting and cold-shaping of glass, panel design, painting on glass, copper foil and leading techniques. Projects include study of and response to examples in the Glencairn Museum and Bryn Athyn Cathedral.

3 Credits.

#### 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.

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.

3 Credits.

#### 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.

### 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 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.

## **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.

## History

## 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.

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 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 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 and Honors Contracts**

In addition to the listed courses, departments may offer independent studies and honors contracts in a variety of fields. The purpose of these 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, and honors contract courses are designated with a trailing H, such as Math205H. Academic departments are under no obligation to meet requests for independent studies and honors contracts. Students who undertake independent studies must be able to work independently between meetings with the instructor. In order to qualify to take an independent study or honors contract, a student must:

- Have completed at least 31 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 or honors contract is to occur.
- Submit an independent study card or honors contract card (signed by the department chair and instructor) to the College Office to be reviewed by the Dean of Academics.
- Create a syllabus together with the instructor and submit it to the College Office before or during registration.

## **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.

3 Credits.

## Latin

#### 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 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 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.

#### Mathematics 151. Calculus II.

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

Prerequisite: Mathematics 150.

4 Credits.

#### Mathematics 340. Abstract Algebra.

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

Prerequisite: Mathematics 240 or Mathematics 270.

3 Credits.

#### 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 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.

## Music

#### Music 113. Music Theory I.

Study of music theory and harmony, progressing from basic notation to advanced musical structures. Includes styles from the  $18^{\text{th}}$ - $20^{\text{th}}$  centuries.

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.

### 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 129. Badminton.

Basic instruction in skill techniques, rules, strategies, and competition in badminton. 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.

## **Physics**

## 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.

## **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 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.

## **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 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. 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 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 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 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 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 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. Depending on enrollment, may include an RTTP simulation of the court of Josiah. 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 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 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.

3 Credits.

## Spanish

### 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.

## **Theater**

### 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.

## Writing

## 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 four 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 second-year students. Prerequisite: Writing 101.

# Spring Term 2020-21 Undergraduate Course List

As of 8/12/2020. (Independent Study and Internship courses not listed).

COURSE	TITLE	CREDITS	INSTRUCTOR
Anth110(0)	An Introduction to Cultural Anthropology	3	Yardumian, Aram
Anth260(0)	Human Evolution	3	Yardumian, Aram
Bio225(0)	Ornithology	3	Potapov, Eugene R.
Bio225L(0)*	Ornithology Lab	1	Potapov, Eugene R.
Bio232(0)	Cell Structure and Function	3	Bryntesson, A. Fredrik
Bio250(0)	Microbiology	3	Evans, Stella R.
Bio250L(0) *	Microbiology Lab	1	Evans, Stella R.
Bio355(0)	Cancer Biology	3	Bryntesson, A. Fredrik
Bio380(0)	Research Seminar (IL)(PP)	1	Evans, Stella R.
Bio492(0)	Biology Seminar III	1	Potapov, Eugene R.
Bio492(1)	Biology Seminar III	1	Potapov, Eugene R.
Bus/Mth380(0)	Linear Models and Methods for Optimization (QR)	3	Simonetti, Neil
Bus142(0)	Accounting II	3	Waltrich, Christopher
Bus257(0)	Principles of Management	3	Swiski, Mark D.
Bus272(0)	Drone Applications in Business and Science	3	King, Ethan
Bus290(0)	Internship Preparation Seminar	1.5	Nash, Laura
Bus302(0)	Corporate Social Responsibility	3	Rogers, Elizabeth
Bus351(0)	Introduction to Business Law	3	Rogers, Elizabeth
Bus390(0)	Research Seminar(IL)	2	King, Ethan
Bus496(0)	Senior Seminar II	1	Nash, Laura
Chem111(1)	General Chemistry II	3	Higgins, Ed
Chem111L(0) *	General Chemistry II Lab (QR)	1	McMackin, Grace Rose
Chem111L(2) *	General Chemistry II Lab (QR)	1	McMackin, Grace Rose
Comm105	Public Speaking (PP)	3	Bernhardt, Suzanne
Comm230(0)	Intermediate Graphic Design	3	Kline, Caroline K.
CS/Math235(0)	Discrete Structures	3	Simonetti, Neil
Dan120(0)	Dance Technique.	3	Bostock, Jessica
Dan241(0)	History of Twentieth-Century American Dance	3	Bostock, Jessica
Dan499(0)	Senior Project	2	Bostock, Jessica
Econ132(0)	Microeconomics (QR)	3	King, Ethan
Ed128(0)	Introduction to the Theory and Practice of Education	3	Rose, Angela N.
Ed219(0)	Literacy for Young Learners II	3	Morey, Robin
Ed274(0)	Adolescent Growth and Development: Ages 8-18	3	Phillips, Nina Gunther
Ed402(0)	Student Teaching (EE)	12	Rose, Angela N.
Eng219(0)	American Literature II	3	King, Kristin
Eng370(0)	Twentieth Century Authors (after 1950) (W)	3	King, Kristin
FA120(0) +*	Metal Work I	3	Kline, Jonathan D.
FA125(0) *	Photography	3	Orthwein, Christina
FA141(0) *	Building Arts Foundation	3	Staff
FA205(0)	Introduction to American Architectural History	3	Staff
FA220(0) +*	Metal Work II	3	Kline, Jonathan D.
FA251(0) *	Integrating Art into a Child's Early Years	1.5	Gyllenhaal, Martha
FA452(0)	Blacksmithing - Large Scale Design & Production	3	Holzman, Warren

FE3(0)	Field Experience III	3	Phillips, Nina Gunther
Heb111(0)	Beginning Hebrew II	3	Frazier, Scott Innes
Hist117(0)	The Contemporary World	3	Rose, D. Greg
Hist276(0)	Barbarians and the Fall of Rome	3	Lawing, Sean
Hist330(0)	Twentieth-Century American History Seminar	3	Rose, D. Greg
ID390(0)	Research Seminar (IL)	2	Latta, Marcy
ID496(0)	Senior Seminar II	1	Nash, Laura
Lead130(0)	Introduction to Leadership (EE)	3	King, Kristin
Math095(0)	Preparation for Quantitative Reasoning	1	Genzlinger, Maret
Math101(0)	Introduction to Quantitative Reasoning (QR)	3	Simonetti, Neil
Math115(0)	College Algebra (QR)	3	Genzlinger, Maret
Math124(0)	Transcendental Functions (QR)	1.5	Simonetti, Neil
Math130(0)	Introduction to Statistics (QR)	3	Bongers, Caira
Math130L(0)	Introduction to Statistics Lab	1	Bongers, Caira
Math130L(1)	Introduction to Statistics Lab	1	Bongers, Caira
Math270(0)	Formal Mathematical Reasoning	3	Bongers, Caira
Math311(0)	Ordinary Differential Equations	3	Blair, Max
Math496(0)	Senior Seminar II	1	Nash, Laura
Mus100(0)	College Chorale	1	Bier, Graham
Nutr110(0)	Principles of Nutrition	3	Nelson, Suzanne
PE133(0)	Yoga	1	Ritter, Kristin Suzanne
PE170(0)	Frisbee Sports	1	Bryntesson, Hilary J.
Phil101(1)	Critical Thinking	3	Synnestvedt, Dan
Phil102(0)	Introduction to Philosophy (Worldview)	3	Synnestvedt, Dan
Phil310(0)	Topics in Contemporary Philosophy I	3	Synnestvedt, Dan
Phil340(0)	Bioethics (Moral)	3	Latta, Marcy
Phil340(1)	Bioethics (Moral)	3	Latta, Marcy
Phys211(0)	Principles of Physics II (QR)	3	Blair, Max
Phys211L(0) *	Principles of Physics II -Lab	1	Blair, Max
PSci101(0)	Introduction to Politics and Governance (Civil)	3	Rose, D. Greg
Psyc201(0)	Abnormal Psychology	3	Rogers, Kiri K.
Psyc205(0)	Social Psychology (PP)	3	Frey, Kurt
Psyc220(0)	Cognitive Psychology	3	Frey, Kurt
Psyc307(0)	Psychological Measurement	3	Frey, Kurt
Rel115(0)	Introduction to New Church Doctrine on Life After Death	3	Frazier, Scott Innes
Rel115(1)	Introduction to New Church Doctrine on Life After Death	3	Schnarr, Grant
Rel115(2)	Introduction to New Church Doctrine on Life After Death	3	Schnarr, Grant
Rel123(0)	Introduction to the Old and New Testaments (SpScript)	3	Cole, Stephen
Rel222(0)	The Gospels (SpScript)	3	Glenn, Coleman
Rel272(0)	Advanced Religious Ethics (SpAppl)	3	Silverman, Ray
Rel273(0)	Religion and Marriage (SpDoc)(W)	3	Silverman, Ray
Rel283(0)	Pre-Christian Church History (SpComp)	3	Cole, Stephen
Rel320(0)	Judgment, Providence, and Human Society (SpAppl)	3	Frazier, Scott Innes
SpEd213(0)	Family and Community Partnership	3	Wong, Sarah
SpEd313(0)	Evidence-Based Interventions	3	Ballard, Kelly M.

Thea130(0)	Scenic Production (EE)	3	Haus-Roth, Naomi
Thea150(0)	Dramatic Performance (EEc)	3	Bostock, Jessica
Writ101(0)	Expository Writing (W)	3	Anderson, Kimberly
Writ101(1)	Expository Writing (W)	3	Glenn, Thane
Writ202(0)	Writing About Literature (W) (IL)	3	Cooper, Robin
Writ202(1)	Writing About Literature (W) (IL)	3	Odhner, Dylanfa141
Writ212(0)	Online Writing (W)	3	Hoffman, Chandra

<sup>+</sup>This course is offered on multiple levels. All students must register on the 100 level.

\*This course requires a lab fee.

The College administration will make every effort to offer the courses listed, but reserves the right to cancel courses if necessary.

## Spring Term 2020-21 Undergraduate Courses

## 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 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.

## Biology

## 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, 122L, 123, and 123L. 3 Credits.

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## 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 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, 122L, 123, 123L, and Chemistry 110 and 110L.

3 Credits.

#### 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, 122L, 123, and 123L.

### Biology 250 Lab. Microbiology Lab.

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

### Biology 355. Cancer Biology.

This course provides an overview of the biology of cancer with an emphasis on molecular mechanisms that underlie this disease. Course topics include a general description of what cancer is; the cell cycle, growth factors and growth factor receptors and how they are related to cancer, cellular signaling mechanisms, tumor suppressors and oncogenes, apoptosis and how cancer cells evade apoptosis, the importance of cell immortalization in cancer, the multistep features of cancer development, heterotypic interactions, angiogenesis, how cancer cells spread from the primary tumor to form secondary tumors, and cancer therapies.

Prerequisites: Biology 230 and Biology 232.

3 Credits.

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

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 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.

#### **Business**

#### 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 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 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 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 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 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 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.

## Chemistry

#### 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 and 110L.

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.

Prerequisite: Chemistry 110 and 110L.

## 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 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.

3 Credits.

## **Computer Science**

#### 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.

### 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 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 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.

## **Economics**

## 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.

## 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 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 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.

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.

## 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.

### 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 313. Evidence-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.

## 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 English courses require a 200-level English as prerequisite.

## English 219. American Literature II.

Chronological survey of late 19th and early 20th-Century American authors, including Twain, Crane, Cather, Wharton, James, Miller, and Faulkner.

Prerequisite: Writing 101.

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.

## **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.

### 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 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.

### 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 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 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 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 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 452. Blacksmithing – Large Scale Design and Production.

Students produce a large-scale object/project 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.

Prerequisite: Fine Arts 122 and Fine Arts 222.

3 Credits.

## Hebrew

### 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.

## History

### 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.

#### 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 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 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.

## **Independent Studies and Honors Contracts**

In addition to the listed courses, departments may offer independent studies and honors contracts in a variety of fields. The purpose of these 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, and honors contract courses are designated with a trailing H, such as Math205H. Academic departments are under no obligation to meet requests for independent studies and honors contracts. Students who undertake independent studies must be able to work independently between meetings with the instructor. In order to qualify to take an independent study or honors contract, a student must:

- Have completed at least 31 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 or honors contract is to occur.
- Submit an independent study card or honors contract card (signed by the department chair and instructor) to the College Office to be reviewed by the Dean of Academics.
- Create a syllabus together with the instructor and submit it 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 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.

## **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 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 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.

## 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 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.

### Mathematics 311. Ordinary Differential Equations.

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

Prerequisite: Mathematics 151.

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.

## 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.

#### 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 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.

#### 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.

## **Physical Education**

#### 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.

Introduction to the fundamental skills and strategies of organized Frisbee play. This course is 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. Course may be repeated once for credit.

1 Credit.

## **Physics**

## 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 and 210L.

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.

## **Psychology**

## 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.

## 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 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 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 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 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 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 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 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. Text: Last Judgment, Last Judgment Continued, assorted selections from the Heavenly Doctrines.

3 Credits.

## **Theater**

## 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.

## Writing

## 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 four 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 second-year students. Prerequisite: Writing 101.

3 Credits.

#### Writing 212. Online Writing. (W)

Instruction in market research and establishing individual niche. Study of effective style and content in target markets and the general blogosphere. Focus on creating and maintaining a multimedia site, establishing consistent creative nonfiction voice, and populating platform with high quality digital, visual, and written content.

Prerequisite: Writing 101.

3 credits.