

**MINUTES OF THE MEETING  
OF THE UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE  
January 20, 2021**

The Undergraduate AP&P Committee met on Wednesday, January 20, 2021 at 3:00 p.m. via Zoom.

Committee members present: Dr. Jon Beebe, Dr. C. A. Debelius, Dr. Christina Hayes, Dr. Jeff Hirst, Dr. Steve Leon, Dr. Ellen Cowan, Dr. Courtney McGahee, Mr. Jason Miller, Dr. Tanga Mohr, Dr. Lisa Poling, Dr. Manan Roy, Dr. Shannon Shanely, Dr. Teressa Sumrall, Mr. John Wiswell, Mr. Brayden Benkiel-Robinson, Mr. Hunter Koch

Committee members excused: Dr. Susan Lappan

Committee members not excused:

At 3:00 p.m., Tanga Mohr called the meeting to order.

**Approval of Minutes**

December 2, 2020

Vote 1 – To approve the minutes from December 2, 2020 - PASSED

**Subcommittee**

AP&P Joint Subcommittee Recommendations

Tanga Mohr presented the recommended changes to the AP&P Manual to be effective immediately. The marked-up version of the manual is attached to the minutes.

Vote 2 – To approve the changes to the AP&P Manual – PASSED

Julie Hayes presented the recommended changes to the AP&P form to be effective immediately. The recommended changes are attached at the end of the minutes.

Vote 3 – To approve the changes to the AP&P form - PASSED

**Announcements/FIOs**

- FIO - Semester Offerings Changes
  - HCM 3570 changed from Fall; Spring to Fall
  - HCM 3610 changed from Fall to Spring
  - HCM 3680 changed from Fall to Fall; Spring
  - HCM 3700 changed from Fall; Spring to Fall
  - HCM 4570 changed from Fall; Spring to Spring
  - HCM 4630 changed from Fall; Spring to Fall
  - HCM 4710 changed from Fall; Spring to Spring

**New Business (Total 160)**

Hayes School of Music (3)  
College of Arts and Sciences (85)

Walker College of Business (3)  
Dean's Council (1)  
Reich College of Education (12)  
College of Fine and Applied Arts (30)  
Beaver College of Health Sciences (26)

**Reeves Shulstad presented proposals (3) from the Hayes School of Music**

The proposals from the Hayes School of Music are approved as follows: (Effective: Fall 2021)

**U\_MUS\_MUS\_2020\_1** Change the course description of **MUS 2017 – Survey of Musical Theatre (3)** to read as follows:

**MUS 2017 - Survey of Musical Theatre (3)**

When Offered: Fall; Summer Session.

GEN ED: Fine Arts Designation; Liberal Studies Experience

An investigation into the social and cultural relevance of musical theater in the United States. Topics will include the historical development of musical theater, its commentary on and reflection of changes in American society from the 19th century to present day, and the role that race, gender and representation both on and off the stage have had on the development of musical theater.

Students with prior credit for THR 2025 may not use MUS 2017 to fulfill General Education requirements

**U\_MUS\_MUS\_2020\_2** Change the title, semester offering, and course description of **MUS 3029 – Marching and Concert Band Methods and Literature (3)** to read as follows:  
**MUS 3029 Band Methods and Techniques (3)**

When Offered: Spring

A survey of the materials and methods for band instruction and leadership.

This course is designed for instrumental music education majors planning careers as band directors in grades 6-12. Topics include: philosophical development, logistical organization, and administration of a comprehensive instrumental music program including concert band and jazz band. The course is comprised of both lecture and laboratory components for 3 hours.

Prerequisite: admission to music education program.

POS affected: 552C

**U\_MUS\_MUS\_2020\_3** Course Addition:  
**MUS 2025 – Heavy Metal Culture (3)**

When Offered: Fall; Spring

GEN ED: Fine Arts Designation, Liberal Studies Experience

Critical analysis of the popular rock sub-genre Heavy Metal from artistic, political and cultural perspectives. Profiling the major innovators and trends, the course traces the progression of Metal's origins in the late 1960s to the dominant place on the global stage today.

Schedule type: Lecture

Vote 4 – To approve the proposals from the Hayes School of Music with the addition of adding a note to MUS 2017 referring to prior credit. - PASSED

**Mark Bradbury presented proposals (85) from the College of Arts and Sciences for the Department of Biology, Department of Geography and Planning, Department of Geological and Environmental Sciences, Department of History, Department of Interdisciplinary Studies, Department of Languages, Literatures, and Cultures, Department of Mathematical Sciences, Department of Philosophy and Religion, Department of Physics and Astronomy.**

The Proposals (5) from the Department of Biology were approved as follows: (Effective: Fall 2021)

U_CAS_BIO_2020_1	<p>Change the course description of <b>BIO 1204 - Biology in Society I Laboratory (1)</b> to read as follows:</p> <p><b>BIO 1204 - Biology in Society I Laboratory (1)</b></p> <p>When Offered: Fall; Spring.</p> <p>GEN ED: Science Inquiry Perspective (Themes: "Biology in Society")</p> <p>This course is offered primarily for transfer students who require a one-credit hour lab course to satisfy the eight-credit hour requirement of the Biology in Society theme in the General Education Science Inquiry. In this course, students will complete on-line lab exercises that explore the biological and ecological diversity of the Southern Appalachian Mountains. This course should be taken in conjunction with the lecture course, BIO 1201. Laboratory one and a half hours. Students who require a two-credit hour lab course must take BIO 1203. The combination of BIO 1204 and BIO 1205 does not count for BIO 1203 credit.</p> <p>Prerequisite: BIO 1205 or BIO 1802. Demonstrated Readiness for College-level Math.</p>
U_CAS_BIO_2020_2	<p>Change the course description of <b>BIO 1205 - Biology in Society II Laboratory (1)</b> to read as follows:</p> <p><b>BIO 1205 - Biology in Society II Laboratory (1)</b></p> <p>When Offered: Fall; Spring</p> <p>GEN ED: Science Inquiry Perspective (Themes: "Biology in Society")</p> <p>This course is offered primarily for transfer students who require a one-credit hour lab course to satisfy the eight-credit hour requirement of the Biology in Society theme in the General Education Science Inquiry. In this course, students will complete in-lab exercises that examine current research projects in the ASU Biology Department, ranging from molecular genetics to ecosystem ecology. This course should be taken in conjunction with the lecture course, BIO 1202. Laboratory one and a half hours. Students who require a two-credit hour lab course must take BIO 1203. The combination of BIO 1204 and BIO 1205 does not count for BIO 1203 credit.</p> <p>Prerequisite: BIO 1204 or BIO 1801. Demonstrated Readiness for College-level Math.</p>
U_CAS_BIO_2020_3	<p>Change the semester offering and course description of <b>BIO 1801 – Biological Concepts I (4)</b>.</p> <p><b>BIO1801 Biological Concepts I (4)</b></p> <p>When Offered: Fall; Spring; Summer Session</p> <p>This course will investigate the history of science and the scientific method, the chemical basis of life, cell biology, bioenergetics, DNA structure and function, as well as general and molecular genetics. The course will cover the evolutionary basis of life and the application of evolutionary theories to the study of life. Lecture three hours, laboratory three hours. UNLESS NOTED, BIO 1801 IS THE MINIMUM PREREQUISITE FOR ALL BIO COURSES NUMBERED 2000 AND ABOVE. Co-enrollment with CHE 1101 is suggested.</p>

U\_CAS\_BIO\_2020\_4

Course Addition:

**Bio 3330. Local Flora (4)**

When offered: Summer Session; On Demand

A study of the indigenous plants of northwestern North Carolina. This class aims to improve the student's skill sets in plant identification, collection, and preservation. We will identify plants found in their natural communities and preserved plant specimens available in museum collections. The course will focus on the morphology, phenology and ecology of the plants of the Southern Appalachian Mountains. Lecture two hours, laboratory and field work two hours. Lectures will coincide with lab effort, which may occasionally last longer than the scheduled two hours.

Prerequisites: BIO 1801 or permission of the instructor.

Schedule type: Lecture/Lab Combo

U\_CAS\_BIO\_2020\_5

Add a concentration in Integrative Biology (142E) to the Bachelor of Science in Biology (142\*/26.0101). The new program of study is at the end of the minutes.

Vote 5 – To approve the proposals from the Department of Biology with the change of removing 'perspective' from the course description on BIO\_1 and BIO\_2 - PASSED

The proposals (19) from the Department of Geography and Planning were approved as follows: (Effective: Fall 2021)

U\_CAS\_GHY\_2020\_1

Change the title and course description of **GHY 1010 Introduction to Physical Geography (3)** to read as follows:

**GHY 1010 - Global Environmental Systems (3)**

When Offered: Fall; Spring

GEN ED: Integrative Learning Experience (Theme: "Sustainability and Global Resources")

This course takes an Earth Systems approach to introduce students to Earth's atmospheric processes, physical landscapes, and biological systems through a lens of human interaction and sustainability. Students will explore a suite of topics including weather patterns, storms, and climate change, weathering of the Earth's surface, ecological disturbance and biodiversity, and human impacts to Earth's environmental systems.

(Global Learning Opportunity course)

POS affected: 142C, 218A, 241C, 241D, 242A, GI, Gen Ed

U\_CAS\_GHY\_2020\_2

Change the title and course description of **GHY 1020 – Geographic Diversity and Globalization (3)** to read as follows:

**GHY 1020 - Exploring People and Places Globally (3)**

When Offered: Fall; Spring

GEN ED: Social Science Designation; Liberal Studies Experience

The exploration of our contemporary world through the geographic lens of its people and places. Examination of global issues, including population, race, technology and culture change, rural versus urban development, the environment and climate, international trade, political identity, and international conflict.

(Global Learning Opportunity course)

POS affected: 116A, 218A, 241C, 241D, 242A, 246B, 272D, 470E, CHN, FRE, GER, JPN, SNH, DI, SSC, SS, GI, Gen Ed

U\_CAS\_GHY\_2020\_3

Change the title and course description of **GHY 1040 – Introduction to Human Geography (3)** to read as follows:

**GHY 1040 - Human Geography and Social Justice (3)**

When Offered: Fall; Spring

GEN ED: Social Science Designation; Liberal Studies Experience

This is an introductory course that examines the spatial patterns of human society. The course emphasizes social justice by fostering an understanding of the economic systems, the welfare state and societal structures that contribute to inequalities. Successful students will also gain insight into policies relating to global challenges such as climate change, poverty and economic development. The geographical perspective is valuable in helping us interpret and critically examine events and socio-cultural issues throughout the world.

POS affected: 116A, 126, 218A, 220B, 241C, 241D, 242A, 272D, DI, GI, Gen Ed

U\_CAS\_GHY\_2020\_4

Change the course description and remove the prerequisite statement of **GHY 2310 – Cartographic Design and Analysis (3)** to read as follows:

**GHY 2310: Cartographic Design and Analysis (3)**

When Offered: Fall; Spring

Maps are powerful tools for the communication and visualization of geographic data. This course provides an introduction to cartography, including the art, science, and technology of mapmaking and map use. The primary emphasis of the course is on the cartographic representation design of static maps for print and digital use. Students will use Adobe Illustrator to create a portfolio of original thematic maps and develop skills in data selection, classification, and symbolization. Course labs focus on the techniques for the conception, production, and dissemination of maps in the world today.

U\_CAS\_GHY\_2020\_5

Change the course number, title, and course description of **GHY 4005 – Geography of Health and Disease (3)** [DELETE GHY 4005 and ADD GHY 3005] to read as follows:

**GHY 3005 - Global Health and Diseases (3)**

When Offered: Spring

GEN ED: Social Science Designation; Integrative Learning Experience  
(Theme: “How We Know What We Know about the Past: Method, Evidence, Knowledge”)

This course examines the geographical dimensions of health and disease, emphasizing global diseases and domestic public health issues. Topics in this course range from the effects of the physical environment on diseases, to rural community health care, to global pandemics. The focus of this course will be on the geographical patterns of health and disease from the viewpoint of populations and public health, rather than individuals.

POS affected: 241C, 241D, 242A, 605

GHY 3005 and GHY 4005 are equivalent.

U_CAS_GHY_2020_6	Course Deletion: <b>GHY 3012 – U.S. and Canada (3)</b>
	POS affected: 241C, 241D, 242, 242A, 272C
U_CAS_GHY_2020_7	Change the course description of <b>GHY 3013 – North Carolina (3)</b> to read as follows: <b>GHY 3013 - North Carolina (3)</b> When Offered: Fall; Spring GEN ED: Social Science Designation; Liberal Studies Experience This class considers the patterns of land and people in North Carolina. We will discuss topics that impact our lives daily here in North Carolina. These topics include, but aren't limited to: environmental change, politics, race, economics, and our changing cultural landscape. In addition to studying the state's historical evolution, emphasis will be placed on contemporary problems facing the state. North Carolina's regional, national, and international contexts are discussed.
U_CAS_GHY_2020_8	Delete <b>GHY 3015 – The Geography of Asia (3)</b>  POS affected: 136D, 241C, 241D, 242, 242A, 272D
U_CAS_GHY_2020_9	Change the title, semester offering, and course description of <b>GHY 3016 – Geography of the American South (3)</b> to read as follows: <b>GHY 3016 - Place and the American South (3)</b> When Offered: Fall; Spring GEN ED: Social Science Designation; Integrative Learning Experience (Theme: "American Culture: Past and Present") This class will evaluate various images and interpretations as we try to understand the influence of the American South on American cultural identity. Students will explore the origins, development, and diffusion of the concepts of race, and the social, cultural, and geographical manifestations of race in different American South regions and during different historical periods. Topics include colonial settlement, spatial patterns of slavery and race, regional folk culture, geopolitics, place, globalization and social change. (Global Learning Opportunity course)  POS affected: 205, 241C, 241D, 242, 242A
U_CAS_GHY_2020_10	Change the title and course description of <b>GHY 3017 – Spain and North Africa (3)</b> to read as follows: <b>GHY 3017 - Mediterranean Empires and Globalization (3)</b> When Offered: Fall GEN ED: Social Science Designation; Integrative Learning Experience (Theme: "From Empire to Globalization") This course explores Spain, Portugal, and North Africa history of empire, colonial expansion, culture, politics, and society, as well as their transitions to post-colonial global societies. This course also focuses on critical periods, events, and socio-political forces that substantially influenced these countries and demonstrate their role as one of Europe's key links to North Africa and Latin America. Particular attention is given to human relations as they are influenced by social, economic and political institutions, spatial and geographical factors, and the events and social and cultural forces at play in the contemporary world.

POS affected: 241C, 241D, 242, 242A

**U\_CAS\_GHY\_2020\_11** Change the course description and remove the prerequisite of **GHY 3100 – Weather and Climate (3)** to read as follows:

**GHY 3100 - Weather and Climate (3)**

When Offered: Spring

This course focuses on the basic principles, elements, and controls of meteorology and climatology. The objective of this course is to enhance students' understanding of daily weather, as well as weather events such as ice storms, tornadoes, and hurricanes. Students will learn how to observe and forecast weather events and their impacts. This course also demonstrates the interactions between human activities, weather, and climate.

**U\_CAS\_GHY\_2020\_12** Change the course number, title, semester offering, and course description of **GHY 4230 – Political Geography (3) [DELETE GHY 4230 and ADD GHY 3230]** to read as follows:

**GHY 3230 - Political Geography and Society (3)**

When Offered: Fall

GEN ED: Social Science Designation; Integrative Learning Experience (Theme: "Social Relations Across Contexts")

This course explores spatial and societal aspects of territoriality, boundaries, voting patterns, nationalism, migration, government programs and governance, formation of political units, political development and integration, environmental policy and natural resources, and society. The course focuses on the relationships among politics, geography, and societal membership (i.e., how individuals and societies make sense of the world via associations of political and moral values).

POS affected: 126, 241C, 241D, 242A, 272C, 272D

GHY 4230 and GHY 3230 are equivalent.

**U\_CAS\_GHY\_2020\_13** Change the title, course description and remove the prerequisite statement of **GHY 3600 – Climate change, Snow and Ice (3)** to read as follows:

**GHY 3600 - Snow and Ice (3)**

When Offered: Fall

Students will explore the scientific background and develop the skills necessary to understand elements of snow science, sea/lake ice, and glacier processes. Topics will include: Arctic sea ice decline, alpine glacier change, sea level rise, ice cores, high-mountain environments, climate-glacier interactions, snow particle formation, climatology of snow, ski industry, and projections of future climate change impacts on the cryosphere.

POS affected: 144, 241C, 241D, 242A

**U\_CAS\_GHY\_2020\_14** Change the title and course description of **GHY 3700 – Geography of Food (3)** to read as follows:

**GHY 3700 - Food Justice: Geographic Perspectives (3)**

When Offered: Spring

Decisions about which foods are produced and which are consumed are infused with issues of social justice and are geographic in nature. The foods we produce and consume reveal our value systems and are dictated by the specific conditions of a place. This course will take a broad view of food

production and consumption with an eye towards issues of justice and environmental sustainability. Many of the examples we use in this class will be rooted in the specifics of Watauga County, North Carolina.

POS affected: 205, 241C, 241D, 242A

**U\_CAS\_GHY\_2020\_15** Change the title and course description of **GHY 3814 – Web Mapping and GIS (3)** to read as follows:

**GHY 3814: Web Mapping (3)**

When Offered: Spring

Maps are ubiquitous in today's world. They are increasingly developed and delivered over the web for use on a variety of devices, ranging from desktop to tablet to mobile. This course focuses on the design of interactive web maps that provide user exploration of geographic data over the open web. Lecture content is drawn from research in interactive cartography and geovisualization as well as user-centered design as it relates to web maps. Students will produce an original portfolio of web mapping applications using the Leaflet mapping library and JavaScript programming language, as opposed to proprietary software that is offered in other GIS courses. Programming experience is recommended but not required. Prerequisite: GHY 3812 or permission of instructor.

POS affected: 140A, 241C, 241D, 242A

**U\_CAS\_GHY\_2020\_16**

Course Deletion:

**GHY 4200 – Urban Geography (3)**

POS affected: 218A, 241C, 241D, 242A, 284D, 284K

**U\_CAS\_GHY\_2020\_17**

Course Addition:

**PLN 3040 – What is Community? (3)**

When Offered: Spring

GEN ED: Social Science Designation; Integrative Learning Experience  
(Theme: "Social Relations Across Contexts")

This course highlights how people share a common interest, background, or purpose that gives them a sense of cohesion. Major topics explored include poverty across socio-economic groups, environmental justice and equity, physical systems (utilities, transport, other infrastructure), economic revitalization, and participatory community planning.

Schedule type: Lecture

**U\_CAS\_GHY\_2020\_18**

Change the semester offering, course description, and remove the prerequisite statement of **PLN 3730 – Land, Property, and Law (3)** to read as follows:

**PLN 3730 - Land, Property, and Law (3)**

When Offered: Fall

GEN ED: Social Science Designation; Integrative Learning Experience  
(Theme: "How We Know What We Know About the Past: Method, Evidence, Knowledge?")

We will explore traditional and not-so-traditional land use regulation tools and examine how they are used to organize, control, and foster growth and creativity in the built environment of the United States. Students will discuss and research topics such as property rights, due process and equal

protection, the First Amendment, and affordable housing. This course will introduce the constitutional framework that shapes land use regulation.

GU\_CAS\_GHY\_2020\_19

Course Deletion:

**PLN 4470 – Community Development: A Sustainable Approach (3)**  
leaving PLN 5470 and removing the dual-listing.

POS affected: 218A

Vote 6 – To approve the proposals from the Department of Geography and Planning - PASSED

The proposals (17) from the Department of Geological and Environmental Sciences were approved as follows: (Effective: Fall 2021)

U\_CAS\_GES\_2020\_1

Change the Bulletin Text for the Section Honors Program in Geological and Environmental Sciences to read as follows:

**Section Honors Program in Geological and Environmental Sciences**

The Department of Geological and Environmental Sciences offers an honors program. In order to graduate with "Honors in Geological and Environmental Sciences," a student must have a minimum GPA of 3.45 overall and in Geological and Environmental Science courses, and must take a total of nine semester hours of Geological and Environmental Sciences courses with honors at the 2000 level or above with a minimum grade of "B" (3.0) in each course, of which three credits must include GES 4510 - Senior Honors Thesis. The honors thesis must be approved by two readers, with the thesis director from the Department of Geological and Environmental Sciences, in order to graduate with Honors in Geological and Environmental Sciences.

U\_CAS\_GES\_2020\_2

Course Deletion:

**GES 3131 – Environmental Geochemistry (3)**

POS affected: 119A, 144, 259D

U\_CAS\_GES\_2020\_3

Course Addition:

**GES 2750 – Preparation for Careers in the earth and Environmental Sciences (3)**

When Offered: Fall; Spring

GEN ED: Junior Writing in the Discipline (WID)

This course provides instruction in geological and environmental science research methods, through both oral and written communication. Topics include: quantitative and qualitative analysis, image processing, survey of scientific literature and digital information retrieval services, research design, data management, and research ethics. Student learning is augmented with peer-review of fellow students' work and participation in review and revision processes. All activities are designed to help prepare students to more effectively conduct projects and communicate with fellow STEM professionals in their future careers.

Prerequisite: GES 2250. Prerequisite or corequisite: R C 2001 or its equivalent. Open only to GES majors and minors.

Schedule type: Lecture

U\_CAS\_GES\_2020\_4

Course Addition:

**GES 2751 – Geology field Methods (2)**

When Offered: Fall; Spring

This course provides instruction in various aspects of geologic data collection and interpretation in the field. Topics include: geologic mapping, rock identification, data collection, field note procedures, and field ethics and safety. Laboratories will be held on campus (both indoors and outdoors), while field trips will be held outdoors and off-campus (including overnight trips with camping). Vigorous hiking is required on field trips.

Prerequisite: GES 2250. Open only to GES majors and minors.

Schedule type: Lab

U\_CAS\_GES\_2020\_5

Course Addition:

**GES 2752 – Environmental Science Field Methods (1)**

When Offered: Fall; Spring

This course provides instruction in various aspects of environmental science data collection and interpretation in the field. Topics include: water, soil, and air sample collection; designing a sampling protocol; surveying using a total station; making a site map in GIS software; estimating stream discharge field note procedures, and field ethics/safety. Laboratories will be held both indoors and outdoors.

Prerequisite: GES 2250. Open only to GES majors and minors.

Schedule type: Lab

U\_CAS\_GES\_2020\_6

Change the prerequisite statement of **GES 3150 – Principles of Structural Geology and Tectonics (3)** to read as follows:

Prerequisites: GES 2750 and GES 2751. Demonstrated Readiness for College-level Math.

U\_CAS\_GES\_2020\_7

Change the prerequisite statement of **GES 3800 – Sedimentology and Stratigraphy (3)** to read as follows:

Prerequisites: GES 2750 and GES 2751.

U\_CAS\_GES\_2020\_8

Change the prerequisite statement of **GES 3220 – Fundamentals of Mineralogy (3)** to read as follows:

Prerequisites or corequisites: GES 2750, CHE 1101, CHE 1110, or permission of the instructor.

U\_CAS\_GES\_2020\_9

Change the prerequisite statement of **GES 3715 – Petrology and Petrography (3)** to read as follows:

Prerequisites: CHE 1101 and CHE 1110; GES 2750, and GES 3220.

U\_CAS\_GES\_2020\_10

Revise the program of study for the Bachelor of Science in Environmental Science with a concentration in Earth Systems Science (121C/03.0104). The revised program of study is at the end of the minutes.

U\_CAS\_GES\_2020\_11

Revise the program of study for the Bachelor of Science in Environmental Science with a concentration in Life Science (121D/03.0104). The revised program of study is at the end of the minutes.

U\_CAS\_GES\_2020\_12

Revise the program of study for the Bachelor of Arts in Geology (119A/40.0601). The revised program of study is at the end of the minutes.

U\_CAS\_GES\_2020\_13

Revise the program of study for the Bachelor of Science in Geology

(244A/40.0601). The revised program of study is at the end of the minutes.

- U\_CAS\_GES\_2020\_14 Revise the program of study for the Bachelor of Science in Geology with a concentration in Quantitative Geoscience (259E/40.0601). The revised program of study is at the end of the minutes.
- U\_CAS\_GES\_2020\_15 Revise the program of study for the Bachelor of Science in Geology with a concentration in Paleontology (259D/40.0601). The revised program of study is at the end of the minutes.
- U\_CAS\_GES\_2020\_16 Revise the program of study for the Bachelor of Science in Geology with a concentration in Environmental Geology (259C/40.0601). The revised program of study is at the end of the minutes.
- U\_CAS\_GES\_2020\_17 Revise the program of study for the Bachelor of Science in Geology with a concentration in Secondary Education (259G/40.0601). The revised program of study is at the end of the minutes.

Vote 7 – To approve the proposals from the Department of Geological and Environmental Sciences - PASSED

The proposals (9) from the Department of History were approved as follows: (Effective: Fall 2021)

- U\_CAS\_HIS\_2020\_1 Course Addition:  
**HIS 3632 – Methods for Secondary History/Social Studies Education (3)**  
When Offered: Fall; Spring  
Students review national, state, and program standards for 9-12 history/social studies, and research diverse ways to meet adolescent needs through social studies. Students will use national and state standards to design curriculum work in 9-12 history/social studies focused on thematic strands, historical thinking skills, and the construction of new knowledge for diverse learners in the high school classroom. They will also generate materials and resources, instructional strategies, digital tools, assessments, and professional dispositions. Students will be required to participate in a field experience at a regional high school, and create and teach lessons during the internship. Must be taken in semester immediately prior to student teaching.  
Prerequisite: HIS 3626  
A minimum grade "C" (2.0) is required.
- Schedule type: Lecture
- U\_CAS\_HIS\_2020\_2 Change the title of **HIS 3626 – Introduction to Secondary History Education (3)** to read as follows:  
**HIS 3626 - Introduction to Secondary History/Social Studies Education**
- POS affected: 116A
- U\_CAS\_HIS\_2020\_3 Revise the program of study for the Bachelor of Science in History, Social Studies Education (116A/13.1328) including change to title and keeping the same program code. The revised program of study is at the end of the minutes.
- U\_CAS\_HIS\_2020\_4 Revise the program of study for the Bachelor of Science in History with a

concentration in Applied and Public History (246B/54.0101). The revised program of study is at the end of the minutes.

U\_CAS\_HIS\_2020\_5

Revise the program of study for the Bachelor of Science in History with a concentration in Multidisciplinary (246C/54.0101). The revised program of study is at the end of the minutes.

U\_CAS\_HIS\_2020\_6

Change the title and course description of **HIS 3306 – Indigenous Resistance in Modern Latin America (3)** to read as follows:  
**HIS 3306 - History of Indigenous Latin America (3)**

When Offered: Fall, Even-numbered years

A comprehensive introduction to the Indigenous history of Latin America from before the African slave trade and European colonization to the present. Students explore, discuss and write about how the Indigenous history of military struggles, nonviolent resistance and transculturation shaped Latin America and its changing environment.

POS affected: 126

U\_CAS\_HIS\_2020\_7

Revise the program of study for the undergraduate minor in History (246/54.0101). The revised program of study is at the end of the minutes.

U\_CAS\_HIS\_2020\_8

Remove and change notes prohibiting the use of 1000-level HIS courses toward history major and minor. See list of course notes at the end of the minutes.

U\_CAS\_HIS\_2020\_9

Revise the program of study for the Bachelor of Arts in History (254A/54.0101). The revised program of study is at the end of the minutes.

Vote 8 – To approve the proposals from the Department of History - PASSED

The proposals (6) from the Department of Interdisciplinary Studies were approved as follows: (Effective: Fall 2021)

U\_CAS\_IDS\_2020\_1

Change the title, semester offering, and course description of **IDS 3000 – Histories of Knowledges (3)** to read as follows:

**IDS 3000 - How Do We Know? (3)**

When Offered: On Demand

This topics-based course takes an interdisciplinary approach in considering and analyzing what knowledge is, how we produce it, disseminate it, and categorize it. We will walk through some historical ideas about where we get information, how and what we “know” and how that has changed over time. Students will select several contemporary issues and will explore how knowledge about those issues is created and disseminated through media to influence public action or inaction.

Prerequisite: R C 2001 or its equivalent.

Nothing affected

U\_CAS\_IDS\_2020\_2

Change the title, semester offering, and course description of **IDS 3260 – Creativity: An Introduction (3)** to read as follows:

**IDS 3260 - Creativity: Methods & Practice (3)**

When Offered: On Demand

How does creativity work? Cultural references to "the creative genius" promote a caricature, while the reality is that creative disciplines have their own processes and frameworks. This course provides an interdisciplinary exploration of creativity, focusing on how it arrives, is cultivated and experienced, and channeled into creative works. We will also explore the intersection of and/or tension between literary, visual, and performing arts and other academic disciplines. This class allows students to consider and experiment with multiple creative methodologies and the creative process including, but not limited to: inspiration-based to socially-engaged work, problem solving and design thinking, workshops and studio/lab experimentation. Specific focus of the course may vary with instructor.

POS affected: 511A

**U\_CAS\_IDS\_2020\_3**

Change the course description of **IDS 3900 – Internship (3-12)** to read as follows:

**IDS 3900 - Internship (3-12)**

When Offered: Fall; Spring

Supervised work in an appropriate field experience. Students should contact the Department of Interdisciplinary Studies for more information on the internship approval and registration process. Students must be registered in IDS 3900 prior to the start of their internship.

Graded on an S/U basis.

**U\_CAS\_IDS\_2020\_4**

Course Addition:

**IDS 3211 – Documentary Studies Seminar (3)**

When Offered: On Demand

This variable topic course provides students with an in-depth introduction to and exploration of some of the historical, social, ethical, and aesthetic challenges facing documentary work, as both a genre and a practice. Students will explore an interdisciplinary perspective on how documentary studies is in conversation with several other disciplines including history, fine arts, film studies, literary studies, journalism, and ethnographic studies, and the importance of this work in contemporary life. May be repeated for credit when content does not duplicate.

Schedule type: Seminar

**U\_CAS\_IDS\_2020\_5**

Add an undergraduate minor in Documentary Studies (914/30.9999). The new program of study is at the end of the minutes.

**U\_CAS\_IDS\_2020\_6**

Add an undergraduate minor in Creative Engagement and Social Change (918/30.9999). The new program of study is at the end of the minutes.

Vote 9 – To approve the proposals from the Department of Interdisciplinary Studies - PASSED

The proposals (7) from the Department of Languages, Literatures, and Cultures were approved as follows:  
(Effective: Fall 2021)

**U\_CAS\_LLC\_2020\_4**

Course Addition:

**FRE 4511 – Senior Honors Thesis (1-3)**

When Offered: Fall; Spring

Independent study and research. Honors thesis directed by a member of the

French faculty in the Department of Languages, Literatures, and Cultures and graded by a departmental committee. Oral presentation. Prerequisites: completion of two departmental honors contracts or courses in the target language at the 3000 level or higher with a minimum grade of "B" (3.0) in each course.

Schedule type: Honors Thesis

U\_CAS\_LLC\_2020\_5

Course Addition:

**SNH 4511 – Senior Honors Thesis (1-3)**

When Offered: Fall; Spring

Independent study and research. Honors thesis directed by a member of the Spanish faculty in the Department of Languages, Literatures, and Cultures and graded by a departmental committee. Oral presentation. Prerequisites: completion of two departmental honors contracts or courses in the target language at the 3000 level or higher with a minimum grade of "B" (3.0) in each course.

Schedule type: Honors Thesis

U\_CAS\_LLC\_2020\_6

Change the semester offering and prerequisite statement of **JPN 4510 – Senior Honors Thesis (1-3)** to read as follows:

When Offered: Fall; Spring

Prerequisites: completion of two departmental honors contracts or courses in the target language at the 3000 level or higher with a minimum grade of "B" (3.0) in each course.

U\_CAS\_LLC\_2020\_7

Change the semester offering and prerequisite statement of **CHN 4510 – Senior Honors Thesis (1-3)** to read as follows:

When Offered: Fall; Spring

Prerequisites: completion of two departmental honors contracts or courses in the target language at the 3000 level or higher with a minimum grade of "B" (3.0) in each course.

U\_CAS\_LLC\_2020\_8

Change the prerequisite statement of **GER 4510 – Senior Honors Thesis (1-3)** to read as follows:

Prerequisites: completion of two appropriate honors courses with a minimum grade of "B" (3.0) in each course.

U\_CAS\_LLC\_2020\_9

Course Deletion:

**FRE 4510 – Senior Honors Thesis (3)**

Nothing affected

U\_CAS\_LLC\_2020\_10

Course Deletion:

**SNH 4510 – Senior Honors Thesis (3)**

Nothing affected

Vote 10 – To approve the proposals from the Department of Languages, Literatures, and Cultures  
- PASSED

The proposals (7) from the Department of Mathematical Sciences were approved as follows: (Effective: Fall 2021)

U_CAS_MAT_2020_1	Revise the program of study for the <u>Bachelor of Arts in Mathematics</u> ( <u>261A/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_2	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in General Mathematics</u> ( <u>260B/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_3	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in Business</u> ( <u>260D/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_4	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in Computation</u> ( <u>260E/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_5	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in Life Sciences</u> ( <u>260F/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_6	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in Physical Sciences</u> ( <u>260G/27.0101</u> ). The revised program of study is at the end of the minutes.
U_CAS_MAT_2020_7	Revise the program of study for the <u>Bachelor of Science in Mathematics with a concentration in Statistics</u> ( <u>260H/27.0101</u> ). The revised program of study is at the end of the minutes.

Vote 11- To approve the proposals from the Department of Mathematical Sciences - PASSED

Proposals (7) from the Department of Philosophy and Religion were approved as follows: (Effective: Fall 2021)

U_CAS_P&R_2020_1	<p>Course Addition:</p> <p><b>REL 3745 – Religious Studies in the Digital Age (3)</b></p> <p>When Offered: Fall, Even-numbered years.</p> <p>GEN ED: Junior Writing in the Discipline (WID)</p> <p>There is an important need to understand the world through the analysis of data. Focusing on research methods for using data to answer Religious Studies questions, this class seeks to teach students how they can use technology and available datasets in a hands-on format. Students will create a portfolio of projects demonstrating their proficiency in data analysis and visualization techniques.</p> <p>Prerequisite: R C 2001 or its equivalent.</p>
U_CAS_P&R_2020_2	<p>Schedule type: Lecture</p> <p>Revise the program of study for the <u>Bachelor of Arts in Philosophy</u> (<u>101A/38.0101</u>). The revised program of study is at the end of the minutes.</p>
U_CAS_P&R_2020_3	<p>Course Deletion:</p> <p><b>REL 1115 – Religion Goes to the Movies (3)</b></p>

POS affected: 102A, Gen Ed

U_CAS_P&R_2020_4	Course Deletion: <b>REL 1700 – What is Religion? (3)</b>  POS affected: 102A, Gen Ed
U_CAS_P&R_2020_5	Course Deletion: <b>REL 3180 – American Judaism (3)</b>  POS affected: 102A, 126
U_CAS_P&R_2020_6	Change the prerequisite statement of <b>PHL 4510 – Senior Honors Thesis (3)</b> to read as follows: Prerequisites: six semester hours of Honors work below the 4000 level and completion/co-requisite of a PHL WID course.
U_CAS_P&R_2020_7	Revise the program of study for the <u>Bachelor of Arts in Religious Studies (102A/38.0201)</u> . The revised program of study is at the end of the minutes.
Vote 12 – To approve the proposals from the Department of Philosophy and Religion - PASSED	
The proposals (7) from the Department of Physics and Astronomy were approved as follows: (Effective: Fall 2021)	
U_CAS_P&A_2020_9	Add an <u>undergraduate minor in Physics for Secondary Education Majors (273/40.0801)</u> . The new program of study is at the end of the minutes.
U_CAS_P&A_2020_10	Course Addition: <b>PHY 2220 – Physics of Food and Cooking (3)</b> When Offered: On Demand This course will explore the scientific concepts that underlie everyday cooking, including how to heat and cool food, which foods have greater impacts to climate change, and how to cook passively and with solar energy. Students will conduct culinary experiments to compare various cooking strategies and food choices. Cooking brings physics to life and should transform the way students view their food system.  Schedule type: Lecture
U_CAS_P&A_2020_11	Course Deletion: <b>PHY 3851 – Environucleonics Laboratory (1)</b>  Nothing affected
U_CAS_P&A_2020_12	Add an <u>undergraduate minor in Medical Physics (919/40.0801)</u> . The new program of study is at the end of the minutes.
U_CAS_P&A_2020_13	Add a concentration in <u>Physics (270D)</u> to the <u>Bachelor of Science in Physics (270*/40.0801)</u> . The new program of study is at the end of the minutes.
U_CAS_P&A_2020_14	Add a concentration in <u>Astronomy (270E)</u> to the <u>Bachelor of Science in Physics (270*/40.0801)</u> . The new program of study is at the end of the minutes.

U\_CAS\_P&A\_2020\_15      Add a concentration in Automation and Instrumentation (270F) to the Bachelor of Science in Physics (270\*/40.0801). The new program of study is at the end of the minutes.

U\_CAS\_P&A\_2020\_16      Add a concentration in Interdisciplinary Science (270G) to the Bachelor of Science in Physics (270\*/40.0801). The new program of study is at the end of the minutes.

Vote 13 – to approve the proposals from the Department of Physics and Astronomy - PASSED

**Tracy Reed presented proposals (3) from the Walker College of Business for the College of Business, Department of Accounting, and Department of Computer Information Systems.**

The proposal (1) from the College of Business was withdrawn.

U\_COB\_2020\_1      Add **BUS 3510 – Honors Thesis (1). WITHDRAWN**

The proposal (1) from the Department of Accounting was approved as follows: (Effective: Fall 2021)

U\_COB\_ACC\_2020\_1      Course Addition:  
**ACC 3585 - Issues in International Taxation (3)**  
When Offered: On Demand  
A study of selected issues in international taxation, with a focus on U.S. taxation applied to economic activity with an international element. As the course satisfies the College of Business' global requirement, several non-tax topics dealing with foreign countries and their residents are covered. Topics discussed will include US income taxation of foreign transactions, tax treatises, residency status, foreign tax credit, visas, sourcing of income, US taxation of nonresident aliens and foreign corporations, comparison of US international tax law with the tax system of other countries, multi-jurisdictional concepts. Prerequisites: 54 earned hours and a minimum grade of C- (1.7) in ACC 3580.

Schedule Type: Lecture

Vote 14 – To approve the proposal from the Department of Accounting - PASSED

The proposal (1) from the Department of Computer Information Systems was approved as follows: (Effective: Fall 2021)

U\_COB\_CIS\_2020\_1      Change the BSBA in Computer Information Systems from a degree with no concentrations to a degree with concentrations.  

- Delete the BSBA in Computer Information Systems (310A)
- Add a concentration in General Computer information Systems (310B) (change program code 310A to 310B)
- Add a concentration in Cybersecurity (310C) to the BSBA in Computer information Systems (310\*/52.1201). The new program of study is at the end of the minutes.
- Revised Bulletin pages are at the end of the minutes.

Vote 15 – To approve the proposal from the Department of Computer Information Systems - PASSED

The proposal (1) from Dean's Council was approved as follows: (Effective: Fall 2021)

U\_DC\_DC\_2020\_1      Update foreign language degree requirements for all degrees with a foreign language component.

Language Requirements

Students are required to demonstrate intermediate-level proficiency in a language other than English. Intermediate-level proficiency is demonstrated by successful completion of a 4th-semester language course in one of the following:

ARB 1050 - Intermediate Arabic II (3)  
CHN 1050 - Intermediate Chinese II (3)

FRE 1050 - Intermediate French II (3)  
or  
FRE 1060 - Accelerated Intermediate French II (6)

GER 1050 - Intermediate German II (3)  
or  
GER 1060 - Accelerated Intermediate German II (6)

JPN 1050 - Intermediate Japanese II (3)  
LAT 1050 - Intermediate Latin II (3)  
POR 1050 - Intermediate Portuguese II (3)  
RSN 1050 - Intermediate Russian II (3)

SNH 1050 - Intermediate Spanish II (3)  
or  
SNH 1060 - Accelerated Intermediate Spanish II (6)

CSD 3374 - American Sign Language IV (3)

A higher-level language course that requires one of these courses as a prerequisite may also be used to fulfill the requirement.

Note: Appalachian's language placement test is designed for placement purposes only, and a score on this test alone is not sufficient to demonstrate intermediate-level proficiency.

See list of all degrees affected at the end of the minutes.

Vote 16 – To approve the proposal from Dean's Council - PASSED

**Terry McClannon presented proposals (12) from the Reich College of Education for the College of Education, Department of Curriculum and Instruction, and Department of Human Development and Psychological Counseling.**

The proposal (1) from the Reich College of Education was approved as follows: (Effective: Fall 2021)

GU\_COE\_2020\_1      Add a new course prefix EDU (Description: Education) specifically for the Professional Education CORE courses and some uses outside the CORE.

Vote 17 – To approve the proposal from the College of Education - PASSED

The proposals (7) from the Department of Curriculum and Instruction were approved as follows: (Effective: Fall 2021)

U\_COE\_CI\_2020\_1      Revise the program of study for the Bachelor of Science in Elementary Education (441A/13.1202). The revised program of study is at the end of the minutes.

U\_COE\_CI\_2020\_2      Course Addition:  
**CI 3401 – Teaching About Life and Environments In the Elementary School (3)**

When Offered: On Demand

An introduction to the content and methods of elementary science education, with a focus on the life sciences. The course will survey curriculum objectives related to the North Carolina Essential Standards in elementary school related to human body systems, human genetics and evolution, connections between humans and other living organisms, and human health in a global environment. The theory and practice of science education programs at the elementary level is discussed, including evaluation of instructional materials, an integration of current events to relevant science content, and the integration of science with other academic subjects.

Note: Course option for the Health, Wellness, and Life Systems Themed Strand

Schedule Type: Lecture

U\_COE\_CI\_2020\_3      Course Addition:  
**CI 3402 – Children as Citizens: Building Classroom Community (3)**

When Offered: On Demand

This course allows elementary education students to view elementary learners as current citizens of our interconnected world. The course will promote the practice and use of civil discourse within classroom settings in order to create a plan for developing a community of practice. Specifically, the course engages students in the analysis of traditional methods of classroom management through the lens of democratic and equitable classroom practices.

Note: Course option for the Creating Positive Learning Environments

Schedule Type: Lecture

U\_COE\_CI\_2020\_5      Course Addition:  
**CI 3404 – Investigating Critical Literacy in Multiple Media Genres (3)**

When Offered: On Demand

This course provides a critical orientation to the instructional uses of digital and non-digital media as modes for learning and expression in the elementary level classroom. Specifically, students will use critical media literacy as a lens to analyze media, technology, and art as cultural forms that

contain and convey ideological messages and meanings. Through making across a range of modes, students will strengthen their critical and creative competencies using and choosing digital and non-digital media for learning. Note: Course option for the Expanding Teacher Content Knowledge themed strand.

Schedule Type: Lecture

U\_COE\_CI\_2020\_6

Change the semester offering and course description of **CI 3750 – Integrating Media and Technology into Teaching (3)** to read as follows:  
**CI 3750 - Integrating Media and Technology into Teaching (3)**

When Offered: Fall; Spring.

Prospective elementary education teachers gain experience analyzing, selecting, and using technology as tools for building community, developing digital citizenship, and managing learning environments. Successful students will develop strategies to cultivate digital citizenship in their classrooms, including face-to-face and online contexts. They will also learn skills for creating and using media and technology to teach critical thinking and meet the needs of diverse learners. Finally, this course provides an orientation to the educational technology market, facilitating students' abilities to advocate for intentional technology acquisition, vetting, and support the privacy rights of minors.

U\_COE\_CI\_2020\_7

Change the course description and remove the cross-listing of **CI 3000 – Learner Diversity: Teaching English Language Learners (3)**

**CI 3000 - Learner Diversity: Teaching English Language Learners (3)**

When Offered: Fall; Spring

Gen ED: Junior Writing in the Discipline (WID)

This course examines current literature and instructional practices related to working with English language learners (ELLs) and bilingual students in mainstream classrooms. Topics include culturally relevant teaching, language acquisition, translanguaging, and lesson design that integrates language and content learning. Emphasis is placed on developing knowledge of and positive dispositions towards linguistically diverse students and their families. Instructional strategies and interventions will be observed, modeled, discussed, and analyzed. Coursework is integrated with K-6 field experiences to provide real-world contexts for classroom instruction and discussion.

Prerequisite: RC 2001 or its equivalent.

Remove the cross-listing statement (Same as CI 3000) from **SPE 3000 - Learner Diversity: Teaching English Language Learners (3)**

U\_COE\_CI\_2020\_8

Revise the program of study for the undergraduate minor in Teacher Education for Theatre Arts (438/13.1299). The revised program of study is at the end of the minutes.

Vote 18 – To approve the proposals from the Department of Curriculum and Instruction - PASSED

The proposals (4) from the Department of Human Development and Psychological Counseling were approved as follows: (Effective: Fall 2001)

GU\_COE\_HPC\_2020\_1

Course Deletion:

**HPC 4840/HPC 5840 – Human Relations and Interaction (3)**

	Nothing affected
U_COE_HPC_2020_4	Course Deletion: <b>HPC 4710 – Teaching Sex Education within a Family context (3)</b>
	Nothing affected
U_COE_HPC_2020_5	Course Deletion: <b>HPC 4800 – Basic Dream Interpretation (3)</b>
	Nothing affected
U_COE_HPC_2020_6	Change the course description of <b>HPC 3390 – An Introduction to and Procedure in the Helping Professions (3)</b> to read as follows: <b>HPC 3390 - An Introduction to and Procedures in the Helping Professions (3)</b> When offered: On Demand. Historical, philosophical, and legal aspects of the helping professions. Emphasis placed on understanding various approaches to counseling and therapy.

Vote 19 – To approve the proposals from the Department of Human Development and Psychological Counselling - PASSED

**Jason Miller presented proposals (30) from the College of Fine and Applied Arts for the Department of Communication, Department of Sustainable Technology and the Built Environment, and Department of Theatre and Dance.**

The proposals (14) from the Department of Communication were approved as follows: (Effective: Fall 2021)

U_FAA_COM_2020_1	Change the title and course description of <b>COM 3130 – Minorities in Media (3)</b> to read as follows: <b>COM 3130 - Race &amp; Diversity in Media (3)</b> When Offered: Spring GEN ED: Integrative Learning Experience (Theme: “American Culture: Past and Present”) This lecture and discussion course introduces students to the complexities of race, gender, and other intersectional identities as they are constructed and challenged through the consumption and production of mass media. The course will draw from various theoretical perspectives to consider how diverse populations have shaped and are shaped by media and society.  POS affected: Gen Ed, 151, 284K, 517A, 585A, 611, 611A, DI
U_FAA_COM_2020_2	Change the course description of <b>COM 3118 – Communicating Coal in Appalachian (3)</b> to read as follows: <b>COM 3118 - Communicating Coal in Appalachia (3)</b> When Offered: On Demand This course explores advanced theories and current issues within communication and rhetorical studies through the lens of coal’s relationship to the Appalachian region. Students will investigate this relationship through an examination of representations of the past and present, environmental degradation, lived experiences, and social movements within the Appalachian

region. They will do so through an interdisciplinary engagement with relevant scholarly literatures, popular culture, and primary texts.

U\_FAACOM\_2020\_3

Change the prerequisite statement of **COM 4432 – Communication Studies Seminar (3)** to read as follows:

Prerequisites: COM 2180, COM 2181, senior standing and must be admitted to the B.S. degree in Communication Studies.

U\_FAACOM\_2020\_4

Change the prerequisite statement of **COM 4317 – Electronic Media Regulation (3)** to read as follows:

Prerequisites: junior or senior standing; registration is restricted to students admitted to the BS in Communication Electronic Media/Broadcasting; or consent of the instructor.

U\_FAACOM\_2020\_5

Revise the program of study for the Bachelor of Science in Communication, Public Relations (521A/09.0902). The revised program of study is at the end of the minutes.

U\_FAACOM\_2020\_6

Course Addition:

**COM 3428 – Advertising Research (3)**

When Offered: Fall; Spring

This course is designed to help future advertising practitioners to understand the uses and applications of research in various advertising situations. In addition to secondary research, this course includes both qualitative and quantitative research methods of primary research commonly used by advertising industry to gain consumer insights, to select the profitable target audience, to develop creative strategies, to test advertising copies and finished ads, and to assess the success of advertising campaigns.

Schedule Type: Lecture/Lab Combo

U\_FAACOM\_2020\_7

Course Addition:

**COM 3936 – Consumer Insights (3)**

When offered: Fall

The course is designed to help students understand the psychology of persuasion and consumer behavior theories as they relate to marketing communication and advertising. The course will provide students with an overview of the key psychological concepts and theories in understanding consumer decisions and behaviors, as well as the implications of these theories in advertising and marketing practices. Students will explore how perceptions, learning, memory, emotions, attitude, personality, situational factors, groups, and social class influence consumption behavior; how purchase decisions are made; and how powerful cultural and subcultural influences are on consumers. In sum, the course provides critical foundation knowledge for developing advertising, branding and marketing strategies. It also helps students become informative and insightful researchers and practitioners.

Prerequisite: COM 2700 and COM 3428, or permission of the instructor.

Schedule Type: Lecture/Lab Combo

U\_FAACOM\_2020\_8

Course Addition:

**COM 3830 – Advanced Creative Advertising (3)**

When offered: Spring

This advanced creative advertising class is intended to build upon the core competencies acquired in COM 3015. It introduces students to multiple perspectives and approaches in developing strong and unique creative concepts that accurately deliver on well defined strategies. This course is intended to further develop the critical, intellectual and practical skills necessary for the analysis, evaluation and creation of effective advertising messages in today's multimedia visual environment. These abilities along with the technical skills to translate these concepts into effective visual executions is the job of the art director.

Prerequisite: COM 3015.

Schedule Type: Lecture/Lab Combo

#### U\_FAACOM\_2020\_9

Course Addition:

#### **COM 3245 – Introduction to Promotional Video (3)**

When offered: Fall, Spring

This course is intended to provide a foundation in the principles, technologies, techniques and creative concepts involved in the creation of promotional advertising videos for a variety of media platforms. Through the production of diverse video projects students will practice the fundamental production skills needed to produce and edit effective video and audio to promote clearly defined messaging strategies.

Prerequisite: COM 2618.

Schedule Type: Lecture/Lab Combo

#### U\_FAACOM\_2020\_10

Course Addition:

#### **COM 3015 – Advertising Graphics (3)**

When offered: Fall, Spring

This course is intended to introduce students to the unique requirements inherent in the conceiving, design and production of creative advertising messages. Students will learn creative processes to assist in developing effective strategies and creative concepts. Students will acquire and apply skills in the principles of design, layout and typography. All projects will incorporate a comprehensive research and process oriented approach.

Prerequisite: COM 2618.

Schedule Type: Lecture/Lab Combo

#### U\_FAACOM\_2020\_11

Course Addition:

#### **COM 3860 – Client Development and Services (3)**

When Offered: Fall

This course is designed to introduce students to the process of engaging and securing new clients in a competitive marketplace, then servicing client needs to ensure a successful relationship. Students will gain a greater understanding in how to identify prospective clients, define complementary attributes between client and agency, then demonstrate value to client through professional storytelling, negotiation and communication. Students will gain an understanding of client services through account management and in-field activities such as client entertainment, trade shows and experiential events.

Prerequisite: COM 2700 or permission of the instructor.

Schedule Type: Lecture

- U\_FAACOM\_2020\_12      Revise the program of study for the Bachelor of Science in Communication, Advertising (507A/09.0903). The revised program of study is at the end of the minutes.
- U\_FAACOM\_2020\_13      Change the credit hours of **COM 2315 – Mass Communication Activity (1)** to read as follows:  
**COM 2315 - Mass Communication Activity (1-3)**  
Nothing affected
- U\_FAACOM\_2020\_14      Change the course number and prerequisite statement of **COM 4250 – Professional Ethics in Advertising (3)** [DELETE COM 4250 and ADD COM 3430] to read as follows:  
**COM 3430 - Professional Ethics in Advertising (3)**  
When Offered: Spring.  
GEN ED: Junior Writing in the Discipline (WID)  
An examination of ethical practices in advertising through case study analyses of agency, industry, and affected consumer groups.  
Prerequisites: COM 2700 and R\_C 2001 or its equivalent.  
POS affected: 507A  
COM 4250 and COM 3430 are equivalent.

Vote 20 – To approve the proposals from the Department of Communication - PASSED

The proposals (8) from the Department of Sustainable Technology and the Build Environment were approved as follows: (Effective: Fall 2021)

- U\_FAASTBE\_2020\_01      Change the prerequisite statement of **TEC 3638 – Foundations of Sustainable Technology (3)** to read as follows:  
Prerequisites: MAT 1020 or higher with minimum grade of "C" (2.0), TEC 2029 with minimum grade of "C" (2.0), TEC 2601 with minimum grade of "C" (2.0), and R C 2001 or its equivalent.
- U\_FAASTBE\_2020\_02      Revise the program of study for the Bachelor of Science in Sustainable Technology (571A/15.0507). The revised program of study is at the end of the minutes.
- U\_FAASTBE\_2020\_03      Revise the program of study for the undergraduate minor in Sustainable Technology (593/15.0507). The revised program of study is at the end of the minutes.
- U\_FAASTBE\_2020\_04      Revise the program of study for the Bachelor of Science in Building Science with a concentration in Architectural Technology and Design (577B/52.2001). The revised program of study is at the end of the minutes.
- U\_FAASTBE\_2020\_05      Revise the program of study for the Bachelor of Science in Building Science with a concentration in Construction Management (577C/52.2001). The revised program of study is at the end of the minutes.
- U\_FAASTBE\_2020\_06      Revise the program of study for the Bachelor of Science in Building Science with a concentration in Sustainable Building Systems (577D/52.2001). The

revised program of study is at the end of the minutes.

- U\_FAAC\_STBE\_2020\_07      Change the prerequisite statement of **TEC 1728 – Architectural Graphics and Modeling I (3)** to read as follows:  
Prerequisite: Completion of TEC 1708 with a minimum grade of "C" (2.0) or Co-requisite: enrollment in TEC 1708. Prerequisite or corequisite: MAT 1010 (or higher). Note: MAT1020 is required for Building Science majors.
- U\_FAAC\_STBE\_2020\_08      Change the prerequisite statement of **TEC 3728 – Architectural Design Studio I (3)** to read as follows:  
Prerequisite or corequisite: TEC 3718, TEC 3739, and TEC 3748.

Vote 21 – To approve the proposals from the Department of Sustainable Technology and the Built Environment - PASSED

The proposals (8) from the Department of Theatre and Dance were approved as follows: (Effective: Fall 2021)

- U\_FAAC\_TD\_2020\_1      Course Addition:  
**THR 3901 – Theatre Education Teaching Practicum (1)**  
When Offered: On Demand  
A supervised experience in the instructional process on the university level through guided direct participation with students in a classroom. Graded on an S/U basis.  
Prerequisite or corequisite: THR 3071 and junior or senior standing. Required for Theatre Education Concentration.
- Schedule Type: Practicum
- U\_FAAC\_TD\_2020\_2      Change the prerequisite statement of **THR 3520 – Instructional Assistance (1)** to read as follows:  
Prerequisite: junior or senior standing.
- U\_FAAC\_TD\_2020\_3      Revise the program of study for the Bachelor of Arts in Theatre Arts with a concentration in Theatre Education (591E/50.0501). The revised program of study is at the end of the minutes.
- U\_FAAC\_TD\_2020\_4      Course Addition:  
**THR 4820 – Advanced Theatre Seminar (3)**  
When offered: On Demand.  
An upper level experience exploring and discussing topics in theatre, ranging from significant periods in theatre history, to a close examination of specific playwrights, to the focus of a single genre. Course content may vary. May be cross-listed depending on subject of a particular course.  
Prerequisite: Permission of instructor.
- Schedule Type: Seminar
- U\_FAAC\_TD\_2020\_5      Revise the program of study for the undergraduate minor in Theatre Arts (586/50.0501). The revised program of study is at the end of the minutes.
- U\_FAAC\_TD\_2020\_6      Change the course number, credit hours, and course description of **THR 2635 – Stage Combat (2)** [DELETE THR 2635 and ADD 3645] to read as follows:

**THR 3645 - Stage Combat (3)**

When Offered: Fall, Odd-numbered years

This course introduces students to techniques of stage violence and combat by actors in theatrical productions. Course work will emphasize safe approaches to weapon and hand-to-hand combat. Other topics include: history and styles of stage combat; best practices for theatrical intimacy; appropriate weapon choices; text and fight analysis; rehearsal discipline; basic fight choreography.

Prerequisite: THR 2625.

POS affected: 591F

THR 2635 and THR 3645 are equivalent.

U\_FAAC\_TD\_2020\_7

Change the text regarding the grade requirement for continuation in the Undergraduate Bulletin text under the section Admission and Requirements for the BA degrees in the Department of Theatre and Dance, #4 to read as follows:

4. The Bachelor of Arts degree in Theatre Arts with a concentration in Performance is open to students who have successfully interviewed with the performance faculty. A current performance resume, an 8x10 headshot, and a brief written statement expressing major goals in performance are required for the interview. The student may be asked to perform a two-minute audition if the performance faculty is not familiar with the student's acting work. The student must maintain a minimum overall GPA of 2.7 in the (\*) designated major courses as noted on the program of study for this concentration. The student must pass a juried audition and interview at the end of each year to determine the student's ability to successfully continue in the Performance concentration.

U\_FAAC\_TD\_2020\_8

Revise the program of study for the Bachelor of Arts in Theatre Arts with a concentration in Theatre Performance (591F/50.0501). The revised program of study is at the end of the minutes.

Vote 22 – To approve the proposals from the Department of Theatre and Dance - PASSED

**Denise Levy presented proposals (26) from the Beaver College of Health Sciences for the College of Health Sciences, Department of Communication Sciences and Disorders, Department of Health and Exercise Sciences, Department of Nutrition and Health Care Management, Department of Nursing, Department of Recreation Management and Physical Education, and Department of Social Work.**

The proposal (1) for the College of Health Sciences was approved as follows: (Effective: Fall 2021)

U\_HS\_2020\_1

Course Addition:

**CHS 1000 – Exploring Health Sciences (1)**

When Offered: Fall

This course explores health-related topics in an interprofessional community of scholars. It includes an overview of the degree programs available in the Beaver College of Health Sciences and various career opportunities in the health professions. Students are introduced to resources on campus that will assist with career exploration, and will explore health-related service opportunities in the wider community. This course is only open to members of the Exploring Health Sciences Residential Learning Community.

Schedule Type: Lecture

Vote 23 – To approve the proposal from the College of Health Sciences - PASSED

A proposal (1) from the Department of Communication Sciences and Disorders was approved as follows:  
(Effective: Fall 2021)

U\_HS\_CSD\_2020\_1      Revise the program of study for the undergraduate minor in American Sign Language (819/16.1601). The revised program of study is at the end of the minutes.

Vote 24 – To approve the proposal from the Department of Communication Sciences and Disorders - PASSED

A Proposal (1) from the Department of Health and Exercise Science was approved as follows: (Effective: Fall 2021)

U\_HS\_HES\_2020\_1      Delete several AT courses.  
List of Athletic Training courses to delete:  
• A T 1800 - Athletic Training Clinical Laboratory I (2)  
    Courses affected: AT, 2100, AT 2300, AT 2600  
• A T 2100 - Emergent Care Strategies (2)  
• A T 2300 - Manual Evaluation Techniques of Joint Movement (4)  
    Courses affected: AT 2400, AT 3600, AT 3620  
• A T 2400 - Medical Conditions and Disabilities (4)  
• A T 2600 - Athletic Training Clinical Laboratory II (2)  
    Course affected: AT 2700  
• A T 2700 - Athletic Training Clinical Laboratory III (2)  
    Course affected: AT 3000  
• A T 3000 - Athletic Training Clinical Laboratory IV (3)  
    Course affected: AT 3400  
• A T 3010 - Therapeutic Medications in the Rehabilitation Sciences (3)  
• A T 3215 - Athletic Training Clinical Organization and Administration (2)  
• A T 3400 - Athletic Training Clinical Laboratory V (3)  
    Course affected: AT 4000  
• A T 3520 - Instructional Assistance (1)  
• A T 3600 - Orthopedic Clinical Evaluation and Diagnosis I (3)  
    Courses affected: AT 3615, AT 4025  
• A T 3610 - Therapeutic Modalities and Intervention Strategies I (3)  
    Course affected: AT 4025  
• A T 3615 - Orthopedic Clinical Evaluation and Diagnosis II (3)  
    Courses affected: AT 3625, AT 4030  
• A T 3620 - Conditioning and Rehabilitative Exercises I (3)  
    Courses affected: AT 3625, AT 4025  
• A T 3625 - Conditioning and Rehabilitative Exercises II (3)  
    Course affected: AT 4030  
• A T 4000 - Athletic Training Clinical Laboratory VI (4)  
• A T 4025 - Therapeutic Modalities and Intervention Strategies II (3)  
    Course affected: AT 4030  
• A T 4030 - Evidence-Based Practice in Athletic Training (3)

Vote 25 – To approve the proposal from Health and Exercise Science - PASSED

The proposals (2) from the Department of Nutrition and Health Care Management were approved as follows: (Effective: Fall 2021)

U\_HS\_NHM\_2020\_5      Revise the program of study for the undergraduate minor in Health Care Management (845/51.0701). The revised program of study is at the end of the minutes.

U\_HS\_NHM\_2020\_6      Revise the program of study for the Bachelor of Science in Nutrition and Foods with a concentration in Nutrition and Wellness (840D/51.3101). The revised program of study is at the end of the minutes.

Vote 26 – To approve the proposals from the Department of Health and Exercise Science - PASSED

Proposals (14) from the Department of Nursing were approved as follows: (Effective: Fall 2021)

U\_HS\_NUR\_2020\_2      Add a corequisite to the prerequisite statement of **NUR 3100 – Adult Health Nursing I (3)** to read as follows:  
Prerequisites: NUR 3040, NUR 3115, NUR 3300, NUR 3302, and NUR 3400.  
Corequisite: NUR 3110.

U\_HS\_NUR\_2020\_3      Add a corequisite to the prerequisite statement of **NUR 3110 – Adult Health Nursing I Clinical (3)** to read as follows:  
Prerequisites: NUR 3040, NUR 3115, NUR 3300, NUR 3302, and NUR 3400.  
Corequisite: NUR 3100.

U\_HS\_NUR\_2020\_4      Add a corequisite to the prerequisite statement of **NUR 3102 – Adult Health Nursing II (3)** to read as follows:  
Prerequisites: NUR 3050, NUR 3100, NUR 3110, NUR 3450, and NUR 3452.  
Corequisite: NUR 3112.

U\_HS\_NUR\_2020\_5      Add a corequisite to the prerequisite statement of **NUR 3112 – Adult Health Nursing II Clinical (3)** to read as follows:  
Prerequisites: NUR 3050, NUR 3100, NUR 3110, NUR 3450, and NUR 3452.  
Corequisite: NUR 3102.

U\_HS\_NUR\_2020\_6      Add a corequisite statement to **NUR 3121 – Health Assessment Across the Lifespan (3)** to read as follows:  
Prerequisite: admission to the BSN degree program.  
Corequisite: NUR 3123.

U\_HS\_NUR\_2020\_7      Add a corequisite statement to **NUR 3123 – Health Assessment Across the Lifespan Lab/Clinical (1)** to read as follows:  
Prerequisite: admission to the BSN degree program.  
Corequisite: NUR 3121.

U\_HS\_NUR\_2020\_8      Add a corequisite statement to **NUR 3300 – Fundamentals of Nursing Practice (3)** to read as follows:  
Prerequisites: NUR 3121 and NUR 3123.  
Corequisite: NUR 3302.

U\_HS\_NUR\_2020\_9      Add a corequisite statement to **NUR 3302 – Fundamentals of Nursing Practice Lab/Clinical (3)** to read as follows:

Prerequisites: NUR 3121 and NUR 3123.  
Corequisite: NUR 3300.

- U\_HS\_NUR\_2020\_10      Add a corequisite statement to **NUR 3450 – Mental Health and Nursing Care of Communities (5)** to read as follows:  
Prerequisites: NUR 3040, NUR 3115, NUR 3300, NUR 3302, and NUR 3400.  
Corequisite: NUR 3452.
- U\_HS\_NUR\_2020\_11      Add a corequisite statement to **NUR 3452 – Mental Health and Nursing Care of Communities Clinical (3)** to read as follows:  
Prerequisites: NUR 3040, NUR 3115, NUR 3300, NUR 3302, and NUR 3400.  
Corequisite: NUR 3450.
- U\_HS\_NUR\_2020\_12      Add a corequisite statement to **NUR 4110 – Adult Health Nursing III (3)** to read as follows:  
Prerequisites: NUR 3102, NUR 3112, NUR 4124, NUR 4127, and NUR 4200.  
Corequisite: NUR 4112.
- U\_HS\_NUR\_2020\_13      Add a corequisite statement to **NUR 4112 – Adult Health Nursing III Clinical (3)** to read as follows:  
Prerequisites: NUR 3102, NUR 3112, NUR 4124, NUR 4127, and NUR 4200.  
Corequisite: NUR 4110.
- U\_HS\_NUR\_2020\_14      Add a corequisite statement to **NUR 4124 – Nursing Care of Childbearing Families, Women, and Children (5)** to read as follows:  
Prerequisites: NUR 3050, NUR 3100, NUR 3110, NUR 3450, and NUR 3452.  
Corequisite: NUR 4127.
- U\_HS\_NUR\_2020\_15      Add a corequisite statement to **NUR 4127 – Nursing Care of Childbearing Families, Women, and Children Clinical (3)** to read as follows:  
Prerequisites: NUR 3050, NUR 3100, NUR 3110, NUR 3450, and NUR 3452.  
Corequisite: NUR 4124.

Vote 27 – To approve the proposals from the Department of Nursing - PASSED

The proposals (5) from the Department of Recreation Management and Physical Education were approved as follows: (Effective: Fall 2021)

- U\_HS\_RPE\_2020\_1      Course Addition:  
**RM 4510 – Recreation Management Honors Thesis (1-3)**  
When Offered: On Demand  
Independent study and research for a Recreation Management honors thesis or project. Directed and graded by a faculty member in the Recreation Management & Physical Education department. Enrollment is by invitation or application only.
- Schedule Type: Honors Thesis
- U\_HS\_RPE\_2020\_2      Add a section Honors Program in Recreation Management to the Undergraduate Bulletin to read as follows:
- Honors Program in Recreation Management
- The Recreation Management program within the Department of

Recreation Management and Physical Education offers an honors program to students who exhibit academic excellence, a commitment to community engagement, and a desire to conduct research in the field of recreation management. The purpose of the Recreation Management honors program is to give students the opportunity to use creative thinking to address the world's great problems through recreation and leisure. Students must apply for the program. To be considered for the honors program, Recreation Management majors must have an overall GPA of 3.45 or higher. Departmental honors students must earn a minimum grade of "B" (3.0) in honors courses in order to receive credit as honors, and develop an honors thesis/project in collaboration with a faculty member in the Recreation Management and Physical Education department. In order to graduate with "honors in Recreation Management", students must complete 9 credit hours of honors coursework in Recreation Management: an honors section of RM 4110 Evaluation in Recreation and Leisure Service Management (3 hours), one honors section of, or honors contract in, any Recreation Management course at the 2000 level or above (3 hours), and an honors thesis/project chaired by a Recreation Management and Physical Education department faculty member (RM 4510) for a total of 3 credit hours. Recreation Management courses can be designated as an honors section or completed by honors contract in consultation with the faculty member teaching the course during the semester of interest.

U\_HS\_RPE\_2020\_3

Revise the program of study for the Bachelor of Science in Recreation Management with a concentration in Commercial Recreation & Tourism Management (574G/31.0301). The revised program of study is at the end of the minutes.

GU\_HS\_RPE\_2020\_4

Add a dual listing statement to **HPE 4430 – Health and Physical Education Methods (3)** to read as follows:

Dual-listed courses require senior standing; juniors may enroll with permission of the department.

U\_HS\_RPE\_2020\_5

Change the semester offering, course description, and remove the prerequisite statement of **HPE 3030 – Sport-Specific Coaching (3)** to read as follows:

**HPE 3030 - Sport-Specific Coaching (3)**

When Offered: Spring; Summer Session

This course will focus on learning how to teach the technical and tactical skills of specific sports. An emphasis will be placed on the relationship and difference between technical and tactical skills and traditional and games approaches to practice. In addition, instructing, analyzing and correcting essential technical and tactical skills will be addressed. Successful students will also develop knowledge and skills needed to design effective season and individual practice plans as part of a comprehensive approach to coaching.

Vote 28 - To approve the proposals from the Department of Recreation Management and Physical Education - PASSED

The proposals (2) from the department of Social Work were approved as follows: (Effective: Fall 2021)

GU\_HS\_SW\_2020\_1

(Add SW 5002 – Competencies for Child Welfare) and add a dual-listing statement to **SW 4002 – Competencies for child Welfare (3)** to read as follows:

[Dual-listed with S W 5002.] Dual-listed courses require senior standing.  
Juniors may enroll with permission of the department.

GU\_HS\_SW\_2020\_2      (Add SW 5555 – Death, Dying, and Living) and add dual-listing statement to  
**SW 4555 – Death, Dying, and Living (3)** to read as follows:  
[Dual-listed with S W 5555.] Dual-listed courses require senior standing.  
Juniors may enroll with permission of the department.

Vote 29 – To approve the proposals from the Department of Social Work - PASSED

**Old Business**

**Other**

**Adjournment**

Vote 30 – To approve the motion to adjourn - PASSED

**UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE**  
**January 20, 2021**  
**Unofficial Vote Record**

**UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE**  
**January 20, 2021**  
**Unofficial Vote Record**

UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE  
**January 20, 2021**  
Unofficial Vote Record

Committee Members	27	28	29	30	31	32	33	34	35	36	37	38	39
Jon Beebe	Y	Y	Y	Y									
C. A. Debelius	Y	Y	Y	Y									
Christina Hayes	Y	Y	Y	Y									
Jeff Hirst	Y	Y	Y	Y									
Susan Lappan	Y	Y	Y	Y									
Steve Leon	Y	Y	Y	Y									
Ellen Cowan	Y	Y	Y	Y									
Courtney McGahee	Y	Y	Y	Y									
Jason Miller	Y	Y	Y	Y									
Tanga Mohr	Y	Y	Y	Y									
Lisa Poling	Y	Y	Y	Y									
Manan Roy	Y	Y	Y	Y									
Shannon Shanely	Y	Y	Y	Y									
Teressa Sumrall	-	-	-	-									
John Wiswell	Y	Y	Y	Y									
Brayden Benkiel	Y	Y	Y	Y									
Hunter Koch	-	-	-	-									

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The recommendations from the January 20, 2021 Undergraduate Academic Policies and Procedures Committee meeting are approved.

*Heather Norris*

*3/8/2021*

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Heather Norris

Date

Interim Provost and Executive Vice Chancellor

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# **AP&P Manual**

# **Appalachian State University**

Revised for 20210-20221  
(after Provost approved 202019-20210 changes)

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## **Academic Policies and Procedures (AP&P) Committees**

### **AP&P Committees Summary**

Complete information about the memberships of university committees (including Graduate and Undergraduate AP&P Committees), reporting, and areas of responsibility are outlined in the *Faculty Handbook* ([§7.3.4.8](#) and [§7.3.4.14](#)).

### **AP&P Joint Subcommittee**

A Joint Subcommittee consisting of representatives from both Undergraduate and Graduate Academic Policies and Procedures (AP&P) Committees will be tasked with considering and recommending changes to the [AP&P Manual](#), the AP&P proposal forms, and AP&P procedures.

The Joint Subcommittee will include a minimum of two representatives each from the Undergraduate and Graduate AP&P committees; the University Registrar and Associate Registrar; the Undergraduate AP&P Specialist; and a representative from the School of Graduate Studies. The chairpersons of Undergraduate AP&P and Graduate AP&P will co-chair the Joint Subcommittee. Meetings will be called on an as-needed basis.

Changes recommended by the Joint Subcommittee must be approved by both AP&P Committees.

### **AP&P Operating Procedures**

1. Proposals to be presented to an Academic Policies and Procedures (AP&P) committee must be submitted using the approved proposal forms available on the [AP&P website](#).
2. Proposals to be considered by an (AP&P) committee must be agenda-ready and submitted prior to the published due date (approximately twenty-five [25] calendar days prior to the scheduled meeting). The AP&P committees will send the agenda to the entire faculty at least six (6) working days prior to a scheduled meeting, according to the [Faculty Handbook](#) guidelines.
3. The proposal author, department chair, or dean's office should consult with any department(s) or unit(s) that may be affected by the proposal prior to submission. [This includes proposals that originate from a Council, a student government association, or the Faculty Senate.](#)
4. Committee members, deans' offices, authors, department chairs, faculty and students should provide feedback and inquiries on the AP&P AsULearn forum to address proposal concerns prior to committee meetings when appropriate and possible.
5. A quorum for the transaction of business shall consist of two-thirds majority of the voting members of the committee.
6. The order of consideration of proposals before the committee shall be rotated among the colleges and schools.

7. Committee meetings are limited to two hours in length unless a vote to extend is passed. In the event of a backlog of committee business, a second meeting will be called for that month.
8. Voting on proposals/motions is by voice vote or by a show of hands. Proxy representation and absentee voting for the purpose of voting on proposals under consideration is NOT permitted. Proposal/motion decisions shall be by a simple majority of the verbal or show of hands votes cast.
9. The chairs of the AP&P committees shall be elected from the voting membership. The chairs are elected in the first Fall semester meeting by the voting members. The chairs retain their right to vote on proposals/motions. The term of chair is for one year and is renewable. The chair is eligible to receive one-quarter reassigned time per semester.

## **Primacy of Academic Governance over Academic Curriculum and Instruction**

### **Faculty Handbook Academic Governance Summary**

The basic and most important unit in determining curricula is the academic department.

Each department/academic unit and college/school shall have a curriculum committee to carefully consider changes to courses, programs, policies, or structures within or affecting the academic unit. All academic units should develop and implement plans for involving students in academic governance at the departmental level.

In addition, the General Education Council, Honors Council, and Teacher Education Council shall each carefully consider changes to curriculum, policies, programs, or structures within or affecting their programs.

The Graduate and Undergraduate Academic Policies and Procedures (AP&P) Committees are the final committees to carefully consider and recommend changes to the University's curriculum, policies, programs, or structures.

The Provost and the Chancellor shall communicate to the University in a timely fashion their decisions on proposals/motions involving recommendations for changes in curriculum, policies, programs, or structures.

### **Guideline I**

Any proposal for changes in a department's courses or programs must first be acted upon by the department before being submitted to the college advisory council. Only graduate faculty and affiliate graduate faculty may vote on changes to graduate programs and curriculum in their respective areas (*Faculty Handbook, §4.5*). Any proposal for changes (excluding course changes within existing programs) in a college's or school's programs or structures must first be acted upon by the faculty of the college or school concerned before being presented to the Undergraduate Academic Policies and Procedures Committee and/or the Graduate Academic

Policies and Procedures Committee. After a proposal for curricular or structural change has been acted upon by a college or school and after the dean of that college or school has submitted the proposal to all other necessary groups, the dean will then present the proposal to the Undergraduate Academic Policies and Procedures Committee and/or the Graduate Academic Policies and Procedures Committee.

### **Guideline II**

Recommendations for changes in general academic policies or academic programs must be submitted to the Undergraduate Academic Policies and Procedures Committee and/or the Graduate Academic Policies and Procedures Committee by any of the following:

- A. Department, program, college, or school
- B. Faculty Senate
- C. Student Government Association
- D. Graduate Student Government Association Senate
- E. Council of Deans
- F. Council of Chairs

A faculty member, student, or ad hoc faculty or student group will channel proposals through the appropriate body above.

### **Guideline III**

The Undergraduate Academic Policies and Procedures Committee and the Graduate Academic Policies and Procedures Committee are, in most circumstances, the final recommending bodies to the provost /and executive vice chancellor and the chancellor. The faculty members and the students on these committees serve as the representatives for the faculty and students, respectively. As such, these groups should make their respective views known through their appointed representatives and should make arrangements for their respective representatives to be held accountable to them.

### **Guideline IV**

If a proposal for changes in a department's courses or programs is not approved by that department, then the group initiating the proposal may appeal (within 90 days after rejection) first to the advisory council of the college to which that department belongs. If the proposal is also rejected by the college or school, then the group may appeal (as above) to the Undergraduate Academic Policies and Procedures Committee and/or the Graduate Academic Policies and Procedures Committee.

When a departmental proposal is not recommended at the college advisory council level, the department may appeal to the Undergraduate Academic Policies and Procedures Committee and/or the Graduate Academic Policies and Procedures Committee.

### **Bulletin Style Guide**

The information below improves course information consistency and sets standards for the undergraduate and graduate Bulletins. Bulletin course description and title information will be altered to meet these guidelines before being published in the AP&P minutes and Bulletins.

## **Alternate Year Course Offerings**

When courses are offered in alternate years, information listing what years the course will be offered should be provided. “Spring, Alternate years” is not acceptable. If the year cannot be determined, the course offering should be designated “On Demand”.

### **Examples:**

- HIS 3156. History of International Terrorism (3). Fall, Even-numbered years.
- HIS 3158. Ethnic Conflict: East Versus West (3). Fall, Odd-numbered years.
- HIS 3823. American Military History (3). Fall; Spring, Odd-numbered years; Summer Session 1, Even-numbered years.
- PS 2610. Asian Politics (3). On Demand.

Courses may be scheduled in a regular semester “Fall; Spring; Summer Sessions” and “On Demand” if a course will be offered in one semester, but only periodically in another.

### **Examples:**

- PE 1822. Tennis (1). Fall; On Demand.
- HPE 2140. Principles of Fitness and Conditioning (3). Summer Session; On Demand.

## **Course Descriptions**

- Course descriptions should be concise—two to five sentences/statements total.
- Avoid information technology ([IT](#)) language that may become outdated.
- Do not use course titles within the course description or prerequisite statement.
- Ensure contact time coincides with course credit hours and course schedule type.
- Only include prerequisites for that course, not the prerequisites of prerequisite courses.
- Spell out “and” instead of using “&”.
- Spell out “laboratory”.
- Spell out numbers one through nine (e.g., Studio six hours).
- Mode of instruction should not be included (e.g., online, lecture). Statements such as “lecture three hours.” should not be included in the course description unless the course includes multiple modes of instruction (i.e., lecture/lab, lecture/studio). If the course includes multiple modes of instruction, this may be reflected in the course description (e.g., “Includes lecture and studio components meeting for X hours per week.” or Lecture X hours, laboratory Y hours.”).
- Use the standard statement “Graded on an S/U basis.” when the course is graded S/U.
- Use [a](#) course prefix before each number (e.g., ENG 3661, ENG 3662, ENG 3663, rather than ENG 3661, 3662, 3663).

## **Course Titles**

Attempt to use course titles shorter than 30 characters—including spaces. The short title in Banner appears on the class schedule and student transcripts and is limited to 30 characters (including spaces and punctuation). The long course title appears in the Bulletins. The long course title in Banner is limited to 100 characters (including hours and semester offering).

## **Numeric Grade Representation**

Grade Point Average (GPA) points should follow all letter grades listed in the bulletins, programs of study, or other university materials and documents. GPA points should follow all course or program grade prerequisites. Inclusion of “or higher” and “or above” is not necessary.

### **Examples:**

- Prerequisites: completion of LLC 2510 and FRE 3510 with a minimum grade of “B” (3.0).
- Prerequisites: completion of HIS 4100 Senior Seminar with a minimum grade of “C” (2.0) is required to complete the History major.
- Course Description: A minimum grade of “C” (2.0) is required. Prerequisites: completion of HPE 2110, HPE 2120 and HPE 2130 with a minimum grade of “C” (2.0) in each.
- Major Requirement: In order to progress through the RN to BSN program, the student must achieve a minimum grade of “C” (2.0) in each nursing course before proceeding to the next nursing course.

## **Curriculum Proposal and Scheduling Information**

### **Program of Study Change Procedures**

When revising programs of study (majors, minors, concentrations, certificates, or Second Academic Concentrations), submit a single, marked-up program of study using track changes. For more information, refer to the [AP&P website instructions](#).

### **Contact Time**

Across the UNC system, a class must meet for a minimum of 750 minutes for every semester hour of credit. The amount of contact time remains constant, regardless of the academic term.

One semester hour	Minimum of 750 contact minutes
Two semester hours	Minimum of 1500 contact minutes
Three semester hours	Minimum of 2250 contact minutes
Four semester hours	Minimum of 3000 contact minutes

The [Appalachian State University Policy Manual](#) provides a thorough explanation of credit hour applications across different modes of instruction and contact time required. In addition, detailed information on current course schedule types (Banner course term file guidelines) can be found on the [Office of the Registrar's website](#).

### **Determining When a New Course Number is Needed**

In some cases proposers wish to make significant revisions to an existing course. If the changes are substantial enough that a student who had the earlier course would not be able to use the revised course interchangeably, then a new course number is needed. In certain circumstances, even if a course could be used interchangeably, a new course number may be required, as determined by the Registrar’s Office in consultation with the respective AP&P committee chairpersons. If a new course number is assigned, this becomes a course add, and Parts A & B of the form must be completed.

## **Numbering of Coursework**

The following is a summary of the restrictions imposed by university policy on the numbering of coursework. University policy stipulates the following general classifications:

<b>Level</b>	<b>Number Range</b>
Remedial	0001-0999
Freshman	1000-1999
Sophomore	2000-2999
Junior	3000-3999
Senior	4000-4999
Master's	5000-5999
Specialist	6000-6999
Doctorate	7000-7999

### **Numbers specified within the reserved ranges are as follows:**

General & Departmental Honors	1510-1519, 2510-2519, 3510-3519, 4510-4519
Independent Study	1500, 2500, 3500, 4500, 5500, 6500, 7500
Instructional Assistance	3520
Selected Topics	1530-1549, 2530-2549, 3530-3549, 4530-4549, 5530-5549, 6530-6549, 7530-7549

### **Other numbers reserved by University policy are as follows:**

Bibliography & Research	5000
Experiential Learning	1999, 2999, 3999, 4999
Graduate Research	5989, 6989, 7989
Internships	2900, 3900, 4900, 5900, 6900, 7900
Thesis/ Dissertation	5999, 6999, 7999

Proposals for new courses or programs are submitted to the Office of the Registrar during the proposal development process to confirm the appropriateness of course numbering.

## **Course Syllabi**

When proposing a new course, or substantial changes to an existing course, a course syllabus is required as an attachment to the AP&P form. Proposers should note that both the Appalachian State University [Faculty Handbook](#) (§6.3.1.2) and the Office of Academic Affairs have stipulated that **certain elements** must be included in all course syllabi.

For purposes of AP&P proposal review, the course syllabus should include the following minimum components:

- The course title and description as they will appear in the Bulletin(s).
- A list of student learning outcomes for the proposed course.
- The name of the text and any other materials required of each student.
- A description of course activities and assignments, including assessment methods.
- An explanation of how the course grade is to be determined. (Note: for graduate courses, no "D" grades may be assigned; grades below C- will automatically revert to a failing [F])

- grade.)
- If it is a dual-listed course, the dual-listed course differentiation, as described below.

## Dual-Listed Course Proposals

Dual-listed courses are classes taught concurrently at the 4000/5000 level and by the same instructor, either (1) meeting at the same time and in the same classroom, or (2) in the same online setting. Dual-listed graduate courses are noted in the course descriptions as follows: “[Dual-listed with XXX 4xxx.]”

All dual-listed courses must be approved by both the Undergraduate (UAP&P) and the Graduate Academic Policies and Procedures Committee (GAP&P) and will be designated as dual-listed in the University Bulletins. Approval will require the submission of a single “GU” AP&P proposal form with syllabi indicating the advanced academic content and rigor appropriate for graduate courses. Only courses at the 4000 level will be approved for dual listing with 5000-level courses, and only the credit hours of dual-listed courses that were reviewed/approved will count in the student’s Graduate Program of Study. Course descriptions for undergraduate dual-listed courses must include the following standard wording: “[Dual-listed with XXX 5xxx.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.”

In the case of dual-listed selected topics and study abroad courses, syllabi for the undergraduate and graduate course pairings must be submitted for review and approval by the School of Graduate Studies. All materials must be submitted to allow sufficient time for approval before the course is taught, preferably before the schedule is published for the next semester.

Consideration should be given to the ratio of undergraduate to graduate students in these classes and, where possible, graduate students should make up at least 30% of the enrollment.

## Department, Program Name, or Course Prefix Changes

Department or program name changes should be submitted using the [Department Name Change form](#). These are reviewed for approval by the Provost and Chancellor and are information-only items for the AP&P committees.

Course prefix changes **do** require submission of an AP&P proposal.

## Proposal Process Resources

Resources are available on the Academic Policies and Procedures website:

<https://app.appstate.edu/>

AP&P Approval Process

AP&P Process Flowchart Bulletin Deadlines

Contact and Submission Information

Meeting Agendas, Dates, Deadlines, and Minutes

Proposal Forms, Instructions, and Sample Proposals

File Naming Protocol

Department Name Change Form  
Semester Offering Changes Information  
UNC-GA Process for Planning and Establishment of New Program  
UNC-GA-SACS Flowchart

## Scheduling of Courses to be Offered for Credit

Scheduling a course to be offered for credit is authorized by the department chair (or equivalent) under which the course is listed (see *Faculty Handbook*).

After authorizing a course to be offered, the chair will provide the schedule information to the dean's office (or equivalent).

### Provide schedule information to:

- The Office of the Registrar if the course is to be offered for main campus credit during a term of the regular academic year.
- The Office of Summer Sessions if the course is to be offered during a summer term.
- The App State Online Office for all distance education courses.

Courses beginning before 2:00pm Monday-Friday should adhere to regular meeting patterns unless approved as an exception by the appropriate dean's office. Regular meeting patterns and additional information can be found on the schedule build/CTF section of the [Office of the Registrar's webpage](#).

## Selected Topics Course Guidelines

Selected topics are available to allow faculty to test the viability of a new course on a short-term basis. A selected topics course should not be offered more than a total of four semesters before beginning the process for adding the course permanently to the Bulletin(s).

A course under a selected topics designation should not be scheduled when a course with substantially similar content and methodology exists, without first consulting the existing course department chair(s) (or equivalent).

If departments and/or individual faculty members would like to express concerns about a selected topics course, contact should be made with the department chair (or equivalent) at least two weeks in advance of registration. The concerned party, the individual offering the course, and the department chair(s) should attempt to resolve the concern in advance of registration. If that course of action does not result in a solution, the appropriate college dean(s) will serve to arbitrate.

Graduate/undergraduate dual-listed selected topics courses must adhere to the same requirements as other graduate/undergraduate dual-listed courses.

Graduate selected topics courses must adhere to the same requirements as other graduate courses. Contact the Graduate School for additional information.

See the Numbering of Coursework section of this manual for information about selected topics numbering.

## Semester Offering Information

Main campus undergraduate courses offered in a fall or spring term are eligible for the university's book rental program. Selected Topics, On Demand, and courses offered in Summer Sessions only, are not eligible.

Semester offerings (only) can be changed without an AP&P proposal. Details about that process can be found at: <https://app.appstate.edu/proposal-resources/semester-offering-changes> -

Courses can be offered: Fall, Spring, Summer Sessions, On Demand, Even-numbered Years, Odd-Numbered Years. Please see the Alternate Year section of this manual for details on inclusion in course descriptions.

Revisions to AP&P Form  
Submitted to GAPP and UAP&P January 2021

## **Part A**

1. Removed “Other” as an option in the dropdown box for selecting the type of change, leaving: Course, Program of Study, Bulletin Text, and Policy.
- 

Current:

3. a. List the current catalog copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space is needed.

Proposed:

3. For additions/changes to courses:
    - a. List the current Bulletin copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space is needed.
- 

Current:

- 3b. List the proposed catalog copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space is needed.

Proposed:

- 3b. List the proposed Bulletin copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space needed
- 

Current:

- 3c Other REQUIRED attachments: see General Instructions

Proposed: (make 3c a separate question #4)

4. Attachments: For additions/changes to programs of study or policy, attach marked up program of study or Bulletin copy showing revisions. For new courses, attach syllabus.
- 

Current:

5. Contact the Registrar's Office and (for graduate proposals) Graduate School.

Proposed:

5. Contact and share proposal with the Registrar's Office and (for graduate proposals) Graduate School early in the proposal development.

---

Current:

6. a. Please search the current online bulletin for courses and programs of study affected by this proposed change, including any in your own department. List each course and program in the appropriate table below or, if applicable, choose none. Attach a separate spreadsheet if necessary. (Click here for instructions on searching Online Bulletin.)

Proposed:

6. For Course and Program of Study changes and additions:

a. Please search the current online bulletin for courses and programs of study affected by this proposed change, including any in your own department. List each course and program in the appropriate table below or, if applicable, choose none. Attach a separate list if necessary. (Click here for instructions on searching Online Bulletin.)

---

Add a new question

Proposed:

8. If a policy change or deletion is requested, list all units or groups who were consulted in development of this proposal.

List the person(s) and date contacted and their response."

---

Current:

8. Is this a General Education course? yes  no  n/a  (If requesting new general education credit, submit Part C of the AP&P form with an attached syllabus to the Office of General Education)

Proposed:

8. Is this a General Education course? YES  NO  NA  . If yes, consult the Office of General Education. (NOTE: If requesting new General Education credit, you must submit Part C of the AP&P proposal form to the Office of General Education.)

---

Current:

9. App State Online:

Does this proposal affect a course or requirement of a distance education program? yes  no   
If yes, has App State Online been

consulted? yes  no  If yes, list the date(s), App State Online contact person, and their response in support or opposition to this proposal:

**Proposed:**

9. Does this proposal affect a course or requirement of an **AppState Online or Distance Education** program? YES/NO

If yes, what is the mode of delivery? fully online  site based (includes hybrid)

If yes, contact AppState Online ([online@appstate.edu](mailto:online@appstate.edu)) and Site Management and State Authorization ([stateauthorization@appstate.edu](mailto:stateauthorization@appstate.edu)). List the date, the person(s) contacted, and the response.

---

Add a new question similar to #10 on part B

**Proposed:**

12. If the schedule type is being updated and is not designated as an Internship (INT), Practicum (PRA), Field Experience (FLD), Clinical (CLN) or Student Teaching (ST) experience, but students will be applying their skills in an experiential manner such as providing professional advice to community members or working directly with minors, has General Counsel been consulted regarding liability? yes  n/a

If yes, list the date, the person contacted, and the response.

---

Renumber questions on Part A starting with number 4.

## **Part B:**

1.b Eliminate NA as a choice.

---

**Current:**

7. Contact your department's Library Liaison. List the date, person contacted, and their response.  
(Click here for a list of Library Liaisons.)

**Proposed:**

7: Contact your library liaison to assure adequate library resources are or will be available. List the date, the person contacted, and the response.

---

**Current:**

8. Resource responsibilities: Has (have) the appropriate dean(s) been consulted in the development of this proposal? yes  no  If yes, list the date(s), name(s) and title(s) of person(s) contacted, and their response(s) in support or opposition to this proposal:

**Proposed:**

8: Contact the appropriate dean(s) affected by the development of this proposal to assure adequate resources are or will be available. List the date, the person contacted, and the response.

-----

**Current:**

10. If the course being proposed is not designated as an Internship (INT), Practicum (PRA), Field Experience (FLD), Clinical (CLN) or Student Teaching (ST) experience, but students will be applying their skills in an experiential manner such as providing professional advice to community members or working directly with minors, has General Counsel been consulted regarding liability? yes        no        n/a       

**Proposed:**

10. If the course being proposed is not designated as an Internship (INT), Practicum (PRA), Field Experience (FLD), Clinical (CLN) or Student Teaching (ST) experience, but students will be applying their skills in an experiential manner such as providing professional advice to community members or working directly with minors, has General Counsel been consulted regarding liability? yes        n/a

# Biology – Integrative Biology Concentration, BS

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Program Code: 142\*/142E

CIP Code: 26.0101

## General Education Requirements (44 Hours)

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### General Education Requirements

[CHE 1101-CHE 1110](#) and [CHE 1102-CHE 1120](#) fulfill the Science Inquiry. [MAT 1110](#) fulfills the Quantitative Literacy requirement.

## Biology Major Requirements (65 Hours)

---

Not including 12 hours counted in General Education

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Biology Core Requirements (8 Hours)

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Must be completed before taking any other biology courses

[BIO 1801 - Biological Concepts I \(4\)](#)

[BIO 1802 - Biological Concepts II \(4\)](#)

## **Additional Required Biology Courses (26 Hours)**

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*Pre: BIO 1801 & BIO 1802 required for all additional BIO courses*

**BIO 2012 - Introduction to Evolutionary Biology (3)**

**BIO 2300 - Biological Career Explorations (1)**

**BIO 2400 - Genetics (3)**

or

**BIO 2700 - Human Genetics (3)**

**BIO 2600 - Cell Biology (3)**

**BIO 3302 - Ecology (4)**

**BIO 3800 - Molecular Biology (4) [WID]**

**Choose one of the following:**

**BIO 2410 - Genetics Laboratory (1)**

**BIO 2610 - Cell Biology Laboratory (1)**

**Choose one of the following:**

**BIO 3301 - Human Systems Physiology (4) [WID]**

**BIO 3314 - Comparative Vertebrate Zoology (4) [WID]**

**BIO 4555 - Plant Physiology (4)**

**Choose one of the following: [CAP]**

*Pre: Senior Standing; WID*

**BIO 4501 - Independent Research (3) [CAP]**

**BIO 4519 - Biology Honors Thesis (3) [CAP]**

**BIO 4700 - Seminar in Biological Science (3) [CAP]**

**BIO 4910 - Capstone Internship in Biology (3) [CAP]**

## **Integrative Biology Concentration (12 Hours)**

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**Requires at least 12 semester hours, at least one course from each of the following elective categories, and at least two courses with a lab component.**

*Courses may only meet one requirement. If a course is chosen in one area, it may not be used in another (e.g. If BIO 2410 was chosen for lab course in the Required Biology courses above, it cannot be applied in the Integrative Biology Concentration below).*

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### Biodiversity Elective

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Choose at least one course from the following:

- [\*\*BIO 2000 - Introduction to Botany \(4\)\*\*](#)
- [\*\*BIO 2001 - Introduction to Zoology \(4\)\*\*](#)
- [\*\*BIO 3304 - Systematic Botany \(4\)\*\*](#)
- [\*\*BIO 3308 - Microbiology \(4\)\*\*](#)
- [\*\*BIO 4551 - Ornithology \(4\)\*\*](#)
- [\*\*BIO 4552 - Entomology \(4\) \[WID\]\*\*](#)
- [\*\*BIO 4556 - Mycology \(4\)\*\*](#)
- [\*\*BIO 4557 - Ichthyology \(4\)\*\*](#)
- [\*\*BIO 4558 - Taxonomy of the Fleshy Fungi \(4\)\*\*](#)
- [\*\*BIO 4559 - Mammalogy \(4\)\*\*](#)
- [\*\*BIO 4560 - Herpetology \(4\)\*\*](#)
- [\*\*BIO 4567 - Lichenology \(3\)\*\*](#)
- [\*\*BIO 4569 - Invertebrate Zoology \(4\)\*\*](#)
- [\*\*BIO 4572 - Virology \(3\)\*\*](#)

### Biological Systems and Mechanisms Electives

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Choose at least one course from the following:

- [\*\*BIO 2410 - Genetics Laboratory \(1\)\*\*](#)
- [\*\*BIO 2610 - Cell Biology Laboratory \(1\)\*\*](#)
- [\*\*BIO 3304 - Systematic Botany \(4\)\*\*](#)
- [\*\*BIO 3308 - Microbiology \(4\)\*\*](#)
- [\*\*BIO 3600 - Neurobiology \(4\)\*\*](#)

[BIO 4001 - Developmental Biology \(3\)](#)

[BIO 4011 - Honors Developmental Biology Seminar \(1\)](#)

[BIO 4375 - Bacterial Pathogenesis \(3\)](#)

[BIO 4513 - Plant Molecular Biology \(4\)](#)

[BIO 4564 - Microscopy \(4\)](#)

[BIO 4568 - Immunology \(4\)](#)

[BIO 4570 - Parasitology \(4\)](#)

[BIO 4572 - Virology \(3\)](#)

[BIO 4582 - The Biology of Cancer \(3\)](#)

[BIO 4585 - Endocrinology \(3\)](#)

[BIO 4601 - Animal Behavior-Ethology \(4\)](#)

### Biological Applications to Society Electives

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Choose at least one course from the following:

[BIO 2800 - Biotechnology and Society \(3\)](#)

[BIO 3310 - Marine Sciences \(4\)](#)

[BIO 3312 - Environmental Studies \(3\) \[WID\]](#)

[BIO 3313 - Global Change Ecology \(4\) \[WID\]](#)

[BIO 3315 - Conservation Biology \(3\) \[WID\]](#)

[BIO 3320 - Air Pollution Effects on Plants and People \(3\)](#)

[BIO 4110 - Conservation Genetics \(3\)](#)

[BIO 4240 - Aquatic Biology \(4\)](#)

[BIO 4255 - Ethnobotany: Plants, People, and Culture \(4\)](#)

[BIO 4375 - Bacterial Pathogenesis \(3\)](#)

[BIO 4563 - Biology of Aging \(3\)](#)

[BIO 4570 - Parasitology \(4\)](#)

[BIO 4571 - Plant-Insect Interactions in Terrestrial Ecosystems \(4\)](#)

[BIO 4572 - Virology \(3\)](#)

[BIO 4575 - Ecotoxicology \(4\) \[CAP\]](#)

[BIO 4582 - The Biology of Cancer \(3\)](#)

### Additional Integrative Biology Elective(s)

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Choose remaining course(s) from any Integrative Biology category listed above that was not chosen to fulfill a prior section to bring your total Integrative Biology concentration to twelve semester hours.

## **Integrative Focus Area (12 Hours)**

---

In consultation with your advisor, a focus area of study will be identified. The courses outlined within your focus area should integrate with your biology coursework into a degree program that aligns with your interests and career goals.

## **Required Cognate Courses (23 Hours)**

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### **Chemistry**

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[CHE 1101 - Introductory Chemistry I \(3\)](#)

[CHE 1110 - Introductory Chemistry Laboratory I \(1\)](#)

[CHE 1102 - Introductory Chemistry II \(3\)](#)

[CHE 1120 - Introductory Chemistry Laboratory II \(1\)](#)

[CHE 2101 - Fundamentals of Organic Chemistry \(3\)](#)

and

[CHE 2102 - Fundamentals of Organic Chemistry Laboratory \(1\)](#)

### **Mathematics**

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[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[STT 2810 - Introduction to Statistics \(3\)](#)

### **Physics**

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[PHY 1103 - General Physics I \(4\)](#)

## **Minor (optional)**

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## **Electives (7 Hours)**

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Taken to a minimum of 120 hours for the degree

## **Total Required (120 Hours)**

# **Environmental Science - Earth Systems Science Concentration, BS**

---

Program Code: 121\*/121C

CIP Code: 03.0104

## **General Education Requirements (44 Hours)**

---

### **General Education Requirements**

**CHE 1101/CHE 1110 & CHE 1102/CHE 1120** fulfills *Science Inquiry*. **MAT 1110** fulfills *Quantitative Literacy requirement*.

## **Major Requirements (~~67~~68 Hours)**

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*Not including 12 hours already counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### **Science Core Requirements (36 Hours)**

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#### **BIO 1801 - Biological Concepts I (4)**

or

#### **BIO 1802 - Biological Concepts II (4)**

#### **CHE 1101 - Introductory Chemistry I (3)**

#### **CHE 1110 - Introductory Chemistry Laboratory I (1)**

CHE 1102 - Introductory Chemistry II (3)

CHE 1120 - Introductory Chemistry Laboratory II (1)

GES 1010 - Introduction to Environmental Sciences (3)

GES 1101 - Introduction to Physical Geology (4)

GES 2250 - Evolution of the Earth (4)

MAT 1110 - Calculus With Analytic Geometry I (4)

PHY 1150 - Analytical Physics I (5)

STT 3850 - Statistical Data Analysis I (4)

## **Environmental Core Requirements (15-16 Hours)**

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A writing course [WID] must be taken in the Sophomore or Junior year. BS Environmental Science, Concentration in Earth Systems Science students who wish to be eligible for Professional Geologist licensure must take GES 2745.

GES 2750 – Preparation for Careers in the Earth and Environmental Sciences (3)

[WID]

GES 2752 – Environmental Science Field Methods (1)

CHE 3310 - Global Biogeochemical Cycles (3)

or

GES 3310 - Global Biogeochemical Cycles (3)

GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists (3)

GES 3105 - Preparation for Environmental Science Careers (3) [WID]

or

GES 2745 - Preparation for Geological Science Careers (4) [WID]

GHY 3812 - Geographic Information Systems (3)

GES 4630 - Hydrogeology (3)

## **Earth Systems Science Core Requirements (21 Hours)**

---

Choose at least 21 hours from the following list:

BS Environmental Science, Concentration in Earth Systems Science students who wish to be eligible for Professional Geologist licensure must take [GES 2751](#), [GES 3150](#), [GES 3800](#) and an additional 3-hour GES course at the 3000 level or above.

[GES 2751 – Geology Field Methods \(2\)](#)

[GES 3150 - Principles of Structural Geology and Tectonics \(3\)](#)

[GES 3160 - Introduction to Geophysics \(3\)](#)

or

[PHY 3160 - Introduction to Geophysics \(3\)](#)

[GES 3333 - Geomorphology \(3\)](#)

[GES 3800 - Sedimentology and Stratigraphy \(3\)](#)

[GES 4705 - Engineering Geology \(3\)](#)

[GHY 3110 - Ecoregions and Dynamic Landforms \(3\)](#)

[GHY 3310 - Environmental Remote Sensing \(3\)](#)

[PHY 3140 - Environmental Physics \(3\)](#)

[PHY 3150 - Atmospheric Science \(3\)](#)

[BIO 3530-3549 - Selected Topics \(1-4\)](#)

[GES 3530-3549 - Selected Topics \(1-4\)](#)

[PHY 3530-3549 - Selected Topics \(1-4\)](#)

## **Additional Environmental Electives (6 Hours)**

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Choose at least 6 hours from the following list

[CHE 2101 - Fundamentals of Organic Chemistry \(3\)](#)

[CHE 2102 - Fundamentals of Organic Chemistry Laboratory \(1\)](#)

or

[CHE 2201 - Organic Chemistry I \(3\)](#)

CHE 2203 - Organic Chemistry Laboratory I (1)

CHE 2210 - Quantitative Analysis (3)

CHE 2211 - Quantitative Analysis Laboratory (1)

GES 3110 - Environmental Regulation and Enforcement (3)

GES 4501 - Senior Honors Research (1-3)

GES 4900 - Internship in Environmental Science (1-12)

GHY 4812 - Advanced GIS (3)

GES 2301 - Energy Extraction in Appalachia (Past, Present, and Future) (3)

or

A S 2301 - Energy Extraction in Appalachia (Past, Present, and Future) (3)

GES 3680 - Geoarchaeology (3)

GES 3703 - Issues in Environmental Geology (3)

MAT 1120 - Calculus With Analytic Geometry II (4)

PHY 1151 - Analytical Physics II (5)

STT 3851 - Statistical Data Analysis II (3) [WID]

## **Environmental Science Capstone Course (at least 1 Hour)**

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*(Prerequisite: Senior Standing)*

GES 4105 - Analysis and Implications of Environmental Issues (1) [CAP]

or

GES 4510 - Senior Honors Thesis (3)

**Note**

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*\*Pre-/Co-requisites are not included in the 120 hours required for the degree.*

## **Minor (optional)**

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## **Electives (~~9~~8 Hours)**

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Taken to total a minimum of 120 hours for the degree

**Total Required (120 Hours)**

# **Environmental Science - Life Science Concentration, BS**

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Program Code: 121D

CIP Code: 03.0104

## **General Education Requirements (44 Hours)**

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### **General Education Requirements**

**CHE 1101/CHE 1110 & CHE 1102/CHE 1120** fulfills *Science Inquiry*. **MAT 1110** fulfills *Quantitative Literacy requirement*.

## **Major Requirements (~~67~~-~~68~~-**69** Hours)**

---

Not including 12 hours already counted in General Education Requirements, above.

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### **Science Core Requirements (35-36 Hours)**

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**BIO 1801 - Biological Concepts I (4)**

**BIO 1802 - Biological Concepts II (4)**

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**GES 1010 - Introduction to Environmental Sciences (3)**

**GES 1101 - Introduction to Physical Geology (4)**

**GES 2250 - Evolution of the Earth (4)**

**MAT 1110 - Calculus With Analytic Geometry I (4)**

**PHY 1103 - General Physics I (4)**

or

**PHY 1150 - Analytical Physics I (5)**

## **Environmental Core Requirements (~~21~~22 Hours)**

---

A writing course **[WID]** must be taken in the [Sophomore or](#) Junior year.

**BIO 3302 - Ecology (4)**

**CHE 2101 - Fundamentals of Organic Chemistry (3)**

and

**CHE 2102 - Fundamentals of Organic Chemistry Laboratory (1)**

or

**CHE 2201 - Organic Chemistry I (3)**

and

**CHE 2203 - Organic Chemistry Laboratory I (1)**

**CHE 3310 - Global Biogeochemical Cycles (3)**

or

**GES 3310 - Global Biogeochemical Cycles (3)**

**GES 2750 – Preparation for Careers in the Earth and Environmental Sciences (3)**

**[WID]**

**GES 2752 – Environmental Science Field Methods (1)**

**GES 3105 – Preparation for Environmental Science Careers (3) ~~[WID]~~[WID]**

**GHY 3812 - Geographic Information Systems (3)**

**STT 3850 - Statistical Data Analysis I (4)**

## **Life Science Core Requirements (16 Hours)**

---

Choose at least 16 hours from at least three disciplines from the following list

**BIO 2000 - Introduction to Botany (4)**

**BIO 3313 - Global Change Ecology (4) [WID]**

**BIO 3315 - Conservation Biology (3) [WID]**

**BIO 3320 - Air Pollution Effects on Plants and People (3)**

**BIO 4240 - Aquatic Biology (4)**

**BIO 4555 - Plant Physiology (4)**

**BIO 4575 - Ecotoxicology (4) [CAP]**

**CHE 2202 - Organic Chemistry II (3)**

**CHE 2204 - Organic Chemistry Laboratory II (1)**

**CHE 2210 - Quantitative Analysis (3)**

**CHE 2211 - Quantitative Analysis Laboratory (1)**

**CHE 3301 - Physical Chemistry I (3)**

**CHE 3303 - Physical Chemistry I Laboratory (1) [WID]**

**CHE 4580 - Biochemistry I (3)**

**CHE 4581 - Biochemistry I Laboratory (1)**

**GHY 3310 - Environmental Remote Sensing (3)**

**GES 3025 - Principles of Paleontology (3)**

**GES 3333 - Geomorphology (3)**

**GES 3680 - Geoarchaeology (3)**

**GES 3800 - Sedimentology and Stratigraphy (3)**

**GES 4630 - Hydrogeology (3)**

**MAT 1120 - Calculus With Analytic Geometry II (4)**

**PHY 1104 - General Physics II (4)**

or

**PHY 1151 - Analytical Physics II (5)**

**BIO 3530-3549 - Selected Topics (1-4)**

**GES 3530-3549 - Selected Topics (1-4)**

**PHY 3530-3549 - Selected Topics (1-4)**

## Social System-Ecosystem Integration Electives (6 Hours)

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Choose at least 6 hours from the following list

BIO 3312 - Environmental Studies (3) [WID]

COM 3117 - Environmental Communication (3)

ECO 4621 - Environmental Economics and Policy (3)

GES 3110 - Environmental Regulation and Enforcement (3)

GES 4501 - Senior Honors Research (1-3)

GES 4900 - Internship in Environmental Science (1-12)

IDS 3010 - H2O: We are Water (3)

GHY 3100 - Weather and Climate (3)

GHY 3110 - Ecoregions and Dynamic Landforms (3)

GES 2301 - Energy Extraction in Appalachia (Past, Present, and Future) (3)

or

A S 2301 - Energy Extraction in Appalachia (Past, Present, and Future) (3)

GES 3703 - Issues in Environmental Geology (3)

PLN 3730 - Land, Property, and Law (3)

PLN 4460 - Environmental Policy and Planning (3)

P S 4670 - Environmental Politics (3)

PHY 3150 - Atmospheric Science (3)

**Environmental Science Capstone Course (at least 1 Hour)**

---

*(Prerequisite: Senior Standing)*

GES 4105 - Analysis and Implications of Environmental Issues (1) [CAP]

GES 4510 - Senior Honors Thesis (3)

**Note**

---

*\*Pre-/Co-requisites are not included in the 120 hours required for the degree.*

**Minor (optional)**

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**Electives (7-8-9-hours)**

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Taken to total a minimum of 120 hours for the degree

## **Total Required (120 Hours)**

# Geology, BA

---

Program Code: 119A

CIP Code: 40.0601

## General Education Requirements (44 Hours)

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### General Education Requirements

CHE 1101/CHE 1110 & CHE 1102/CHE 1120 will fulfill Science Inquiry. MAT 1110 fulfills the Quantitative Literacy requirement.

## Language Requirements (6-12 Hours)

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Completion of 6 semester hours at the \*intermediate level or higher

### Intermediate Language Course I

\*

and

### Intermediate Language Course II

\*

or

### Combined Intermediate Language Course

\*

or

Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

# **Major Requirements (~~54~~ 55 Hours)**

---

*Not including 12 hours from General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

## **Geology (~~37~~ 38 Hours)**

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### **GES 1101 - Introduction to Physical Geology (4)**

or

advisor approved introductory geology course (4)

### **GES 2250 - Evolution of the Earth (4)**

### **GES 2745 - Preparation for Geological Science Careers (4) [WID]**

### **GES 2750 – Preparation for Careers in the Earth and Environmental Sciences (3)**

**[WID]**

### **GES 2751 – Geology Field Methods (2)**

### **GES 3150 - Principles of Structural Geology and Tectonics (3)**

### **GES 3220 - Fundamentals of Mineralogy (3)**

### **GES 3715 - Petrology and Petrography (3)**

### **GES 3800 - Sedimentology and Stratigraphy (3)**

### **GES 4210 - Geology Seminar (1) [CAP]**

### **GES 4835 - Summer Field Geology (6)**

GLY electives at or above 3000 level (excluding **GES 3520**) (3)

## **Geology Electives from the Following List of Laboratory Courses (3 Hours)**

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### **GES 3025 - Principles of Paleontology (3)**

### **GES 3131 - Environmental Geochemistry (3)**

### **GES 3160 - Introduction to Geophysics (3)**

### **GES 3310 - Global Biogeochemical Cycles (3)**

### **GES 3333 - Geomorphology (3)**

### **GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists (3)**

**GES 4630 - Hydrogeology (3)**

**GES 4705 - Engineering Geology (3)**

## **Mathematics/Chemistry/Physics (29 Hours)**

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**MAT 1110 - Calculus With Analytic Geometry I (4)**

**MAT 1120 - Calculus With Analytic Geometry II (4)**

Math or Computer Science Elective (3)

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**PHY 1150 - Analytical Physics I (5)**

**PHY 1151 - Analytical Physics II (5)**

### **Note**

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During the senior year the B.A. student must take and achieve a satisfactory score on a COMPREHENSIVE EXAMINATION covering theoretical and practical aspects in areas of geology. Students who are unsuccessful on portions or all of the examination may retake appropriate portions up to two additional times prior to graduation.

## **Minor Required (12-16 Hours)**

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Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

## **Electives (0-~~4~~3 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Geology, BS

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Program Code: 244A

CIP Code: 40.0601

## General Education Curriculum (44 Hours)

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### **General Education Requirements**

*CHE 1101/1110 and 1102/1120 fulfills the Science Inquiry. MAT 1110 fulfills the Quantitative Literacy requirement.*

## Major Requirements (~~60-61~~58-62 Hours)

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*Not including 12 hours counted in General Education Curriculum, above.*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Geology (~~40~~38-41 Hours)

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#### **GES 1101 - Introduction to Physical Geology (4)**

or

advisor approved introductory geology course (4)

#### **GES 2250 - Evolution of the Earth (4)**

#### **GES 2745 - Preparation for Geological Science Careers (4) [WID]**

#### **GES 2750 – Preparation for Careers in the Earth and Environmental Sciences (3)**

**[WID]**

### **GES 2751 – Geology Field Methods (2)**

**GES 3150 - Principles of Structural Geology and Tectonics (3)**

**GES 3220 - Fundamentals of Mineralogy (3)**

**GES 3715 - Petrology and Petrography (3)**

**GES 3800 - Sedimentology and Stratigraphy (3)**

**GES 4210 - Geology Seminar (1) [CAP]**

**GES 4835 - Summer Field Geology (6)**

3-6 Hours GES electives from the following list of field or laboratory courses (GES [2752](#) 3025, 3310, 3160, 3333, 3455, 4630, 4705, or advisor-approved GES laboratory [/field-based](#) course)

3 Hours GES electives at or above 3000 level (excluding GES 3520)

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### **Mathematics/Chemistry/Physics (26 Hours)**

**MAT 1110 - Calculus With Analytic Geometry I (4)**

**MAT 1120 - Calculus With Analytic Geometry II (4)**

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**PHY 1150 - Analytical Physics I (5)**

**PHY 1151 - Analytical Physics II (5)**

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### **Computer Science, Computing, or Statistics (6-7 Hours)**

Choose at least 6 hours of statistics.

**STT 2810 - Introduction to Statistics (3)**

**STT 3820 - Statistical Methods I (3)**

Or other Geology advisor approved courses based on statistical applications

**Or At Least 6 Hours Of Geology Advisor-Approved Computer Science Or Computing Courses**

---

**C S 1440 - Computer Science I (4)**

**C S 2435 - Introduction to Scientific Programming (4)**

**GHY 2812 - Geospatial Technology in a Changing World (3)**

or

**PLN 2812 - Geospatial Technology in a Changing World (3)**

**GHY 3812 - Geographic Information Systems (3)**

**GHY 4812 - Advanced GIS (3)**

**GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists (3)**

**Note:**

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During the senior year the B.S. (non-teaching) student must take and achieve a satisfactory score on a COMPREHENSIVE EXAMINATION covering theoretical and practical aspects in areas of geology. Students who are unsuccessful on portions or all of the examination may retake appropriate portions up to two additional times prior to graduation.

## **Minor (Optional)**

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### **Electives (~~15-16~~14-18 hours)**

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Taken to total 120 hours for the degree.

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## **Total Required (120 Hours)**

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# Geology - Quantitative Geoscience Concentration, BS

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Program Code: 259\*/259E

CIP Code: 40.0601

Non-Teaching

## General Education Requirements (44 Hours)

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### General Education Requirements

CHE 1101/CHE 1110 & CHE 1102/CHE 1120 fulfill the Science Inquiry. MAT 1110 fulfills Quantitative Literacy.

## Major Requirements (76 Hours)

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*Not including 12 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Geology (31-32 Hours)

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#### GES 1101 - Introduction to Physical Geology (4)

or

advisor approved introductory geology course (4)

#### GES 2250 - Evolution of the Earth (4)

#### GES 2745 - Preparation for Geological Science Careers (4) [WID1] [WID]

[GES 2750 – Preparation for Careers in the Earth and Environmental Sciences \(3\)](#)

[\[WID\]](#)

[GES 2751 – Geology Field Methods \(2\)](#)

[GES 3150 - Principles of Structural Geology and Tectonics \(3\)](#)

[GES 3220 - Fundamentals of Mineralogy \(3\)](#)

[GES 3715 - Petrology and Petrography \(3\)](#)

[GES 3800 - Sedimentology and Stratigraphy \(3\)](#)

[GES 4210 - Geology Seminar \(1\) \[CAP\] \[CAP\]](#)

[GES 4835 - Summer Field Geology \(6\)](#)

## Quantitative Geoscience Concentration (~~18~~17 Hours)

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[GES 3310 - Global Biogeochemical Cycles \(3\)](#)

or

[CHE 3310 - Global Biogeochemical Cycles \(3\)](#)

[PHY 3160 - Introduction to Geophysics \(3\)](#)

or

[GES 3160 - Introduction to Geophysics \(3\)](#)

[GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists \(3\)](#)

[GES 4630 - Hydrogeology \(3\)](#)

[GES 4705 - Engineering Geology \(3\)](#)

## Geoscience Electives - Choose (~~3~~2 Hours)

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[GES 2752 – Environmental Science Field Methods \(1\)](#)

[GES 3025 - Principles of Paleontology \(3\)](#)

[GES 3333 - Geomorphology \(3\)](#)

[GES 3680 - Geoarchaeology \(3\)](#)

[GES 4501 - Senior Honors Research \(1-3\)](#)

[GES 4510 - Senior Honors Thesis \(3\)](#)

## Mathematics/Chemistry/Physics/Statistics (39 Hours)

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*(Taking all 5 math courses will earn the math minor. The extra MAT course will count as a non-GLY course elective below.)*

**MAT 1110 - Calculus With Analytic Geometry I (4)**

**MAT 1120 - Calculus With Analytic Geometry II (4)**

**MAT 2130 - Calculus With Analytic Geometry III (4)**

**MAT 2240 - Introduction to Linear Algebra (3)**

or

**MAT 3130 - Introduction to Differential Equations (3)**

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**PHY 1150 - Analytical Physics I (5)**

**PHY 1151 - Analytical Physics II (5)**

**STT 2810 - Introduction to Statistics (3)**

**Statistics & Computational Courses - Choose at Least (3 Hours)**

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**STT 3820 - Statistical Methods I (3)**

**C S 1440 - Computer Science I (4)**

**C S 2435 - Introduction to Scientific Programming (4)**

**MAT 2240 - Introduction to Linear Algebra (3)**

or

**MAT 3130 - Introduction to Differential Equations (3)**

Elective - Advisor-approved computational or statistical elective (3)

**Note**

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During the senior year the B.S. (non-teaching) student must take and achieve a satisfactory score on a COMPREHENSIVE EXAMINATION covering theoretical and practical aspects in areas of geology. Students who are unsuccessful on portions or all of the examination may retake appropriate portions up to two additional times prior to graduation.

## **Minor (Optional)**

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## **Total Required (120 Hours)**

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# Geology - Paleontology Concentration, BS

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Program Code: 259\*/259D

CIP Code: 40.0601

Non-Teaching

## General Education Requirements (44 Hours)

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### General Education Requirements

CHE 1101/CHE 1110 & CHE 1102/CHE 1120 fulfill the Science Inquiry. MAT 1110 fulfills the Quantitative Literacy requirement.

## Major Requirements (~~73-75~~74-76 Hours)

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*Not including 12 hours from General Education Requirements, above*

2.0 major GPA required for graduation. Major GPA calculation includes all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Geology (~~34~~35 Hours)

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#### GES 1101 - Introduction to Physical Geology (4)

or

advisor approved introductory geology course (4)

#### GES 2250 - Evolution of the Earth (4)

#### GES 2745 - Preparation for Geological Science Careers (4) [WID1] [WID]

[GES 2750 – Preparation for Careers in the Earth and Environmental Sciences \(3\)](#)

[\[WID\]](#)

[GES 2751 – Geology Field Methods \(2\)](#)

[GES 3025 - Principles of Paleontology \(3\)](#)

[GES 3150 - Principles of Structural Geology and Tectonics \(3\)](#)

[GES 3220 - Fundamentals of Mineralogy \(3\)](#)

[GES 3715 - Petrology and Petrography \(3\)](#)

[GES 3800 - Sedimentology and Stratigraphy \(3\)](#)

[GES 4210 - Geology Seminar \(1\) \[CAP1\]\[CAP\]](#)

[GES 4835 - Summer Field Geology \(6\)](#)

## **Geology & Paleontology Electives (6 Hours)**

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[GES 2857 - Paleontology Field and Museum Methods \(1-3\)](#)

[GES 3131 - Environmental Geochemistry \(3\)](#)

[GES 3264 - Paleontological Laboratory Techniques and Analytical Methods \(1-3\)](#)

[GES 3310 - Global Biogeochemical Cycles \(3\)](#)

[GES 3333 - Geomorphology \(3\)](#)

[GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists \(3\)](#)

[GES 4501 - Senior Honors Research \(1-3\)](#)

[GES 4510 - Senior Honors Thesis \(3\)](#)

[GES 4630 - Hydrogeology \(3\)](#)

[GES 4705 - Engineering Geology \(3\)](#)

## **Evolutionary Component (18 Hours)**

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[BIO 1802 - Biological Concepts II \(4\)](#)

### **Evolutionary Electives - Choose (14 Hours)**

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[ANT 2230 - Biological Anthropology \(3\)](#)

[ANT 3200 - Zooarchaeology \(3\)](#)

[ANT 3220 - Human Biological Variation \(3\) \[WID\]](#)

[ANT 3300 - Human Osteology \(3\)](#)

### **BIO 1801 - Biological Concepts I (4)**

Any BIO course above the 2000 level (except **BIO 2800, BIO 3520, BIO 4550, BIO 4563**)

### **ES 2040 - Human Anatomy (4)**

## **Mathematics/Chemistry/Physics (21 Hours)**

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### **MAT 1110 - Calculus With Analytic Geometry I (4)**

### **MAT 1120 - Calculus With Analytic Geometry II (4)**

### **CHE 1101 - Introductory Chemistry I (3)**

### **CHE 1110 - Introductory Chemistry Laboratory I (1)**

### **CHE 1102 - Introductory Chemistry II (3)**

### **CHE 1120 - Introductory Chemistry Laboratory II (1)**

### **PHY 1150 - Analytical Physics I (5)**

## **Statistics Course (6-8 Hours)**

---

### **STT 2810 - Introduction to Statistics (3)**

or

### **STT 2820 - Reasoning with Statistics (4)**

### **STT 3820 - Statistical Methods I (3)**

or

### **STT 3850 - Statistical Data Analysis I (4)**

## **Note**

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*During the senior year the B.S. (non-teaching) student must take and achieve a satisfactory score on a COMPREHENSIVE EXAMINATION covering theoretical and practical aspects in areas of geology. Students who are unsuccessful on portions or all of the examination may retake appropriate portions up to two additional times prior to graduation.*

## **Minor (optional)**

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## **Electives (~~1-3~~0-2 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Geology - Environmental Geology Concentration, BS

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Program Code: 259\*/259C

CIP Code: 40.0601

## General Education Requirements (44 Hours)

---

### General Education Requirements

CHE 1101/CHE 1110 & CHE 1102/CHE 1120 fulfill Science Inquiry perspective and MAT 1110 fulfills Quantitative Literacy in general education. Some general education requirements may be double-counted in the major. Please see your advisor for information.

## Major Requirements (~~65~~67 Hours)

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*not including 12 hours from General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Required Geology Courses (~~19~~21 Hours)

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#### GES 1101 - Introduction to Physical Geology (4)

or

advisor approved introductory geology course (4)

#### GES 2250 - Evolution of the Earth (4)

#### GES 2745 - Preparation for Geological Science Careers (4) [WID1][WID]

**GES 2750- Preparation for Careers in the Earth and Environmental Sciences (3)**

[WID]

**GES 2751 – Geology Field Methods (2)**

**GES 2752 – Environmental Science Field Methods (1)**

**GES 3150 - Principles of Structural Geology and Tectonics (3)**

**GES 3800 - Sedimentology and Stratigraphy (3)**

**GES 4210 - Geology Seminar (1) [CAP][CAP]**

## **Environmental Geology Courses (24 Hours)**

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**GES 3310 - Global Biogeochemical Cycles (3)**

or

**CHE 3310 - Global Biogeochemical Cycles (3)**

**GES 3160 - Introduction to Geophysics (3)**

**GES 3333 - Geomorphology (3)**

**GES 3703 - Issues in Environmental Geology (3)**

**GES 4630 - Hydrogeology (3)**

**GES 4705 - Engineering Geology (3)**

## **Geology Electives - Choose (6 Hours)**

---

**GES 3025 - Principles of Paleontology (3)**

**GES 3220 - Fundamentals of Mineralogy (3)**

**GES 3455 - Quantitative Data Analysis for Earth and Environmental Scientists (3)**

**GES 3680 - Geoarchaeology (3)**

**GES 3715 - Petrology and Petrography (3)**

**GES 4501 - Senior Honors Research (1-3)**

**GES 4510 - Senior Honors Thesis (3)**

**GES 4835 - Summer Field Geology (6)**

## **Math/Chemistry/Physics/Statistics Courses (19 Hours)**

---

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**MAT 1110 - Calculus With Analytic Geometry I (4)**

**PHY 1103 - General Physics I (4)**

**STT 2810 - Introduction to Statistics (3)**

or

advisor approved statistics course (3)

## **Associated Environmental Electives (15 Hours)**

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**ECO 2620 - Environmental and Resource Economics (3)**

**FIN 3010 - Survey of Finance (3)**

**GES 3110 - Environmental Regulation and Enforcement (3)**

Advisor approved, computer intensive course (3)

**PLN 4460 - Environmental Policy and Planning (3)**

**P S 2130 - State and Local Government (3)**

**P S 4670 - Environmental Politics (3)**

**IDS 3010 - H2O: We are Water (3)**

**GHY 2812 - Geospatial Technology in a Changing World (3)**

or

**PLN 2812 - Geospatial Technology in a Changing World (3)**

**GHY 3310 - Environmental Remote Sensing (3)**

**GHY 3812 - Geographic Information Systems (3)**

**GHY 4812 - Advanced GIS (3)**

## **Note**

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*During the senior year, the B.S. Geology with an Environmental Geology concentration student must take and achieve a satisfactory score on a comprehensive examination covering*

*theoretical and practical aspects of areas of geology. Students who are unsuccessful on any portion or all of the examination may retake the appropriate portion(s) up to two additional times before graduation.*

## **Minor (optional)**

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### **Electives (~~14~~9 Hours)**

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Taken to total 120 hours for the degree

### **Total Required (120 Hours)**

# Geology - Earth/Environmental Science, Secondary Education Concentration, BS

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Program Code: 259\*/259G

CIP Code: 40.0601

## General Education Requirements (44 Hours)

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### General Education Requirements

GES 1101 and GES 1103 fulfill Science Inquiry in general education. MAT 1110 fulfills the Quantitative Literacy requirement.

## Professional Education Requirements (21 Hours)

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Not including 3 semester hours already counted in Gen Ed, above

A minimum grade of "C" (2.0) is required in each professional education course. C I 2300 & F DN 2400 are required prior to admission to Teacher Education.

\*Admission to Teacher Education required.

Minimum 2.7 cumulative GPA required to graduate.

**C I 2300 - Teaching and Learning in the Digital Age (2)**

**F DN 2400 - Critical Perspectives on Learning and Teaching (2)**

**PSY 3010 - Psychology Applied to Teaching (3)** (double counts in Gen Ed)

**SPE 3300 - Creating Inclusive Learning Communities (3)** \*

**C I 3400 - Policies and Practices in Educational Assessment (2)** \*

**C I 4900 - Internship/Student Teaching (6-12) [CAP]** [CAP]

Students must complete 12 hours of Student Teaching

Cumulative 2.7 GPA; All courses in professional core must be completed with minimum grades of "C" (2.0) prior to student teaching, along with other courses (including methods and reading) identified within the major.

## Proficiencies

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Reading

English

### Note

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To be admitted to the Teacher Education Program students must have a minimum 2.7 cumulative GPA and take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.

## Major Requirements (~~52~~53 Hours)

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Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian. *Since many upper level Geology courses require **GES 1101** as a prerequisite, it is highly recommended that students complete this course during their freshman year.*

## Geology Courses (~~27~~28 Hours)

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**GES 1101 - Introduction to Physical Geology (4)**

**GES 1103 - Environmental Change, Hazards, and Resources (4)**

**GES 1105 - Oceanography (4)**

**GES 2250 - Evolution of the Earth (4)**

**GES 2745 - Preparation for Geological Science Careers (4) [WID]**

**GES 2750 – Preparation for Careers in the Earth and Environmental Sciences (3)**

**[WID]**

**GES 2751 – Geology Field Methods (2)**

**GES 3220 - Fundamentals of Mineralogy (3)**

**GES 3333 - Geomorphology (3)**

**GES 3521 - Secondary Science Field Experience (1)**

## **Chemistry or Physics - Choose (12 Hours)**

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**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**PHY 1103 - General Physics I (4)**

**PHY 1104 - General Physics II (4)**

## **Additional Science (25 Hours)**

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**G S 4403 - Teaching Science in Middle and High Schools (3) [WID]** [WID] (*minimum grade of "C" (2.0) required*)

**G S 4404 - The Meaning and Nature of Science (3) [WID]** [WID]

**AST 1001 - Introductory Astronomy I - The Solar System (4)**

**AST 1002 - Introductory Astronomy II - Stars and Galaxies (4)**

**BIO 1801 - Biological Concepts I (4)**

**GHY 3100 - Weather and Climate (3)**

**MAT 1110 - Calculus With Analytic Geometry I (4)**

## **Note**

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During the senior year, the B.S. Geology Teaching Licensure degree student must take the Praxis II subject area exam: Earth/Space Science (#0570) portion. The score should be reported to Appalachian State University.

## **Minor (Optional)**

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## **Electives (3-2 Hours)**

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## **Total Required (120 Hours)**

# History,Social Studies Education, BS

Program Code: 116A

CIP Code: 13.1328

Teaching

## General Education Requirements (44 Hours)

### General Education Requirements

*Some general education requirements may be double-counted in the major. Please see your advisor for information.*

## Professional Education Requirements (21 Hours)

Not including 3 semester hours already counted in Gen Ed, above.[\\_](#)

A minimum grade of "C" (2.0) is required in each professional education course. [\*\*C I\*\*](#)

[\*\*2300 & FDN 2400\*\*](#) are required prior to admission to Teacher Education.[\\_](#)

Courses marked with an \* require Admission to Teacher Education.

Minimum 2.7 cumulative GPA required to graduate.

[\*\*C I 2300 - Teaching and Learning in the Digital Age \(2\)\*\*](#)

[\*\*FDN 2400 - Critical Perspectives on Learning and Teaching \(2\)\*\*](#)

[\*\*PSY 3010 - Psychology Applied to Teaching \(3\)\*\*](#) (double counts in Gen Ed)

[\*\*SPE 3300 - Creating Inclusive Learning Communities \(3\)\*\*](#) \*

[\*\*C I 3400 - Policies and Practices in Educational Assessment \(2\)\*\*](#) \*

[\*\*C I 4900 - Internship/Student Teaching \(6-12\)\*\*](#) [CAP]

Students must complete 12 hours of Student Teaching

Cumulative 2.7 GPA; All courses in professional core must be completed with minimum grades of "C" (2.0) prior to student teaching, along with other courses (including methods and reading) identified within the major.

## Proficiencies

---

Reading

English

**Note:** To be admitted to the Teacher Education Program students must have a minimum 2.7 cumulative GPA and take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exam is required for student teaching.

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~~To be admitted to the Teacher Education Program students must have a minimum 2.7 cumulative GPA and take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.~~

## Major Requirements (48 Hours)

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Not including 9 hours in Major Requirements, below counted in General Education Requirements above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

*At least 3 hours 2000 level HIS is required prior to taking a 3000 level HIS course; at least 3 hours 3000 level HIS course is required prior to taking a 4000 level HIS course. No more than 18 semester hours from the 2000 level including HIS 2201, HIS 2204 and HIS 2800, may be*

*included to fulfill Major Requirements. [1000 level HIS courses are not permitted to count towards History major requirements.](#)*

## **Regional History Requirements (15 Hours)**

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**HIS 2201 - Survey of American Civilization to 1876 (3)**

**HIS 2204 - Survey of American Civilization since 1876 (3)**

European History Courses (3 Hours)

Non-western History Courses (3 Hours) [Africa, Asia, Latin America, Middle East]

Global History (3 Hours)

## **History Teaching Focus (3~~9~~ Hours)**

---

**HIS 3626 - Introduction to Secondary History Education (3)**

**HIS 3632 – Methods for Secondary History/Social Studies Education (3)\* Minimum grade “C” (2.0) required. Must be taken in the semester immediately prior to student teaching. Includes field experience.**

Choose one of the following:

**HIS 3630 - Teaching History with New Media (3)**

or

**HIS 3634 - Teaching Controversy in History (3)**

## **History Elective Courses (12 Hours)**

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*Choose 12 hours HIS electives in keeping with requirements in italics above. Majors are encouraged to select at least 3 sh of HIS electives with a thematic focus (i.e., poverty, gender, race, or class).*

## **Writing in the Discipline (3 Hours)**

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**HIS 2800 - Writing History (3) [WID1] [WID]**

## **Senior Level Requirements (Choose 3 Hours)**

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Only 3 hours of [\*\*HIS 4100\*\*](#) can count in the major

[\*\*HIS 4100 - Senior Seminar \(3\)\*\*](#) [CAP] (minimum grade of "C" (2.0) required)

[\*\*HIS 4510 - Senior Honors Thesis \(3\)\*\*](#) [CAP]

### **Social Studies Courses (18 Hours) Secondary (Grades 9-12) Social Studies Concentration (15 Hours)**

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[\*\*HIS 3524 - World Economic History \(3\)\*\*](#)

[\*\*HIS 3626 - Introduction to Secondary History Education \(3\)\*\*](#)

[\*\*P S 1100 - American National Government and Politics \(3\)\*\*](#)

[\*\*P S 2130 - State and Local Government \(3\)\*\*](#)

or

[\*\*P S 3430 - North Carolina Politics \(3\)\*\*](#) (Preferred Course)

[\*\*CTE 1590 - Personal Money Management \(3\)\*\*](#)

### **Social Studies Electives – Choose Two**Choose one of the following: \*

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~~Consult the director on other possible social studies electives~~

[\*\*ECO 2030 - Principles of Microeconomics \(3\)\*\*](#)

[\*\*ECO 2040 - Principles of Macroeconomics \(3\)\*\*](#)

[\*\*GHY 1020 - Geographic Diversity and Globalization \(3\)\*\*](#)

[\*\*GHY 1040 - Introduction to Human Geography \(3\)\*\*](#)

[\*\*GLS 2000 - Contemporary Global Issues \(3\)\*\*](#)

[\*\*PSY 1200 - Psychological Foundations \(3\)\*\*](#)

[\*\*REL 1110 - Religions of the World \(3\)\*\*](#)

[\*\*SOC 1000 - The Sociological Perspective \(3\)\*\*](#)

[\*\*SOC 1100 - Social Problems in American Society \(3\)\*\*](#)

[\*\*\\*Consult the director on other possible 9-12 Social Studies electives\*\*](#)

## **Methods Course (3 Hours)**

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*\*Minimum grade "C" (2.0) required*

**C I 3100 - Teaching High School Social Studies (3)** \* *(Must be taken in semester immediately prior to student teaching.)*

## **Minor (Optional)**

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## **Electives (7 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# History - Applied and Public History Concentration, BS

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Program Code: 246\*/246B

CIP Code: 54.0101

## General Education Requirements (44 Hours)

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### **General Education Requirements**

*Some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information.*

## Major Requirements (63 Hours)

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2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

*At least 3 hours 2000 level HIS is required prior to taking a 3000 level HIS course; at least 3 hours 3000 level HIS course is required prior to taking a 4000 level HIS course. No more than 1515 semester hours from the 2000 level, ~~which includes HIS 2800~~, may be included used to fulfill Major History Core Requirements ([HIS 2800](#), [Regional History Requirements](#), [History Electives](#)), and no more than 9 semester hours at the 2000 level may be used to fulfill requirements in the concentration. 1000 level HIS courses are not permitted to count towards History major requirements.*

## Writing in the Discipline (3 Hours)

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## **HIS 2800 - Writing History (3) [WID] [WID]**

### **Regional History Requirements (12 Hours)**

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*Choose 3 hours from each of these four areas:*

European History

United States History

Non-western History [Africa, Asia, Latin America, Middle East]

Global History

### **History Elective Courses (18 Hours)**

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*Choose 18 hours HIS electives in keeping with requirements in italics above.*

### **Senior Level Capstone (3 Hours) - Choose One**

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Only 3 hours of **HIS 4100** can count in the major

**HIS 4100 - Senior Seminar (3)** [CAP] \* (\*minimum grade of "C" (2.0) required)

**HIS 4510 - Senior Honors Thesis (3)** [CAP]

### **Public History Introduction (3 Hours)**

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### **HIS 3575 - Public History: An Introduction to the Field (3)**

### **Applied or Public History Concentrations (24 Hours)**

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The Career-Oriented Concentration consists of a minimum of 24 semester hours drawn from courses below or any other approved course.

*No more than 3 hours from the 1000 level may be used to fulfill concentration requirements.*

*At least 12 hours of the concentration must be at or above the 3000 level.*

**ACC 1050 - Survey of Accounting (3)**

**ACC 2100 - Principles of Accounting I (3)**

**ADM 3010 - History of Apparel (3)**

**ANT 1420 - Archaeology and the Human Past (3)**

**ANT 2221 - Archaeology (3)**

**ANT 2235 - North American Archaeology (3)**

**ART 3112 - Art Exhibitions in Contemporary Culture (3)**

ART 3227 - Special Topics in Photography (3)

ARH 3600 - History of Modern Art (3) [WID]

COM 2101 - Public Speaking (3)

C S 1410 - Introduction to Computer Applications (2)

ECO 2030 - Principles of Microeconomics (3)

ECO 2040 - Principles of Macroeconomics (3)

ENG 3050 - Studies in Folklore (3)

ENG 3700 - Technical Writing (3) [WID]

CTE 1300 - Housing Environments (3)

FL 1010-1050 (3)

GHY 1020 - Geographic Diversity and Globalization (3)

GHY 3812 - Geographic Information Systems (3)

HIS 3238 - America's National Parks (3)

HIS 3600 - Selected Topics in Public History (3)

HIS 4900 - Internship: Experiential Learning in Public and Applied History (3-12)

IND 1001 - Technical Drafting (4)

IND 1010 - CADD I: Imaging (3)

IND 2401 - History of Furniture Design (3)

INT 2300 - History of Interior Design and Architecture I (3)

MGT 3010 - Survey of Management (3)

P A 4665 - Public Management (3) [WID]

PLN 2410 - Town, City and Regional Planning (3)

PLN 3730 - Land, Property, and Law (3)

P S 1100 - American National Government and Politics (3)

P S 2130 - State and Local Government (3)

R M 2130 - Principles of Commercial Recreation and Tourism (3)

R M 2210 - Recreation Site and Facility Management (3)

R M 3154 - Outdoor Experiential Education Laboratory (3)

R M 3155 - Wilderness First Responder (3)

R M 3241 - Travel and Tourism (3)

R M 3630 - Interpretive Methods (3)

S D 2400 - Principles of Sustainable Development (3)

SOC 1000 - The Sociological Perspective (3)

SOC 1100 - Social Problems in American Society (3)

**SOC 3710 - Sociology of Appalachian Communities (3)**

**SOC 3800 - Sociology of War (3)**

**SOC 4850 - Global Sociology (3)**

**Minor (Optional)**

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## **Electives (13 Hours)**

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Taken to total 120 hours for the degree

**Total Required (120 Hours)**

# History - Multidisciplinary Concentration, BS

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Program Code: 246\*/246C

CIP Code: 54.0101

## General Education Requirements (44 Hours)

---

### **General Education Requirements**

*Some general education requirements may be double-counted in the major. Please see your advisor for information.*

## Major Requirements (63 Hours)

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2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

*At least 3 hours 2000 level HIS is required prior to taking a 3000 level HIS course; at least 3 hours 3000 level HIS course is required prior to taking a 4000 level HIS course. No more than 15 semester hours from the 2000 level, which includes [HIS 2800](#), may be included used to fulfill major History Core requirements Requirements (HIS 2800, Regional History Requirements, History Electives), and no more than 9 semester hours at the 2000 level may be used to fulfill requirements in the concentration. 1000 level HIS courses are not permitted to count towards History major requirements.*

## Writing in the Discipline (3 Hours)

---

**HIS 2800 - Writing History (3) [WID] [WID]**  
**Regional History Requirements (12 Hours)**

---

Choose 3 hours from each of these four areas:

- European History
- United States History
- Non-western History [Africa, Asia, Latin America, Middle East]
- Global History

**History Elective Courses (18 Hours)**

---

Choose 18 hours HIS electives in keeping with requirements in italics above.

**Senior Level Capstone (3 Hours) - Choose One**

---

Only 3 hours of **HIS 4100** can count in the major

**HIS 4100 - Senior Seminar (3) \* [CAP]**

**HIS 4510 - Senior Honors Thesis (3) [CAP]**

**Career-Oriented Concentrations (27 Hours)**

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Multidisciplinary History

The Career-Oriented Concentration consists of a minimum of 27 semester hours drawn from any department or discipline. Examples of general areas of career-orientation, around one of which the student may design a program are: Business, Government Service or Law. **All programs must be planned in consultation with a B.S. (non-teaching) degree advisor in the history department and are subject to departmental approval.**

Area of Career Orientation

**Note**

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No more than 3 hours from the 1000 level may be used to fulfill concentration requirements

At least 15 hours of the concentration must be at or above the 3000 level.

## **Minor (optional)**

---

### **Electives (13 Hours)**

---

Taken to total 120 hours for the degree

### **Total Required (120 Hours)**

# History Minor

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Minor Code: 246

CIP Code: 54.0101

A minor in history consists of a minimum of 18 hours ~~at or above the 2000 level, with no more than 3 hours at the 1000 level and~~ at least 9 hours of which must be from courses at the 3000 level or above. At least one course must come from each of ~~three-four~~ areas: United States, European, ~~and~~ the Non-western world, and Global history.

## Courses

---

United States history

European history

Non-western history

Global History

## Total Required (18 Hours)

---

A minimum of 9 hours must be ‘in residence,’ i.e. courses taken through ASU (can include study abroad, ASU online courses, etc.).

U\_CAS\_HIS\_2020\_8 Addendum

Change course descriptions for HIS 1110, 1120, 1130, 1200, 1400, 1501, 1520, 1525, and 1700 to remove prohibition against using 1000-level HIS courses toward HIS major and minor.

HIS 1110 - History and Culture (3)

Delete: NOTE: HIS 1110 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

HIS 1120 - Society and History (3)

Delete: NOTE: HIS 1120 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

HIS 1130 - Themes in Global History (3)

Delete: NOTE: HIS 1130 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

HIS 1200 - American History (3)

Delete: NOTE: HIS 1200 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

HIS 1400 - World Empires (3)

Delete: NOTE: HIS 1400 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

HIS 1501 - Revolution and Social Change in World History (3)

Delete: NOTE: HIS 1501 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

Current

HIS 1520 - Honors: Patterns of Global History (3)

HIS 1520 cannot be repeated for credit and does not count toward the requirements for a History major or minor.

**Proposed**

HIS 1520 - Honors: Patterns of Global History (3)

NOTE: Cannot be repeated for credit.

**Current**

HIS 1525 - Honors: Problems in Global History (3)

HIS 1525 cannot be repeated for credit and does not count toward the requirements for a History major or minor.

**Proposed**

HIS 1525 - Honors: Problems in Global History (3)

NOTE: Cannot be repeated for credit.

HIS 1700 - The Making of Europe (3)

Delete: HIS 1700 DOES NOT COUNT TOWARD THE REQUIREMENTS FOR A HISTORY MAJOR OR MINOR.

# History, BA

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Program Code: 254A

CIP Code: 54.0101

## General Education Requirements (44 Hours)

---

### **General Education Requirements**

*Some general education requirements may be double-counted in the major. Please see your advisor for information.*

### **Language Requirements (6-12 Hours)**

---

Completion of 6 semester hours at the \*intermediate level or higher

#### **Intermediate Language Course I**

\*

and

#### **Intermediate Language Course II**

\*

or

#### **Combined Intermediate Language Course**

\*

or

Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

# **Major Requirements (36 Hours)**

---

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

*At least 3 hours 2000 level HIS is required prior to taking a 3000 level HIS course; at least 3 hours 3000 level HIS course is required prior to taking a 4000 level HIS course. No more than 15 15 semester hours from the 2000 level, which includes HIS 2800, may be included used to fulfill major History Core requirements Requirements (HIS 2800, Regional History Requirements, History Electives). 1000 level HIS courses are not permitted to count towards History major requirements.*

## **Writing in the Discipline (3 Hours)**

---

### **HIS 2800 - Writing History (3) [WID] [WID]**

## **Regional History Requirements (12 Hours)**

---

Choose 3 hours from each of these four areas:

European History

United States History

Non-western History [Africa, Asia, Latin America, Middle East]

Global History

## **History Elective Courses (18 Hours)**

---

*Choose 18 hours HIS electives in keeping with requirements in italics above.*

### **Senior Level Capstone (3 Hours) - Choose One**

---

Only 3 hours of **HIS 4100** can count in the major

### **HIS 4100 - Senior Seminar (3) \* [CAP]**

**HIS 4510 - Senior Honors Thesis (3) [CAP]**

## **Minor Required (12-21 Hours)**

---

Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian. History majors earning the BA degree should consider a minor that complements their academic or professional program.

## **Electives (13-22 Hours)**

---

Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

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# Documentary Studies Minor

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Minor Code: 914

CIP Code: TBD

A minor in documentary studies consists of 18 total hours from the list below. At least two courses (6 hours) must be required courses, two courses (6 hours) must be documentary production courses, and two courses (6 hours) must be listed elective courses.

## Required Courses (6 Hours)

---

[IDS 2211 - Exploring the Documentary Form \(3\)](#)

[IDS 4211 - Advanced Documentary Projects \(3\)](#) (Admission by approval of instructor)

## Choose Two Documentary Production Courses (6 Hours)

---

[C I 4740 - Photography and Digital Imaging \(3\)](#)

[C I 4825 - Non-fiction Film and Video \(3\)](#)

or

[C I 4840 - Video Production and Story \(3\)](#)

[C I 4860 - Audio Documentary Production \(3\)](#)

or

[COM 2316 - Audio Production \(3\)](#)

[COM 2316 - Audio Production \(3\)](#)

[COM 2416 - Video Production I \(3\)](#)

### **COM 3320 - Audio-Video Production (3)**

Other production courses, as approved by the Interdisciplinary Studies Department

## **Choose Two Elective Courses (6 Hours)**

---

### **ART 3230 - Photography as Social Critique (3)**

or

### **IDS 3230 - Photography as Social Critique (3)**

### **ENG 2170 - Introduction to Film (3)**

### **ENG 4170 - Film Theory and Criticism (3)**

### **IDS 3110 - Story and Medium (3)**

IDS 3211: Documentary Studies Seminar (3)

Other courses, as approved by the Interdisciplinary Studies Department

## **Total Required (18 Hours)**

---

A minimum of 9 hours must be “in residence,” i.e. courses taken through ASU (can include study abroad, ASU online courses, etc.).

# Creative Engagement and Social Change Minor

---

Minor Code: 918

CIP Code: TBD

A minor in creative engagement and social change consists of 18 total hours from the list below. At least 9 hours of which must be at the 3000-level or higher. At least two courses (6 hours) must be required courses, two courses (6 hours) must be creative practice courses, and two courses (6 hours) must be listed elective courses.

## Choose Two Required Courses (6 Hours)

---

### [ART 2019 - Art for Social Change \(3\)](#)

IDS 3260 – Creativity: Methods & Practice (3)

### [P S 3910 - Art, Culture, and Politics \(3\)](#)

## Choose Two Creative Practice Courses (6 Hours)

---

### [ART 2019 - Art for Social Change \(3\)](#) (if not used above)

### [ART 3230 - Photography as Social Critique \(3\)](#)

or

### [IDS 3230 - Photography as Social Critique \(3\)](#)

### [IDS 2211 - Exploring the Documentary Form \(3\)](#)

IDS 3260 – Creativity: Methods & Practice (3) (if not used above)

### [IDS 4211 - Advanced Documentary Projects \(3\)](#)

### [THR 2017 - Theatre for Social Change \(3\)](#)

**WRC 3203 - Why Art? Ways of Responding to the World Around Us (3)**

**WRC 3665 - Black Mountain College (3)**

Other creative practice courses, as approved by the Interdisciplinary Studies Department

## **Choose Two Elective Courses (6 Hours)**

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**ANT 4270 - Arts of Resistance (3)**

**C I 2350 - Critical Media Literacy and/as Civic Engagement (3)**

**C I 4830 - Media Literacy (3)**

**C I 4835 - Media: Image, Influence, and Identity (3)**

**COM 2181 - Introduction to Rhetorical Theory (3)**

**COM 3117 - Environmental Communication (3)**

**ENT 3650 - Social Entrepreneurship (3)**

**GWS 3350 - Gender, Media and Popular Culture (3)**

**IDS 3050 - Social Media and Community Engagement (3)**

**MUS 2023 - Music and Gender (3)**

**MUS 2615 - Music and Propaganda (3)**

**P S 3910 - Art, Culture, and Politics (3)** (if not used above)

**SOC 2040 - Popular Culture (3)**

**SOC 3750 - Propaganda, Media and Society (3)**

**SOC 4250 - Social Movements (3)**

Other courses, as approved by the Interdisciplinary Studies Department

## **Total Required (18 Hours)**

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A minimum of 9 hours must be “in residence,” i.e. courses taken through ASU (can include study abroad, ASU online courses, etc.).

# Mathematics, BA

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Program Code: 261A

CIP Code: 27.0101

## General Education Requirements (44 Hours)

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### **General Education Requirements**

**MAT 1110** will count toward Quantitative Literacy general education requirement.

## Language Requirements (6-12 Hours)

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Completion of 6 semester hours at the \*intermediate level or higher

### **Intermediate Language Course I**

\*

and

### **Intermediate Language Course II**

\*

or

### **Combined Intermediate Language Course**

\*

or

Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

# **Major Requirements (~~31~~38 Hours)**

---

*Not including 4 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

## **Mathematics Major Requirements Core (~~29-30~~19 Hours)**

---

**MAT 1110 - Calculus With Analytic Geometry I (4)**

**MAT 1120 - Calculus With Analytic Geometry II (4)**

**MAT 2130 - Calculus With Analytic Geometry III (4)**

**MAT 2110 - Techniques of Proof (4)**

**MAT 2130 - Calculus With Analytic Geometry III (4)**

**MAT 2240 - Introduction to Linear Algebra (3)**

### **Choose One**

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**MAT 3130 - Introduction to Differential Equations (3)**

**STT 3850 - Statistical Data Analysis I (4)**

### **Choose One WID Course**

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*(Pre for WID: R C 2001, MAT 2110 or MAT 2510)*

**MAT 3110 - Introduction to Modern Algebra (3) [WID]**

**MAT 3220 - Introduction to Real Analysis I (3) [WID]**

### **Choose One 4 Hour Combination**

---

**Courses must be taken in same semester;**

**[CAP] is Capstone course; each has corequisite of first class in each pair below**

**MAT 4010 - Current Topics in Mathematics (1-3)**

**MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]**

-

[MAT 4140 - Differential Geometry \(3\)](#)

[MAT 4141 - Differential Geometry Capstone \(1\) \[CAP\]](#)

[MAT 4220 - Introduction to Real Analysis II \(3\)](#)

[MAT 4221 - Introduction to Real Analysis II Capstone \(1\) \[CAP\]](#)

[MAT 4310 - Numerical Methods \(3\)](#)

[MAT 4311 - Numerical Methods Capstone \(1\) \[CAP\]](#)

[MAT 4340 - Introduction to Operations Research \(3\)](#)

[MAT 4341 - Introduction to Operations Research Capstone \(1\) \[CAP\]](#)

[MAT 4420 - Dynamical Systems Theory \(3\)](#)

[MAT 4421 - Dynamical Systems Theory Capstone \(1\) \[CAP\]](#)

[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)

[MAT 4591 - Advanced Topics in Differential Equations Capstone \(1\) \[CAP\]](#)

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4711 - Introduction to Topology Capstone \(1\) \[CAP\]](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4721 - Abstract Algebra Capstone \(1\) \[CAP\]](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

[MAT 4991 - Numerical Linear Algebra Capstone \(1\) \[CAP\]](#)

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4821 - Design and Analysis of Experiments Capstone \(1\) \[CAP\]](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4831 - Linear Regression Models Capstone \(1\) \[CAP\]](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4841 - Regression and Time Series Forecasting Capstone \(1\) \[CAP\]](#)

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[STT 4880 - Mathematical Statistics \(3\)](#)

[STT 4881 - Mathematical Statistics Capstone \(1\) \[CAP\]](#)

## Breadth Requirements (10 Hours)

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Choose one:

[MAT 3110 - Introduction to Modern Algebra \(3\) \[WID\]](#)

[MAT 3220 - Introduction to Real Analysis I \(3\) \[WID\]](#)

Choose one:

[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)

Choose one:

[STT 3250 - Fundamentals of Probability \(4\)](#)

[STT 3850 - Statistical Data Analysis I \(4\)](#)

## Capstone Requirement (1 Hour)

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[MAT 4040 - Mathematics Capstone \(1\)](#)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

## Depth Requirements (6 Hours)

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Choose one:

[MAT 4140 - Differential Geometry \(3\)](#)

- [MAT 4220 - Introduction to Real Analysis II \(3\)](#)  
[MAT 4310 - Numerical Methods \(3\)](#)  
[MAT 4340 - Introduction to Operations Research \(3\)](#)  
[MAT 4420 - Dynamical Systems Theory \(3\)](#)  
[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)  
[MAT 4710 - Introduction to Topology \(3\)](#)  
[MAT 4720 - Abstract Algebra \(3\)](#)  
[MAT 4990 - Numerical Linear Algebra \(3\)](#)

Choose additional courses from the immediately preceding list or:

- [MAT 4010 - Current Topics in Mathematics \(1-3\)](#)  
[MAT 4530-4549 - Selected Topics \(1-4\)](#)  
[STT 4820 - Design and Analysis of Experiments \(3\)](#)  
[STT 4830 - Linear Regression Models \(3\)](#)  
[STT 4840 - Regression and Time Series Forecasting \(3\)](#)  
[STT 4880 - Mathematical Statistics \(3\)](#)  
[STT 4890 - Introduction to Modeling and Analysis in Sports \(3\)](#)

## **Mathematics Major Electives (5-6 Hours)**

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~~(5-6 hours to bring total hours in Major Requirements to 35 hours)~~ Any course listed above but not used to meet requirements above, may be used in this section.

- [MAT 2310 - Computational Mathematics \(3\)](#)  
[MAT 2500 - Independent Study \(1-4\)](#)  
[MAT 3010 - Survey in the History of Mathematics \(2\)](#)  
[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)  
[MAT 3330 - Financial Mathematics \(4\)](#)  
[MAT 3350 - Introduction to Mathematical Biology \(3\)](#)  
[MAT 3500 - Independent Study \(1-3\)](#)  
[MAT 3510 - Junior Honors Seminar \(3\)](#)  
[MAT 3610 - Introduction to Geometry \(3\)](#)  
[MAT 4400 - Senior Research \(1-3\)](#)  
[STT 3250 - Fundamentals of Probability \(4\)](#)  
[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 4811 - Statistical Concepts and Applications I \(3\)](#)

[STT 4812 - Statistical Concepts and Applications II with Probability Modeling \(3\)](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

## Honors Students

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You may substitute [MAT 2510 Sophomore Honors Seminar](#) for [MAT 2110](#), and [MAT 4510 Senior Honors Thesis](#) for your Capstone. This will slightly change your elective requirements to ensure you earn 35 hours in Major Requirements. Please see your advisor for approval and more information.

[Choose from courses listed above but not used to satisfy previous requirements, including:](#)

[MAT 3110, MAT 3130, MAT 3220, MAT 3310, MAT 4140, MAT 4220, MAT 4310, MAT 4340, MAT 4420, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT 3250, STT 3850](#)

[or any of the following courses:](#)

[MAT 2310 - Computational Mathematics \(3\)](#)

[MAT 3010 - Survey in the History of Mathematics \(2\)](#)

[MAT 3330 - Financial Mathematics \(4\)](#)

[MAT 3340 - Actuarial Models \(3\)](#)

[MAT 3350 - Introduction to Mathematical Biology \(3\)](#)

[MAT 3500 - Independent Study \(1-3\)](#)

[MAT 3510 - Junior Honors Seminar \(3\)](#)

[MAT 3530-3549 - Selected Topics \(1-4\)](#)

[MAT 4400 - Senior Research \(1-3\)](#)

[MAT 4500 - Independent Study \(1-4\)](#)

[MAT 4510 - Senior Honors Thesis \(3\)](#)

[MAT 4530-4549 - Selected Topics \(1-4\)](#)

[MAT 4900 - Internship \(1-12\)](#)

[STT 2860 - Introduction to Data Management and Visualization \(3\)](#)

[STT 3500 - Independent Study \(1-4\)](#)

[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 3860 - Introduction to Statistical Modeling \(3\)](#)

[STT 4500 - Independent Study \(1-4\)](#)

[STT 4530-4549 - Selected Topics \(1-4\)](#)

## **Minor Required (12-21 Hours)**

---

Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

## **Electives (~~18-27~~5-20 Hours)**

---

Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Mathematics - General Mathematics Concentration, BS

---

Program Code: 260\*/260B

CIP Code: 27.0101

## General Education Requirements (44 Hours)

---

### General Education Requirements

MAT 1110 will meet the Quantitative Literacy general education requirement.

## Major Requirements (61 Hours)

---

*Not including 4 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Mathematics ~~Common~~-Core (15~~19~~ Hours)

---

[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2110 - Techniques of Proof \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

[MAT 2240 - Introduction to Linear Algebra \(3\)](#)

## **Mathematics Courses for The Concentration (17 Hours)**

---

**MAT 2130 - Calculus With Analytic Geometry III (4)**

**MAT 3110 - Introduction to Modern Algebra (3) [WID]** [WID]

**MAT 3220 - Introduction to Real Analysis I (3) [WID]** [WID]

**Choose One**

---

**MAT 3130 - Introduction to Differential Equations (3)**

**MAT 3310 - Discrete and Continuous Mathematical Models (3)**

**Choose One**

---

**STT 3250 - Fundamentals of Probability (4)**

**STT 3850 - Statistical Data Analysis I (4)**

**Capstone Requirements (4 Hours)**

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Choose one 4-hour combination (courses to be taken in the same semester); [CAP] is Capstone course; each has corequisite of first course in each pair below

**MAT 4010 - Current Topics in Mathematics (1-3)**

**MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]**

**MAT 4140 - Differential Geometry (3)**

**MAT 4141 - Differential Geometry Capstone (1) [CAP]**

**MAT 4220 - Introduction to Real Analysis II (3)**

**MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP]**

**MAT 4310 - Numerical Methods (3)**

**MAT 4311 - Numerical Methods Capstone (1) [CAP]**

**MAT 4340 - Introduction to Operations Research (3)**

**MAT 4341 - Introduction to Operations Research Capstone (1) [CAP]**

**MAT 4420 - Dynamical Systems Theory (3)**

MAT 4421 - Dynamical Systems Theory Capstone (1) [CAP]

MAT 4590 - Advanced Topics in Differential Equations (3)

MAT 4591 - Advanced Topics in Differential Equations Capstone (1) [CAP]

MAT 4710 - Introduction to Topology (3)

MAT 4711 - Introduction to Topology Capstone (1) [CAP]

MAT 4720 - Abstract Algebra (3)

MAT 4721 - Abstract Algebra Capstone (1) [CAP]

MAT 4990 - Numerical Linear Algebra (3)

MAT 4991 - Numerical Linear Algebra Capstone (1) [CAP]

STT 4820 - Design and Analysis of Experiments (3)

STT 4821 - Design and Analysis of Experiments Capstone (1) [CAP]

STT 4830 - Linear Regression Models (3)

STT 4831 - Linear Regression Models Capstone (1) [CAP]

STT 4840 - Regression and Time Series Forecasting (3)

STT 4841 - Regression and Time Series Forecasting Capstone (1) [CAP]

STT 4880 - Mathematical Statistics (3)

STT 4881 - Mathematical Statistics Capstone (1) [CAP]

## Breadth Requirements (10 Hours)

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Choose one:

MAT 3110 - Introduction to Modern Algebra (3) [WID]

MAT 3220 - Introduction to Real Analysis I (3) [WID]

Choose one:

MAT 3130 - Introduction to Differential Equations (3)

## MAT 3310 - Discrete and Continuous Mathematical Models (3)

Choose one:

STT 3250 - Fundamentals of Probability (4)

STT 3850 - Statistical Data Analysis I (4)

## Capstone Requirement (1 Hour)

---

### MAT 4040 - Mathematics Capstone (1)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

## Depth Requirements (6 Hours)

---

Choose one:

MAT 4140 - Differential Geometry (3)

MAT 4220 - Introduction to Real Analysis II (3)

MAT 4310 - Numerical Methods (3)

MAT 4340 - Introduction to Operations Research (3)

MAT 4420 - Dynamical Systems Theory (3)

MAT 4590 - Advanced Topics in Differential Equations (3)

MAT 4710 - Introduction to Topology (3)

MAT 4720 - Abstract Algebra (3)

MAT 4990 - Numerical Linear Algebra (3)

Choose additional courses from the immediately preceding list or:

MAT 4010 - Current Topics in Mathematics (1-3)

MAT 4530-4549 - Selected Topics (1-4)

STT 4530-4549 - Selected Topics (1-4)

STT 4820 - Design and Analysis of Experiments (3)

STT 4830 - Linear Regression Models (3)

STT 4840 - Regression and Time Series Forecasting (3)

STT 4880 - Mathematical Statistics (3)

STT 4890 - Introduction to Modeling and Analysis in Sports (3)

## **Approved Major Electives (8 Hours)**

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~~In mathematical sciences to bring total hrs in Major Requirements to 65 hrs~~

~~3 hours at the 4000 level~~

~~Remaining 5 hours: (At least 3 hours in MAT if STT combination was chosen in Capstone Requirements)~~

Choose from courses listed above but not used to satisfy previous requirements, including:

MAT 3110, MAT 3130, MAT 3220, MAT 3310, MAT 4010, MAT 4140, MAT 4220, MAT 4310,

MAT 4340, MAT 4420, MAT 4530-4549, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT

3250, STT 3850, STT 4530-4549, STT 4820, STT 4830, STT 4840, STT 4880, STT 4890

or any of the following courses:

MAT 2310 - Computational Mathematics (3)

MAT 3010 - Survey in the History of Mathematics (2)

MAT 3330 - Financial Mathematics (4)

MAT 3340 - Actuarial Models (3)

MAT 3350 - Introduction to Mathematical Biology (3)

MAT 3500 - Independent Study (1-3)

MAT 3510 - Junior Honors Seminar (3)

MAT 3530-3549 - Selected Topics (1-4)

MAT 4400 - Senior Research (1-3)

MAT 4500 - Independent Study (1-4)

MAT 4510 - Senior Honors Thesis (3)

MAT 4900 - Internship (1-12)

STT 2860 - Introduction to Data Management and Visualization (3)

STT 3500 - Independent Study (1-4)

STT 3530-3549 - Selected Topics (1-4)

- [STT 3820 - Statistical Methods I \(3\)](#)
- [STT 3830 - Statistical Methods II \(3\)](#)
- [STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)
- [STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)
- [STT 3860 - Introduction to Statistical Modeling \(3\)](#)
- [STT 4500 - Independent Study \(1-4\)](#)
- [STT 4870 - Senior Seminar in Statistics \(2\)](#)

## **A-Career Support Concentration (21 Hours)**

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~~At least 21 hours, which must be approved by the mathematical sciences advisor~~

### **Honors Students**

~~Choose courses selected from the elective list above but not used to satisfy previous requirements and additional courses from a single departmental prefix but not used to satisfy General Education requirements. Alternatively, a student can design a custom Career Support Concentration with approval of the mathematical sciences advisor.~~

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~~You may substitute MAT 2510 Sophomore Honors Seminar for MAT 2110, and MAT 4510 Senior Honors Thesis for your Capstone. This will slightly change your elective requirements to ensure you earn 65 hours in Major Requirements. Please see your advisor for approval and more information.~~

## **Minor (Optional)**

## **Electives (15 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Mathematics - Business Concentration, BS

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Program Code: 260\*/260D

CIP Code: 27.0101

## General Education Requirements (44 Hours)

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- **General Education Requirements**

MAT 1110 will meet the Quantitative Literacy general education requirement.

## Major Requirements (61 Hours)

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*Not including 4 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Mathematics **Common**-Core (15-19 Hours)

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- [MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)
- [MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)
- [MAT 2110 - Techniques of Proof \(4\)](#)
- [MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)
- [MAT 2240 - Introduction to Linear Algebra \(3\)](#)

### Breadth Requirements (10 Hours)

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**Choose one:**

[MAT 3110 - Introduction to Modern Algebra \(3\) \[WID\]](#)

[MAT 3220 - Introduction to Real Analysis I \(3\) \[WID\]](#)

**Choose one:**

[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)

**Choose one:**

[STT 3250 - Fundamentals of Probability \(4\)](#)

[STT 3850 - Statistical Data Analysis I \(4\)](#)

**Capstone Requirement (1 Hour)**

---

[MAT 4040 - Mathematics Capstone \(1\)](#)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

**Depth Requirements (6 Hours)**

---

**Choose one:**

[MAT 4140 - Differential Geometry \(3\)](#)

[MAT 4220 - Introduction to Real Analysis II \(3\)](#)

[MAT 4310 - Numerical Methods \(3\)](#)

[MAT 4340 - Introduction to Operations Research \(3\)](#)

[MAT 4420 - Dynamical Systems Theory \(3\)](#)

[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

Choose additional courses from the immediately preceding list or:

MAT 4010 - Current Topics in Mathematics (1-3)

MAT 4530-4549 - Selected Topics (1-4)

STT 4530-4549 - Selected Topics (1-4)

STT 4820 - Design and Analysis of Experiments (3)

STT 4830 - Linear Regression Models (3)

STT 4840 - Regression and Time Series Forecasting (3)

STT 4880 - Mathematical Statistics (3)

STT 4890 - Introduction to Modeling and Analysis in Sports (3)

## **Mathematics Courses for The Concentration (14 Hours)**

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- MAT 2130 - Calculus With Analytic Geometry III (4)
- MAT 3220 - Introduction to Real Analysis I (3) [WID] [WID]
- STT 3850 - Statistical Data Analysis I (4)

### **Choose One**

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- MAT 3130 - Introduction to Differential Equations (3)
- MAT 3310 - Discrete and Continuous Mathematical Models (3)

## **Capstone Requirement (4 Hours)**

---

Choose one 4 hour combination (courses must be taken in same semester); **[CAP]** is Capstone course; each has corequisite of first class in each pair below

- MAT 4010 - Current Topics in Mathematics (1-3)
- MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]
- 
- MAT 4140 - Differential Geometry (3)
- MAT 4141 - Differential Geometry Capstone (1) [CAP]
- 
- MAT 4220 - Introduction to Real Analysis II (3)
- MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP]
- 
- MAT 4310 - Numerical Methods (3)

- MAT 4311 - Numerical Methods Capstone (1) [CAP]
- 
- MAT 4340 - Introduction to Operations Research (3)
- MAT 4341 - Introduction to Operations Research Capstone (1) [CAP]
- 
- MAT 4420 - Dynamical Systems Theory (3)
- MAT 4421 - Dynamical Systems Theory Capstone (1) [CAP]
- 
- MAT 4590 - Advanced Topics in Differential Equations (3)
- MAT 4591 - Advanced Topics in Differential Equations Capstone (1) [CAP]
- 
- MAT 4710 - Introduction to Topology (3)
- MAT 4711 - Introduction to Topology Capstone (1) [CAP]
- 
- MAT 4720 - Abstract Algebra (3)
- MAT 4721 - Abstract Algebra Capstone (1) [CAP]
- 
- MAT 4990 - Numerical Linear Algebra (3)
- MAT 4991 - Numerical Linear Algebra Capstone (1) [CAP]
- 
- STT 4820 - Design and Analysis of Experiments (3)
- STT 4821 - Design and Analysis of Experiments Capstone (1) [CAP]
- 
- STT 4830 - Linear Regression Models (3)
- STT 4831 - Linear Regression Models Capstone (1) [CAP]
- 
- STT 4840 - Regression and Time Series Forecasting (3)
- STT 4841 - Regression and Time Series Forecasting Capstone (1) [CAP]
- 
- STT 4880 - Mathematical Statistics (3)
- STT 4881 - Mathematical Statistics Capstone (1) [CAP]
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## Major Approved Electives (6 Hours)

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**9 hours in mathematical sciences to bring total hours in AREA II to 65 hours**

- 3 hours at the 4000 level

*Remaining 6 hours: (At least 3 hours in MAT if STT combination was chosen in Capstone Requirement)*

**Choose from courses listed above but not used to satisfy previous requirements, including:**

MAT 3110, MAT 3130, MAT 3220, MAT 3310, MAT 4010, MAT 4140, MAT 4220, MAT 4310, MAT 4340, MAT 4420, MAT 4530-4549, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT 3250, STT 3850, STT 4530-4549, STT 4820, STT 4830, STT 4840, STT 4880, STT 4890

**or any of the following courses:**

[MAT 2310 - Computational Mathematics \(3\)](#)

[MAT 3010 - Survey in the History of Mathematics \(2\)](#)

[MAT 3330 - Financial Mathematics \(4\)](#)

[MAT 3340 - Actuarial Models \(3\)](#)

[MAT 3350 - Introduction to Mathematical Biology \(3\)](#)

[MAT 3500 - Independent Study \(1-3\)](#)

[MAT 3510 - Junior Honors Seminar \(3\)](#)

[MAT 3530-3549 - Selected Topics \(1-4\)](#)

[MAT 4400 - Senior Research \(1-3\)](#)

[MAT 4500 - Independent Study \(1-4\)](#)

[MAT 4510 - Senior Honors Thesis \(3\)](#)

[MAT 4900 - Internship \(1-12\)](#)

[STT 2860 - Introduction to Data Management and Visualization \(3\)](#)

[STT 3500 - Independent Study \(1-4\)](#)

[STT 3530-3549 - Selected Topics \(1-4\)](#)

[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 3860 - Introduction to Statistical Modeling \(3\)](#)

[STT 4500 - Independent Study \(1-4\)](#)

## STT 4870 - Senior Seminar in Statistics (2)

### **Business Concentration (21 Hours)**

---

- At least 21 advisor approved hours in business courses

Choose from the courses listed below:

ENG 3100 - Business Writing (3) [WID]

COM 2101 - Public Speaking (3)

Any course in ACC, BUS, SCM, and LAW

Courses at the 2000 level and above in CIS, ECO, FIN, MGT, HOS and MKT, except ECO 2100 and ECO 2200

### **~~Concentration~~ Additional Electives (2 Hours)**

---

~~Advisor approved elective in business or mathematical sciences~~

Choose two additional hours of coursework from the Major Electives section or two additional hours of coursework from the Business Concentration section. The selected course(s) cannot be used to satisfy previous requirements.

### **Honors Students**

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~~You may substitute MAT 2510 Sophomore Honors Seminar for MAT 2110, and MAT 4510 Senior Honors Thesis for your Capstone. This will slightly change your elective requirements to ensure you earn 65 hours in Major Requirements. Please see your advisor for approval and more information.~~

### **Minor (Optional)**

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### **Electives (15 Hours)**

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Taken to total 120 hours for the degree

### **Total Required (120 Hours)**

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## Mathematics - Computation Concentration, BS

Program Code: 260\*/260E

CIP Code: 27.0101

### General Education Requirements (44 hours)

#### General Education Requirements

MAT 1110 will meet the Quantitative Literacy general education requirement.

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### Major Requirements (61 Hours)

Not including 4 hours counted in General Education Requirements, above

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2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

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#### Mathematics ~~Common~~-Core (~~15~~<sup>19</sup> Hours)

MAT 1110 - Calculus With Analytic Geometry I (4)

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MAT 1120 - Calculus With Analytic Geometry II (4)

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MAT 2110 - Techniques of Proof (4)

MAT 2130 - Calculus With Analytic Geometry III (4)

MAT 2240 - Introduction to Linear Algebra (3)

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**Honors Students**

You may substitute [MAT 2510](#) Sophomore Honors Seminar for [MAT 2110](#), and [MAT 4510](#) Senior Honors Thesis for your Capstone. This will slightly change your elective requirements to ensure you earn 65 hours in Major Requirements. Please see your advisor for approval and more information.

### Breadth Requirements (10 Hours)

Choose one:

[MAT 3110 - Introduction to Modern Algebra \(3\) \[WID\]](#)

[MAT 3220 - Introduction to Real Analysis I \(3\) \[WID\]](#)

Choose one:

[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)

Choose one:

[STT 3250 - Fundamentals of Probability \(4\)](#)

[STT 3850 - Statistical Data Analysis I \(4\)](#)

### Capstone Requirement (1 Hour)

[MAT 4040 - Mathematics Capstone \(1\)](#)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

### Depth Requirements (9 Hours)

Choose one:

[MAT 2310 - Computational Mathematics \(3\)](#)

**MAT 4310 - Numerical Methods (3)**

**Choose additional courses from the immediately preceding list or:**

**MAT 4010 - Current Topics in Mathematics (1-3)**

**MAT 4140 - Differential Geometry (3)**

**MAT 4220 - Introduction to Real Analysis II (3)**

**MAT 4340 - Introduction to Operations Research (3)**

**MAT 4420 - Dynamical Systems Theory (3)**

**MAT 4530-4549 - Selected Topics (1-4)**

**MAT 4590 - Advanced Topics in Differential Equations (3)**

**MAT 4710 - Introduction to Topology (3)**

**MAT 4720 - Abstract Algebra (3)**

**MAT 4990 - Numerical Linear Algebra (3)**

**STT 4530-4549 - Selected Topics (1-4)**

**STT 4820 - Design and Analysis of Experiments (3)**

**STT 4830 - Linear Regression Models (3)**

**STT 4840 - Regression and Time Series Forecasting (3)**

**STT 4880 - Mathematical Statistics (3)**

**STT 4890 - Introduction to Modeling and Analysis in Sports (3)**

**Mathematics Courses for The Concentration (13 Hours)**

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**MAT 2310 - Computational Mathematics (3)**

**MAT 4310 - Numerical Methods (3)**

**STT 3850 - Statistical Data Analysis I (4)**

**Choose One**

---

**MAT 3110 - Introduction to Modern Algebra (3) [WID] [WID]**

**MAT 3220 - Introduction to Real Analysis I (3) [WID] [WID]**

**Capstone Requirements (4 Hours)**

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**Choose one option:**

**Option 1 (4 Hours)**

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**MAT 4311 - Numerical Methods Capstone (1) [CAP]**

4000 level MAT Course (3)

**Option 2**

---

Choose one 4 hour combination (courses taken in the same semester); [CAP] is Capstone course; each has CO: of first course in each pair below

**MAT 4010 - Current Topics in Mathematics (1-3)**

**MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]**

**MAT 4140 - Differential Geometry (3)**

**MAT 4141 - Differential Geometry Capstone (1) [CAP]**

**MAT 4220 - Introduction to Real Analysis II (3)**

**MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP]**

**MAT 4340 - Introduction to Operations Research (3)**

**MAT 4341 - Introduction to Operations Research Capstone (1) [CAP]**

**MAT 4420 - Dynamical Systems Theory (3)**

**MAT 4421 - Dynamical Systems Theory Capstone (1) [CAP]**

**MAT 4590 - Advanced Topics in Differential Equations (3)**

**MAT 4591 - Advanced Topics in Differential Equations Capstone (1) [CAP]**

**MAT 4710 - Introduction to Topology (3)**

**MAT 4711 - Introduction to Topology Capstone (1) [CAP]**

**MAT 4720 - Abstract Algebra (3)**

**MAT 4721 - Abstract Algebra Capstone (1) [CAP]**

**MAT 4990 - Numerical Linear Algebra (3)**

**MAT 4991 - Numerical Linear Algebra Capstone (1) [CAP]**

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4821 - Design and Analysis of Experiments Capstone \(1\) \[CAP\]](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4831 - Linear Regression Models Capstone \(1\) \[CAP\]](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4841 - Regression and Time Series Forecasting Capstone \(1\) \[CAP\]](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

[STT 4881 - Mathematical Statistics Capstone \(1\) \[CAP\]](#)

### **Approved Major Electives (3 Hours)**

**10 hours in mathematical sciences\*\* to bring total number of hours in Major**

**Requirements to 65 (At least 3 hours in MAT if STT combination was chosen in Capstone Requirements)**

**Choose from courses listed above but not used to satisfy previous requirements, including:**

[MAT 3110, MAT 3130, MAT 3220, MAT 3310, MAT 4010, MAT 4140, MAT 4220, MAT 4340, MAT 4420, MAT 4530-4549, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT 3250, STT 3850, STT 4530-4549, STT 4820, STT 4830, STT 4840, STT 4880, STT 4890](#)

**or any of the following courses:**

[MAT 3010 - Survey in the History of Mathematics \(2\)](#)

[MAT 3330 - Financial Mathematics \(4\)](#)

[MAT 3340 - Actuarial Models \(3\)](#)

[MAT 3350 - Introduction to Mathematical Biology \(3\)](#)

[MAT 3500 - Independent Study \(1-3\)](#)

[MAT 3510 - Junior Honors Seminar \(3\)](#)

[MAT 3530-3549 - Selected Topics \(1-4\)](#)

[MAT 4400 - Senior Research \(1-3\)](#)

[MAT 4500 - Independent Study \(1-4\)](#)

[MAT 4510 - Senior Honors Thesis \(3\)](#)

[MAT 4900 - Internship \(1-12\)](#)

[STT 2860 - Introduction to Data Management and Visualization \(3\)](#)

[STT 3500 - Independent Study \(1-4\)](#)

[STT 3530-3549 - Selected Topics \(1-4\)](#)

[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 3860 - Introduction to Statistical Modeling \(3\)](#)

[STT 4500 - Independent Study \(1-4\)](#)

[STT 4870 - Senior Seminar in Statistics \(2\)](#)

### **Computational Concentration (14-23 Hours)**

---

[C S 1440 - Computer Science I \(4\)](#)

[C S 2440 - Computer Science II \(4\)](#)

[C S 3430 - Database \(3\)](#)

[C S 3460 - Data Structures \(3\)](#)

Choose additional courses (minimum of nine semester hours) from any 2000 level and above CS courses excluding CS 3520 and [CS 4900](#), approved computational courses in the sciences, or any courses in the Major Electives list not used to satisfy previous requirements.

### **Computational Electives (9 Hours)**

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*\*\* Must be approved by mathematical sciences advisor.*

*9 hours\*\* of Approved courses in the sciences, which may include computer science*

### **Minor (Optional)**

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### **Electives (15 Hours)**

---

Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Mathematics - Life Sciences Concentration, BS

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Program Code: 260\*/260F

CIP Code: 27.0101

## General Education Requirements (44 Hours)

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### General Education Requirements

CHE 1101/CHE 1110 & CHE 1102/CHE 1120 fulfill the Science Inquiry perspective. MAT 1110 fulfills the Quantitative Literacy requirement.

## Major Requirements (58-55 Hours)

---

*Not including 12 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Mathematics Common Core (15-19 Hours)

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MAT 1110 - Calculus With Analytic Geometry I (4)

MAT 1120 - Calculus With Analytic Geometry II (4)

MAT 2110 - Techniques of Proof (4)

MAT 2130 - Calculus With Analytic Geometry III (4)

MAT 2240 - Introduction to Linear Algebra (3)

## **Mathematics Courses for The Concentration (19 Hours)**

---

**MAT 2310 - Computational Mathematics (3)**

**MAT 3130 - Introduction to Differential Equations (3)**

**MAT 3220 - Introduction to Real Analysis I (3) [WID]** [WID]

**MAT 3350 - Introduction to Mathematical Biology (3)**

**MAT 4420 - Dynamical Systems Theory (3)**

**STT 3850 - Statistical Data Analysis I (4)**

## **Capstone Requirements (4 Hours)**

---

Choose one option:

**Option 1 (4 Hours)**

**MAT 4421 - Dynamical Systems Theory Capstone (1) [CAP]**

4000 level MAT Course (3)

**Option 2**

---

Choose one 4-hour combination (courses taken in the same semester); [CAP] is Capstone course; each has CO: of first course in each pair below

**MAT 4010 - Current Topics in Mathematics (1-3)**

**MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP] [CAP]**

-

**MAT 4140 - Differential Geometry (3)**

**MAT 4141 - Differential Geometry Capstone (1) [CAP] [CAP]**

-

**MAT 4220 - Introduction to Real Analysis II (3)**

**MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP] [CAP]**

-

**MAT 4310 - Numerical Methods (3)**

**MAT 4311 - Numerical Methods Capstone (1) [CAP]**

-

**MAT 4340 - Introduction to Operations Research (3)**

MAT 4341 - Introduction to Operations Research Capstone (1) [CAP]

MAT 4590 - Advanced Topics in Differential Equations (3)

MAT 4591 - Advanced Topics in Differential Equations Capstone (1) [CAP]

MAT 4710 - Introduction to Topology (3)

MAT 4711 - Introduction to Topology Capstone (1) [CAP] [CAP]

MAT 4720 - Abstract Algebra (3)

MAT 4721 - Abstract Algebra Capstone (1) [CAP] [CAP]

MAT 4990 - Numerical Linear Algebra (3)

MAT 4991 - Numerical Linear Algebra Capstone (1) [CAP] [CAP]

STT 4820 - Design and Analysis of Experiments (3)

STT 4821 - Design and Analysis of Experiments Capstone (1) [CAP] [CAP]

STT 4830 - Linear Regression Models (3)

STT 4831 - Linear Regression Models Capstone (1) [CAP] [CAP]

STT 4840 - Regression and Time Series Forecasting (3)

STT 4841 - Regression and Time Series Forecasting Capstone (1) [CAP] [CAP]

STT 4880 - Mathematical Statistics (3)

STT 4881 - Mathematical Statistics Capstone (1) [CAP] [CAP]

Breadth Requirements (10 Hours)

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MAT 3130 - Introduction to Differential Equations (3)

STT 3850 - Statistical Data Analysis I (4)

And

Choose one:

MAT 3110 - Introduction to Modern Algebra (3) [WID]

MAT 3220 - Introduction to Real Analysis I (3) [WID]

## **Capstone Requirement (1 Hour)**

---

### **MAT 4040 - Mathematics Capstone (1)**

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

## **Depth Requirements (9 Hours)**

---

### **MAT 2310 - Computational Mathematics (3)**

Choose one:

[MAT 4310 - Numerical Methods \(3\)](#)

[MAT 4420 - Dynamical Systems Theory \(3\)](#)

[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)

Three additional hours chosen from the immediately preceding list or:

[MAT 4010 - Current Topics in Mathematics \(1-3\)](#)

[MAT 4140 - Differential Geometry \(3\)](#)

[MAT 4220 - Introduction to Real Analysis II \(3\)](#)

[MAT 4340 - Introduction to Operations Research \(3\)](#)

[MAT 4530-4549 - Selected Topics \(1-4\)](#)

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

[STT 4530-4549 - Selected Topics \(1-4\)](#)

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

**STT 4890 - Introduction to Modeling and Analysis in Sports (3)**

**Major Electives (3 Hours)**

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**Choose from courses listed above but not used to satisfy previous requirements, including:**

MAT 4010, MAT 4140, MAT 4220, MAT 4310, MAT 4340, MAT 4420, MAT 4530-4549, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT 4530-4549, STT 4820, STT 4830, STT 4840, STT 4880, STT 4890

**or any of the following courses:**

MAT 3010 - Survey in the History of Mathematics (2)

MAT 3110 - Introduction to Modern Algebra (3) [WID]

MAT 3310 - Discrete and Continuous Mathematical Models (3)

MAT 3330 - Financial Mathematics (4)

MAT 3340 - Actuarial Models (3)

MAT 3350 - Introduction to Mathematical Biology (3)

MAT 3500 - Independent Study (1-3)

MAT 3510 - Junior Honors Seminar (3)

MAT 3530-3549 - Selected Topics (1-4)

MAT 4400 - Senior Research (1-3)

MAT 4500 - Independent Study (1-4)

MAT 4510 - Senior Honors Thesis (3)

MAT 4900 - Internship (1-12)

STT 2860 - Introduction to Data Management and Visualization (3)

STT 3250 - Fundamentals of Probability (4)

STT 3500 - Independent Study (1-4)

STT 3530-3549 - Selected Topics (1-4)

STT 3820 - Statistical Methods I (3)

STT 3830 - Statistical Methods II (3)

STT 3840 - Elementary Probability and Survey Sampling (3)

STT 3851 - Statistical Data Analysis II (3) [WID]

STT 3860 - Introduction to Statistical Modeling (3)

STT 4500 - Independent Study (1-4)

STT 4870 - Senior Seminar in Statistics (2)

## Life Sciences Concentration (~~20~~25 Hours)

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Choose 25 hours from the following list of courses:

CHE 1101 - Introductory Chemistry I (3)

CHE 1110 - Introductory Chemistry Laboratory I (1)

and

CHE 1102 - Introductory Chemistry II (3)

CHE 1120 - Introductory Chemistry Laboratory II (1)

CHE 2101 - Fundamentals of Organic Chemistry (3)

CHE 2102 - Fundamentals of Organic Chemistry Laboratory (1)

BIO 1801 - Biological Concepts I (4)

BIO 1802 - Biological Concepts II (4)

Choose one of the following three sequences:

BIO 1801 - Biological Concepts I (4)

and

BIO 1802 - Biological Concepts II (4)

GES 1101 - Introduction to Physical Geology (4)

and

GES 2250 - Evolution of the Earth (4)

GHY 2812 - Geospatial Technology in a Changing World (3)

and

GHY 3812 - Geographic Information Systems (3)

Choose additional courses to bring to total hours to at least 25. Additional courses must be at or above the 2000 level and selected from a single departmental prefix in the list BIO, CHE, GHY, and GES.

### **Life Sciences Electives (10 Hours)**

---

~~10 hours of approved electives in BIO, CHE, GHY (at least one lab class; at least one class at 3000 level or higher)~~

### **Approved Major Electives (2 Hours)**

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~~2 hours in mathematical sciences to bring total hrs in Major Requirements to 70 hours~~

### **Honors Students**

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~~You may substitute **MAT 2510** Sophomore Honors Seminar for **MAT 2110**, and **MAT 4510** Senior Honors Thesis for your Capstone. This will slightly change your elective requirements to ensure you earn 70 hours in Major Requirements. Please see your advisor for approval and more information.~~

### **Minor (Optional)**

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### **Electives (~~18~~21 Hours)**

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Taken to total 120 hours for the degree

### **Total Required (120 Hours)**

# Mathematics - Physical Sciences Concentration, BS

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Program Code: 260\*/260G

CIP Code: 27.0101

## General Education Requirements (44 Hours)

### General Education Requirements

MAT 1110 will meet the Quantitative Literacy general education requirement. Introductory level PHY sequence will meet Science Inquiry general education requirement (8hrs).

## Major Requirements (~~61~~54 Hours)

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Not including ~~4~~12 hours counted in General Education, above (MAT 1110 and PHY sequence)

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Mathematics ~~Common~~-Core (~~15~~19 Hours)

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MAT 1110 - Calculus With Analytic Geometry I (4)

MAT 1120 - Calculus With Analytic Geometry II (4)

MAT 2110 - Techniques of Proof (4)

MAT 2130 - Calculus With Analytic Geometry III (4)

## MAT 2240 - Introduction to Linear Algebra (3)

### Mathematics Courses for The Concentration (20 Hours)

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MAT 2130 - Calculus With Analytic Geometry III (4)

MAT 2310 - Computational Mathematics (3)

MAT 3130 - Introduction to Differential Equations (3)

MAT 4310 - Numerical Methods (3)

STT 3850 - Statistical Data Analysis I (4)

Choose One

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MAT 3110 - Introduction to Modern Algebra (3) [WID] [WID]

MAT 3220 - Introduction to Real Analysis I (3) [WID] [WID]

### Capstone Requirements (4 Hours)

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Choose one option:

#### Option 1 (4 Hours)

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MAT 4311 - Numerical Methods Capstone (1) [CAP]

4000 level MAT Course (3)

#### Option 2

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Choose one 4-hour combination (courses taken in the same semester); [CAP] is Capstone course; each has C0: of first course in each pair below

MAT 4010 - Current Topics in Mathematics (1-3)

MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]

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MAT 4140 - Differential Geometry (3)

MAT 4141 - Differential Geometry Capstone (1) [CAP]

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MAT 4220 - Introduction to Real Analysis II (3)

MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP]

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[MAT 4340 - Introduction to Operations Research \(3\)](#)

[MAT 4341 - Introduction to Operations Research Capstone \(1\) \[CAP\]](#)

[MAT 4420 - Dynamical Systems Theory \(3\)](#)

[MAT 4421 - Dynamical Systems Theory Capstone \(1\) \[CAP\]](#)

[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)

[MAT 4591 - Advanced Topics in Differential Equations Capstone \(1\) \[CAP\]](#)

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4711 - Introduction to Topology Capstone \(1\) \[CAP\]](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4721 - Abstract Algebra Capstone \(1\) \[CAP\]](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

[MAT 4991 - Numerical Linear Algebra Capstone \(1\) \[CAP\]](#)

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4821 - Design and Analysis of Experiments Capstone \(1\) \[CAP\]](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4831 - Linear Regression Models Capstone \(1\) \[CAP\]](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4841 - Regression and Time Series Forecasting Capstone \(1\) \[CAP\]](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

[STT 4881 - Mathematical Statistics Capstone \(1\) \[CAP\]](#)

## Breadth Requirements (10 Hours)

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[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[STT 3850 - Statistical Data Analysis I \(4\)](#)

**Choose one:**

[\*\*MAT 3110 - Introduction to Modern Algebra \(3\) \[WID\]\*\*](#)

[\*\*MAT 3220 - Introduction to Real Analysis I \(3\) \[WID\]\*\*](#)

**Capstone Requirement (1 Hour)**

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[\*\*MAT 4040 - Mathematics Capstone \(1\)\*\*](#)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course chosen from the Depth Requirements or Major Electives listed below. With special permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

**Depth Requirements (9 Hours)**

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**Computational Component:**

[\*\*MAT 2310 - Computational Mathematics \(3\)\*\*](#)

[\*\*MAT 4310 - Numerical Methods \(3\)\*\*](#)

**Three additional hours chosen from:**

[\*\*MAT 4010 - Current Topics in Mathematics \(1-3\)\*\*](#)

[\*\*MAT 4140 - Differential Geometry \(3\)\*\*](#)

[\*\*MAT 4220 - Introduction to Real Analysis II \(3\)\*\*](#)

[\*\*MAT 4340 - Introduction to Operations Research \(3\)\*\*](#)

[\*\*MAT 4420 - Dynamical Systems Theory \(3\)\*\*](#)

[\*\*MAT 4530-4549 - Selected Topics \(1-4\)\*\*](#)

[\*\*MAT 4590 - Advanced Topics in Differential Equations \(3\)\*\*](#)

[\*\*MAT 4710 - Introduction to Topology \(3\)\*\*](#)

[\*\*MAT 4720 - Abstract Algebra \(3\)\*\*](#)

[\*\*MAT 4990 - Numerical Linear Algebra \(3\)\*\*](#)

[\*\*STT 4530-4549 - Selected Topics \(1-4\)\*\*](#)

[\*\*STT 4820 - Design and Analysis of Experiments \(3\)\*\*](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

[STT 4890 - Introduction to Modeling and Analysis in Sports \(3\)](#)

## **Approved Major Electives (3 Hours)**

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~~9 hours in mathematical sciences to bring total hrs in Major Requirements to 65~~

~~hours (At least 3 hours in MAT if STT combination was chosen in Capstone Requirements)~~

Choose from courses listed above but not used to satisfy previous requirements, including:

[MAT 3110, MAT 3220, MAT 4010, MAT 4140, MAT 4220, MAT 4340, MAT 4420, MAT 4530-4549, MAT 4590, MAT 4710, MAT 4720, MAT 4990, STT 3250, STT 4530-4549, STT 4820, STT 4830, STT 4840, STT 4880, STT 4890](#)

or any of the following courses:

[MAT 3010 - Survey in the History of Mathematics \(2\)](#)

[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)

[MAT 3330 - Financial Mathematics \(4\)](#)

[MAT 3340 - Actuarial Models \(3\)](#)

[MAT 3350 - Introduction to Mathematical Biology \(3\)](#)

[MAT 3500 - Independent Study \(1-3\)](#)

[MAT 3510 - Junior Honors Seminar \(3\)](#)

[MAT 3530-3549 - Selected Topics \(1-4\)](#)

[MAT 4400 - Senior Research \(1-3\)](#)

[MAT 4500 - Independent Study \(1-4\)](#)

[MAT 4510 - Senior Honors Thesis \(3\)](#)

[MAT 4900 - Internship \(1-12\)](#)

[STT 2860 - Introduction to Data Management and Visualization \(3\)](#)

[STT 3500 - Independent Study \(1-4\)](#)

[STT 3530-3549 - Selected Topics \(1-4\)](#)

[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 3860 - Introduction to Statistical Modeling \(3\)](#)

[STT 4500 - Independent Study \(1-4\)](#)

[STT 4870 - Senior Seminar in Statistics \(2\)](#)

## **Physical Sciences Concentration Courses (17-24 Hours)**

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*\*\* Must be approved by math sciences advisor.*

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[PHY 2110 - Modern Physics I \(3\)](#)

~~3 hours of approved electives\*\* in physics at or above 2000 level~~

~~3 hours of approved electives\*\* in physics or technology~~

### **Honors Students**

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~~You may substitute MAT 2510 Sophomore Honors Seminar for MAT 2110, and MAT 4510 Senior Honors Thesis for your Capstone. This will slightly change your elective requirements to ensure you earn 65 hours in Major Requirements. Please see your advisor for approval and more information.~~

[PHY 1103 - General Physics I \(4\)](#)

and

[PHY 1104 - General Physics II \(4\)](#)

OR

[PHY 1150 - Analytical Physics I \(5\)](#)

and

[PHY 1151 - Analytical Physics II \(5\)](#)

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[One additional course in PHY at or above the 2000 level](#)

Additional courses in the physical sciences, technology, or other related field to bring the total of this section to at least 24 hours.

## **Minor (Optional)**

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### **Electives (~~15~~22 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Mathematics - Statistics Concentration, BS

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Program Code: 260\*/260H

CIP Code: 27.0101

## General Education Requirements (44 Hours)

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### General Education Requirements

MAT 1110 will meet the Quantitative Literacy general education requirement.

## Major Requirements (61 Hours)

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*Not including 4 hours counted in General Education Requirements, above*

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Mathematics ~~Common~~-Core (15-19 Hours)

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[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2110 - Techniques of Proof \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

[MAT 2240 - Introduction to Linear Algebra \(3\)](#)

### ~~Mathematics Courses for Concentration (16 Hours)~~

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- MAT 2130 - Calculus With Analytic Geometry III (4)  
MAT 2310 - Computational Mathematics (3)  
MAT 3130 - Introduction to Differential Equations (3)  
MAT 3220 - Introduction to Real Analysis I (3) [WID] [WID]  
MAT 4310 - Numerical Methods (3)  
**Capstone Requirements (4 Hours)**
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Choose one option:

**Option 1 (4 Hours)**

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- MAT 4311 - Numerical Methods Capstone (1) [CAP]

4000 level MAT Course (3)

**Option 2**

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Choose one 4-hour combination (courses taken in the same semester); [CAP] is Capstone course; each has CO: of first course in each pair below

- MAT 4010 - Current Topics in Mathematics (1-3)

- MAT 4011 - Current Topics in Mathematics Capstone (1) [CAP]

- MAT 4140 - Differential Geometry (3)

- MAT 4141 - Differential Geometry Capstone (1) [CAP]

- MAT 4220 - Introduction to Real Analysis II (3)

- MAT 4221 - Introduction to Real Analysis II Capstone (1) [CAP]

- MAT 4340 - Introduction to Operations Research (3)

- MAT 4341 - Introduction to Operations Research Capstone (1) [CAP]

- MAT 4420 - Dynamical Systems Theory (3)

- MAT 4421 - Dynamical Systems Theory Capstone (1) [CAP]

- MAT 4590 - Advanced Topics in Differential Equations (3)

- MAT 4591 - Advanced Topics in Differential Equations Capstone (1) [CAP]

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4711 - Introduction to Topology Capstone \(1\) \[CAP\]](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4721 - Abstract Algebra Capstone \(1\) \[CAP\]](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

[MAT 4991 - Numerical Linear Algebra Capstone \(1\) \[CAP\]](#)

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4821 - Design and Analysis of Experiments Capstone \(1\) \[CAP\]](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4831 - Linear Regression Models Capstone \(1\) \[CAP\]](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4841 - Regression and Time Series Forecasting Capstone \(1\) \[CAP\]](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

[STT 4881 - Mathematical Statistics Capstone \(1\) \[CAP\]](#)

## Breadth Requirements (10 Hours)

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[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[MAT 3220 - Introduction to Real Analysis I \(3\) \[WID\]](#)

[STT 3250 - Fundamentals of Probability \(4\)](#)

## Capstone Requirement (1 Hour)

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[MAT 4040 - Mathematics Capstone \(1\)](#)

The capstone course has a co-requisite of concurrent enrollment in an associated 4000 level course. With special

permission, the capstone may be completed in association with a 5000 level course. Honors students who complete MAT 4510 may substitute one additional hour of electives to satisfy this requirement.

## **Mathematical Sciences Electives**

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~~5 hours in mathematical sciences to bring total hrs in Major Requirements to 65~~

### **Statistics Concentration ~~Core~~ (~~11~~16 Hours)**

~~\*\* Must be approved by mathematical sciences advisor.~~

[MAT 2310 - Computational Mathematics \(3\)](#)

[MAT 4310 - Numerical Methods \(3\)](#)

[STT 3250 - Fundamentals of Probability \(4\)](#)

[STT 3850 - Statistical Data Analysis I \(4\)](#)

[STT 3851 - Statistical Data Analysis II \(3\) \[WID\]](#)

[STT 4880 - Mathematical Statistics \(3\)](#)

### **Statistics ~~Concentration~~ Electives (~~14~~10 Hours)**

~~Statistic Electives (5 Hours) – Must be approved by advisor\*\* and must be at or above STT 3830 (excluding STT 4811 & STT 4812)~~

~~Related Coursework (9 Hours) – Must be approved by advisor, \*\* courses may include courses from outside mathematical sciences~~

[Choose from:](#)

[STT 2810 - Introduction to Statistics \(3\)](#)

[STT 2820 - Reasoning with Statistics \(4\)](#)

[STT 2860 - Introduction to Data Management and Visualization \(3\)](#)

[STT 3500 - Independent Study \(1-4\)](#)

[STT 3820 - Statistical Methods I \(3\)](#)

[STT 3830 - Statistical Methods II \(3\)](#)

[STT 3840 - Elementary Probability and Survey Sampling \(3\)](#)

[STT 3860 - Introduction to Statistical Modeling \(3\)](#)

[STT 4500 - Independent Study \(1-4\)](#)

[STT 4530-4549 - Selected Topics \(1-4\)](#)

[STT 4820 - Design and Analysis of Experiments \(3\)](#)

[STT 4830 - Linear Regression Models \(3\)](#)

[STT 4840 - Regression and Time Series Forecasting \(3\)](#)

[STT 4890 - Introduction to Modeling and Analysis in Sports \(3\)](#)

## Related Coursework (9 Hours)

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Choose additional courses from any 2000 level or above Computer Science (CS) courses excluding CS 3520 and CS 4900, or any courses in the Statistics Electives list not used to satisfy previous requirements, or any of the following:

[MAT 3110 - Introduction to Modern Algebra \(3\) \[WID\]](#)

[MAT 3310 - Discrete and Continuous Mathematical Models \(3\)](#)

[MAT 4140 - Differential Geometry \(3\)](#)

[MAT 4220 - Introduction to Real Analysis II \(3\)](#)

[MAT 4340 - Introduction to Operations Research \(3\)](#)

[MAT 4420 - Dynamical Systems Theory \(3\)](#)

[MAT 4590 - Advanced Topics in Differential Equations \(3\)](#)

[MAT 4710 - Introduction to Topology \(3\)](#)

[MAT 4720 - Abstract Algebra \(3\)](#)

[MAT 4990 - Numerical Linear Algebra \(3\)](#)

Related coursework may include courses outside the mathematical sciences with advisor approval.

## **Minor (Optional)**

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## **Electives (15 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**



# Philosophy, BA

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Program Code: 101A

CIP Code: 38.0101

## General Education Requirements (44 Hours)

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### **General Education Requirements**

*Some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information.*

### **Language Requirements (6-12 Hours)**

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Completion of 6 semester hours at the \*intermediate level or higher

#### **Intermediate Language Course I**

\*

and

#### **Intermediate Language Course II**

\*

or

#### **Combined Intermediate Language Course**

\*

or

Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

# **Major Requirements (36 Hours)**

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2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

## **Core Philosophy Courses (15 Hours)**

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**PHL 1100 - Logic I (3)**

**PHL 3000 - Ancient Philosophy (3)**

**PHL 3200 - Modern Philosophy (3)**

**Choose one [WID] Course**

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**PHL 3300 - A Critique of Worldmaking (3) [WID] [WID]**

**PHL 3400 - Contemporary Continental Philosophy (3) [WID] [WID]**

**Choose One Capstone Experience**

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Students who wish to substitute **HON 4010** for **PHL 4700** must choose a Philosophy faculty member as Director of their University Honors Thesis in **HON 4010**.

**PHL 4510 – Senior Honors Thesis (3) [CAP]**

**PHL 4700 - Senior Research: Philosophy (3) [CAP]**

**HON 4010 - Senior Honors Thesis/Project (1-3)**

## **Stream Philosophy Requirements (9 Hours)**

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**Choose One: Ethics**

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**PHL 2000 - Philosophy, Society, and Ethics (3)**

**PHL 2015 - Environmental Ethics (3)**

**PHL 3015 - Medical Ethics (3)**

**PHL 4300 - Ethical Theory (3)**

Choose One: Metaphysics and Epistemology

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**PHL 2100 - Logic II (3)**

**PHL 3020 - Metaphysics (3)**

**PHL 3550 - Philosophy of Mind (3)**

**PHL 3600 - Philosophy of Science (3)**

**PHL 4000 - Nature of Knowledge (3)**

Choose One: Art, Identities, and Politics

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**PHL 2013 - Philosophy of Art (3)**

**PHL 3013 - Philosophical Aesthetics (3)**

**PHL 3030 - Feminist Philosophy (3)**

**PHL 3040 - Social and Political Philosophy (3)**

**PHL 3050 - Philosophy of Race (3)**

**Philosophy Electives (12 Hours Required)**

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Only one 1000-level course may be used. At least one additional 4000-level course must be selected if **PHL 4000** or **PHL 4300** not used in Stream Philosophy Requirements.

**Minor Required (12-21 Hours)**

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Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

**Electives (13-22 Hours)**

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Taken to total 120 hours for the degree

**Total Required (120 Hours)**

# Religious Studies, BA

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Program Code 102A

CIP Code: 38.0201

## General Education Requirements (44 Hours)

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### **General Education Requirements**

Some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information.

## Language Requirements (6-12 Hours)

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Completion of 6 semester hours at the \*intermediate level or higher

### **Intermediate Language Course I**

\*

and

### **Intermediate Language Course II**

\*

or

### **Combined Intermediate Language Course**

\*

or

Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

## **Major Requirements (36 Hours)**

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2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major discipline, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

At least 18 semester hours must be at or above 3000 level.

### **Core Religion Courses (~~15~~ 18 Hours)**

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**Choose one Studying Religion course:**

[REL 1010 - Religion and Imaginary Worlds \(3\)](#)

[REL 1100 - Religion and Contemporary Issues \(3\)](#)

[REL 1110 - Religions of the World \(3\)](#)

[REL 1115 - Religion Goes to The Movies \(3\)](#)

[REL 1120 - Confronting Death \(3\)](#)

[REL 1700 - What is Religion? \(3\)](#)

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**Choose one Ways of Being Religious I course:**

[REL 2010 - Old Testament: The Jewish Scriptures \(3\)](#)

[REL 2020 - New Testament \(3\)](#)

[REL 2030 - Islamic Literature \(3\)](#)

[JHP 2110 - Judaism \(3\)](#)

or

[REL 2110 - Judaism \(3\)](#)

[REL 2120 - Christianity \(3\)](#)

[REL 2130 - Islam \(3\)](#)

[REL 2180 - Life Without God \(3\)](#)

### REL 3165 - The Prophet (3)

Choose one Ways of Being Religious II course

[REL 2140 - Hinduism \(3\)](#)

[REL 2150 - Buddhism \(3\)](#)

[REL 2210 - Gods, Ghosts and Ancestors \(3\)](#)

Choose one Understanding Study of Religion course:

[REL 3700 - Theories of Religion \(3\) \[WID\]](#)

[REL 3710 - Religion, Ecology, & Biology \(3\) \[WID\]](#)

[REL 3715 - Biblical Interpretation \(3\) \[WID\]](#)

[REL 3725 - Religion and Empire \(3\) \[WID\]](#)

[REL 3740 - Religion and Social Theory \(3\) \[WID\]](#)

[REL 3745 – Religious Studies in the Digital Age](#)

[REL 3750 - Minds, Brain, and Religion \(3\) \[WID\]](#)

[REL 3760 - Religion and Reason \(3\) \[WID\]](#)

[REL 3770 - Religion, Gender, and the Body \(3\) \[WID\]](#)

### Capstone Required Courses

[REL 3700 - Theories of Religion \(3\) \[WID\]](#)

[REL 4700 - Senior Seminar \(3\) \[CAP\] \[CAP\]](#)

### **Religion Electives (21-18 Hours)**

*Courses taken for credit in section III-A may NOT also be counted in this section.*

\*\*\*\* Please see a Religious Studies advisor, or contact the department, for a list of suggested tracks: Asian Religions; Religion, Culture & Society; Pre-Graduate Religious Studies; and Pre-Seminary.

A maximum of 6 hours of internship (i.e., any combination of REL 2900 & 4900) may count towards the degree.

[REL 1010 - Religion and Imaginary Worlds \(3\)](#)

[REL 1100 - Religion and Contemporary Issues \(3\)](#)

REL 1110 - Religions of the World (3)

~~REL 1115 - Religion Goes to The Movies (3)~~

REL 1120 - Confronting Death (3)

REL 1530-1549 - Selected Topics (1-4)

~~REL 1700 - What is Religion? (3)~~

REL 2010 - Old Testament: The Jewish Scriptures (3)

REL 2020 - New Testament (3)

REL 2030 - Islamic Literature (3)

JHP 2110 - Judaism (3)

or

REL 2110 - Judaism (3)

REL 2120 - Christianity (3)

REL 2130 - Islam (3)

REL 2140 - Hinduism (3)

REL 2150 - Buddhism (3)

REL 2180 - Life Without God (3)

REL 2210 - Gods, Ghosts and Ancestors (3)

REL 2500 - Independent Study (1-4)

REL 2530-2549 - Selected Topics (1-4)

REL 2900 - Internship (1-3)

REL 3010 - Biblical Prophets: Justice and Hope (3)

REL 3020 - After Jesus: Paul to Christianity (3)

REL 3030 - Gender, Sexuality, and the Bible (3)

REL 3040 - Bible and Science (3)

REL 3100 - Church and State in Latin America (3)

REL 3110 - Religion in America (3)

REL 3160 - Life and Teachings of Jesus (3)

REL 3165 - The Prophet (3)

REL 3170 - Religion and Violence (3)

~~REL 3180 - American Judaism (3)~~

REL 3500 - Independent Study (1-4)

REL 3520 - Instructional Assistance (1)

**REL 3530-3549 - Selected Topics (1-4)**

**REL 3560 - Religion and Science Fiction (3)**

**REL 3600 - Study Tour Abroad (3-6)**

**REL 3700 - Theories of Religion (3) [WID]**

**REL 3710 - Religion, Ecology, & Biology (3) [WID]**

**REL 3715 - Biblical Interpretation (3) [WID]**

**REL 3725 - Religion and Empire (3) [WID]**

**REL 3740 - Religion and Social Theory (3) [WID]**

**REL 3750 - Minds, Brain, and Religion (3) [WID]**

**REL 3760 - Religion and Reason (3) [WID]**

**REL 3770 - Religion, Gender, and the Body (3) [WID]**

**REL 4001 - Undergraduate Research (1-3)**

**REL 4115 - Religion and Cultural Forms (3)**

**REL 4510 - Senior Honors Thesis (3)**

**REL 4900 - Advanced Internship (1-6)**

## **Minor Required (12-21 Hours)**

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Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

## **Electives (13-22 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**

# Physics Minor for Secondary Education Majors

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Minor Code: 273

CIP Code: 40.0801

## Required (15-17 Hours)

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One of the following sequences.

**PHY 1103 - General Physics I (4)**

**PHY 1104 - General Physics II (4)**

or

**PHY 1150 - Analytical Physics I (5)**

**PHY 1151 - Analytical Physics II (5)**

**PHY 2110 - Modern Physics I (3)**

**PHY 2700 - Computer Interfacing (3)**

**PHY 3520 - Instructional Assistance (1)**

## Electives

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Choose 3 hours of physics electives at or above the 2000 level.

## Total Required (18-20 Hours)

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## Note

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This minor is designed for students enrolled in a Secondary Education Baccalaureate program. Candidates who wish to teach Secondary Education Physics in North Carolina public schools are required to successfully complete an educator preparation program and hold or be eligible to hold an A-level professional education license and successfully complete the Physics: Content Knowledge exam and/or other licensure requirements. The minor, on its own, does not convey such eligibility.

A minimum of 9 hours must be ‘in residence,’ i.e. courses taken through ASU (can include study abroad, ASU online courses, etc.).

# Medical Physics Minor

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Minor Code: 919

CIP Code: 40.0801

## Required (18 Hours)

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**PHY 2820 – Medical Physics (3)**

**CS 2435 – Introduction to Scientific Programming (4)**

**CHE 1101 – Introductory Chemistry I (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**PHY 2700 – Computer Interfacing (3)**

**BIO 3301 – Human Systems Physiology (4)**

## Total Required (18 Hours)

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A minimum of 9 hours must be ‘in residence,’ i.e. courses taken through ASU (can include study abroad, ASU online courses, etc.).

## Physics - Physics Concentration, BS

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Program Code: 270\*/270D

CIP Code: 40.0801

Non-Teaching

### General Education Requirements (44 Hours)

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#### General Education Requirements

PHY 1150 & PHY 1151 or PHY 1103 & PHY 1104 will fulfill Science Inquiry. MAT 1110 fulfills Quantitative Literacy.

### Major Requirements (62 Hours)

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Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

#### Physics (38 Hours)

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PHY 1103 - General Physics I (4)

PHY 1104 - General Physics II (4)

or

PHY 1150 - Analytical Physics I (5)

PHY 1151 - Analytical Physics II (5)

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[PHY 2110 - Modern Physics I \(3\)](#)

[PHY 3310 - Physics Laboratory Techniques and Data Analysis \(3\) \[WID\]](#) [WID]

[PHY 4210 - Methods of Experimental Physics \(4\)](#) [CAP]

10-12 hours of Physics or Astronomy electives at the 2000 level or higher required to complete 38 semester hours:

### **Mathematics (12 Hours)**

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[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

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### **Emphasis Area (24 Hours)**

[MAT 3130 - Introduction to Differential Equations \(3\)](#)

[PHY 3001 - Analytical Methods in Physics \(3\)](#)

[PHY 3010 - Classical Mechanics \(3\)](#)

[PHY 3020 - Electromagnetism \(3\)](#)

[PHY 3230 - Thermal Physics \(3\)](#)

[PHY 4640 - Quantum Mechanics \(3\)](#)

Choose remaining 6 hours from:

[CHE 1101 - Introductory Chemistry I \(3\)](#)

[CHE 1110 - Introductory Chemistry Laboratory I \(1\)](#)

[CHE 1102 - Introductory Chemistry II \(3\)](#)

[CHE 1120 - Introductory Chemistry Laboratory II \(1\)](#)

[C S 1440 - Computer Science I \(4\)](#)

or

[C S 2435 - Introduction to Scientific Programming \(4\)](#)

[MAT 2240 - Introduction to Linear Algebra \(3\)](#)

- [PHY 2120 - Modern Physics II \(3\)](#)  
[PHY 2820 - Medical Physics \(3\)](#)  
[PHY 3011 - Classical Mechanics II \(3\)](#)  
[PHY 3030 - Electromagnetic Waves and Optics \(3\)](#)  
[PHY 3140 - Environmental Physics \(3\)](#)  
[PHY 3150 - Atmospheric Science \(3\)](#)  
[PHY 3160 - Introduction to Geophysics \(3\)](#)  
[PHY 4020 - Computational Methods in Physics and Engineering \(3\)](#)

**Commented [ND1]:** Misspelling in course title in current bulletin. I will work to have this corrected.

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## Minor (Optional)

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### Electives (14 Hours)

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Taken to total 120 hours for the degree

### Total Required (120 Hours)

## Physics - Astronomy Concentration, BS

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Program Code: 270\*/270E

CIP Code: 40.0801

Non-Teaching

### General Education Requirements (44 Hours)

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#### General Education Requirements

PHY 1150 & PHY 1151 or PHY 1103 & PHY 1104 will fulfill Science Inquiry. MAT 1110 fulfills Quantitative Literacy.

### Major Requirements (62 Hours)

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Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

#### Physics (38 Hours)

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PHY 1103 - General Physics I (4)

PHY 1104 - General Physics II (4)

or

PHY 1150 - Analytical Physics I (5)

PHY 1151 - Analytical Physics II (5)

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[PHY 2110 - Modern Physics I \(3\)](#)

[PHY 3310 - Physics Laboratory Techniques and Data Analysis \(3\) \[WID\]](#) [WID]

[PHY 4210 - Methods of Experimental Physics \(4\)](#) [CAP]

10-12 hours of Physics or Astronomy electives at the 2000 level or higher required to complete 38 semester hours:

### **Mathematics (12 Hours)**

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[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

---

### **Emphasis Area (24 Hours)**

[AST 1001 - Introductory Astronomy I - The Solar System \(4\)](#)

[AST 1002 - Introductory Astronomy II - Stars and Galaxies \(4\)](#)

[AST 2001 - Observational Astronomy \(3\)](#)

Remaining Emphasis Area courses must follow one of the optional paths listed below:

#### **Option 1**

[AST 3100 - Astrophysics \(3\)](#)

[MAT 3130 - Introduction to Differential Equations \(3\)](#)

Choose remaining 7 hours from:

[AST 2300 - Public and School Outreach in Astronomy \(1\)](#)

[AST 3001 - Techniques in Astronomical Photometry \(3\)](#)

[AST 3002 - Techniques in Astronomical Spectroscopy \(3\)](#)

[AST 3120 - Planets and Exoplanets \(3\)](#)

[AST 3130 - Binary and Variable Stars \(3\)](#)

[AST 3140 - Star Formation \(3\)](#)

[AST 3150 - Computational Astronomy \(3\)](#)  
[C S 2435 - Introduction to Scientific Programming \(4\)](#)  
[PHY 3001 - Analytical Methods in Physics \(3\)](#)  
[PHY 3010 - Classical Mechanics \(3\)](#)  
[PHY 3020 - Electromagnetism \(3\)](#)  
[PHY 3230 - Thermal Physics \(3\)](#)  
[PHY 4020 - Computational Methods in Physics and Engineering \(3\)](#)  
[PHY 4640 - Quantum Mechanics \(3\)](#)

OR

**Option 2**

[AST 3001 - Techniques in Astronomical Photometry \(3\)](#)  
[AST 3002 - Techniques in Astronomical Spectroscopy \(3\)](#)

Choose remaining 7 hours from:

[AST 2300 - Public and School Outreach in Astronomy \(1\)](#)  
[AST 3120 - Planets and Exoplanets \(3\)](#)  
[AST 3130 - Binary and Variable Stars \(3\)](#)  
[AST 3140 - Star Formation \(3\)](#)  
[AST 3150 - Computational Astronomy \(3\)](#)  
[C S 2435 - Introduction to Scientific Programming \(4\)](#)  
[PHY 2700 - Computer Interfacing \(3\)](#)  
[PHY 3030 - Electromagnetic Waves and Optics \(3\)](#)  
[PHY 4020 - Computational Methods in Physics and Engineering \(3\)](#)  
[PHY 4330 - Digital Electronics \(4\)](#)  
[PHY 4730 - Analog Systems \(4\)](#)

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**Minor (Optional)**

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**Electives (14 Hours)**

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Taken to total 120 hours for the degree

**Total Required (120 Hours)**

## Physics – Automation & Instrumentation Concentration, BS

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Program Code: 270\*/270F

CIP Code: 40.0801

Non-Teaching

### General Education Requirements (44 Hours)

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#### General Education Requirements

PHY 1150 & PHY 1151 or PHY 1103 & PHY 1104 will fulfill Science Inquiry. MAT 1110 fulfills Quantitative Literacy.

### Major Requirements (62 Hours)

---

Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

#### Physics (38 Hours)

---

PHY 1103 - General Physics I (4)

PHY 1104 - General Physics II (4)

or

[PHY 1150 - Analytical Physics I \(5\)](#)

[PHY 1151 - Analytical Physics II \(5\)](#)

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[PHY 2110 - Modern Physics I \(3\)](#)

[PHY 3310 - Physics Laboratory Techniques and Data Analysis \(3\) \[WID\]](#) [WID]

[PHY 4210 - Methods of Experimental Physics \(4\)](#) [CAP]

10-12 hours of Physics or Astronomy electives at the 2000 level or higher required to complete 38 semester hours:

### **Mathematics (12 Hours)**

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[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

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### **Emphasis Area (24 Hours)**

[C S 2435 - Introduction to Scientific Programming \(4\)](#)

[PHY 2700 - Computer Interfacing \(3\)](#)

[PHY 4330 - Digital Electronics \(4\)](#)

[PHY 4730 - Analog Systems \(4\)](#)

Choose remaining 9 hours from:

[MAT 2240 - Introduction to Linear Algebra \(3\)](#)

[PHY 3030 - Electromagnetic Waves and Optics \(3\)](#)

[PHY 4020 - Computational Methods in Physics and Engineering \(3\)](#)

[PHY 4845 - Nanoscience and Technology \(3\)](#)

[PHY 4860 - Physical Principles of Electron Microscopy \(4\)](#)

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Note: Students enrolled as undergraduates at Appalachian State University may request permission to take graduate courses if they will be seniors in the semester of enrollment and have at least a 3.0 GPA. For dual listed courses, juniors may enroll with permission of the

department. The request form can be found on the Graduate School website, and it requires both department and Graduate School approval.

---

### **Minor (Optional)**

---

### **Electives (14 Hours)**

---

Taken to total 120 hours for the degree

### **Total Required (120 Hours)**

# Physics – Interdisciplinary Science Concentration, BS

---

Program Code: 270\*/270G

CIP Code: 40.0801

Non-Teaching

## General Education Requirements (44 Hours)

---

### General Education Requirements

PHY 1150 & PHY 1151 or PHY 1103 & PHY 1104 will fulfill Science Inquiry. MAT 1110 fulfills Quantitative Literacy.

## Major Requirements (62 Hours)

---

Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under Major Requirements. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

### Physics (38 Hours)

---

PHY 1103 - General Physics I (4)

PHY 1104 - General Physics II (4)

or

[PHY 1150 - Analytical Physics I \(5\)](#)

[PHY 1151 - Analytical Physics II \(5\)](#)

[PHY 2010 - Intermediate Physics I \(4\)](#)

[PHY 2020 - Intermediate Physics II \(4\)](#)

[PHY 2110 - Modern Physics I \(3\)](#)

[PHY 3310 - Physics Laboratory Techniques and Data Analysis \(3\) \[WID\]](#) [WID]

[PHY 4210 - Methods of Experimental Physics \(4\)](#) [CAP]

10-12 hours of Physics or Astronomy electives at the 2000 level or higher required to complete 38 semester hours:

## **Mathematics (12 Hours)**

---

[MAT 1110 - Calculus With Analytic Geometry I \(4\)](#)

[MAT 1120 - Calculus With Analytic Geometry II \(4\)](#)

[MAT 2130 - Calculus With Analytic Geometry III \(4\)](#)

---

## **Emphasis Area (24 Hours)**

The Interdisciplinary Science emphasis area is made up of courses drawn from one or more disciplines, departments or programs, with a single coherent focus in one of the following areas: Biology, Chemistry, Computer Science, Geology, Mathematics, Medical Physics or Statistics. Students will need to coordinate their emphasis area selection and course options with their departmental advisor.

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## **Minor (Required)**

- Minor is required in your designated emphasis area listed above.

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## **Electives (14 Hours)**

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Taken to total 120 hours for the degree

## **Total Required (120 Hours)**



## *CIS Department catalog pages*

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# Department of Computer Information Systems

◀ Return to: **Colleges & Departments**

*Sandra A. Vannoy, Interim Chair/Associate Dean for Graduate Programs and Research*

### **Full Faculty Listing**

The Department of Computer Information Systems offers coursework in the areas of computer information systems, production/operations management, and quantitative methods. Students in computer information systems are encouraged to acquire a broad liberal education in order to understand the interface between the technical and non-technical aspects of business. A major in computer information systems is offered by this department and is designed to develop professional skills/capabilities which enable students to pursue careers in computerized information systems areas in either the public or private sectors of our economy. With the computer information systems major, students will be able to pursue careers in a variety of positions requiring a knowledge of computers and information systems. Students majoring in computer information systems will have the opportunity to work in areas of security, e-business, project management, systems analysis, data management, networking, and programming.

### **Bachelor of Science in Business Administration in Computer Information Systems (Program Code: 310\*/5201201)**

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#### **Students must select one of the following concentrations:**

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**Computer Information Systems - General Computer Information Systems Concentration (310B)**

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**Computer Information Systems- Cybersecurity Concentration (310C)**

## **Undergraduate Minor in Computer Information Systems (310/52.1201)**

(for all business and non-business majors, except CIS majors)

A minor in Computer Information Systems (CIS) may be obtained by completing 15 semester hours.

### **SPECIAL NOTE ABOUT ENROLLMENT IN UPPER LEVEL BUSINESS COURSES:**

Enrollment in 3000/4000 level courses in the Walker College of Business is limited to business majors admitted to the College of Business. An exception is allowed for other students, including business majors not yet admitted to the College of Business, to take a maximum of five business courses at the 3000-level or above, including graduate-level courses (unless more are specifically listed as required on the Program of Study for a non-business major, a required concentration, or a required minor). No exceptions beyond this will be allowed.

Please see course descriptions for important prerequisite information for 3000 level and 4000 level business courses.

Business majors are encouraged to complete all admission requirements by the beginning of the junior year. Students who are not admitted to the College of Business will not be allowed to early register for more than five business courses at the 3000-level or above, including graduate-level business courses, even if they anticipate they will be admitted to the College of Business by the beginning of the next semester. Non business majors must get a permit from the College of Business Undergraduate Advising Office to register for any business courses at the 3000-level or above in excess of the five allowed, when required on the program of study.

### **Programs**

#### **Bachelor of Science in Business Administration**

##### **Computer Information Systems, BSBA**

- [Computer Information Systems - General Computer Information Systems Concentration, BSBA](#)
- [Computer Information Systems - Cybersecurity Concentration, BSBA](#)

##### **Minor**

- **Computer Information Systems Minor**

## *Program of Study for CIS-GENmark up from old POS*

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## **Computer Information Systems-General Computer Information Systems Concentration, BSBA**

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Program Code: 310BA

CIP Code: 52.1201

### **General Education Requirements (44 Hours)**

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#### **General Education Requirements**

*The following 16 hours of major requirements can also count in the General Education Program:*

*R C 1000 and R C 2001 (6 hours) count towards the General Education Writing Across the Curriculum requirement*

*MAT 1035 (3 hours) and 1 hours of ECO 2100 fulfill the General Education Quantitative Literacy requirement*

*ECO 2030 and ECO 2040 (6 hours) count towards the General Education Liberal Studies Experience requirement*

# **WCOB Core Requirements**

## **WCOB Admission Requirements (16 Hours)**

---

2.6 cumulative GPA (based on 12+ graded hours at ASU), 45 earned hours and completion of the following:

**R C 1000 - Expository Writing (3)** minimum grade of "C" (2.0) required

**MAT 1035 - Business Mathematics With Calculus (3)** minimum grade of "C-" (1.7) required

**ACC 2100 - Principles of Accounting I (3)** minimum grade of "C-" (1.7) required

**BUS 2001 - Business Career Development (1)** minimum grade of "C" (2.0) required

**CIS 1060 - Business Analytics using Spreadsheet Technology (3)** minimum grade of "C-" (1.7)  
required

**ECO 2030 - Principles of Microeconomics (3)** minimum grade of "C-" (1.7) required

## **WCOB Lower Level Core (18 hours)**

---

2.0 average required

Business majors are encouraged to complete all WCOB Lower Level Core courses before taking 4000 level business courses.

**ACC 2110 - Principles of Accounting II (3)** minimum grade of "C-" (1.7) required

**ECO 2040 - Principles of Macroeconomics (3)** \* minimum grade of "C-" (1.7) required

**ECO 2100 - Business and Economic Statistics I (3)** \* minimum grade of "C-" (1.7) required (can  
sub. **STT 2810** or **STT 2820**)

**ECO 2200 - Business and Economic Statistics II (3)** (can sub. STT 3820)

**LAW 2150 - Legal Environment of Business (3)** minimum grade of "C-" (1.7) required

**R C 2001 - Introduction to Writing Across the Curriculum (3)** minimum grade of "C" (2.0) required

(hours already counted in Gen Ed)

**Note**

---

*Students cannot be admitted to the COB with any outstanding grades of "I".*

*\***MAT 1035, ECO 2030, ECO 2040**, and one hour of **ECO 2100** already count in Gen Ed.*

## **WCOB Upper Level Core (19 hours)**

---

**2.0 average required**

*\*A senior check and, for students graduating in the term in which these are taken, a graduation application, must be completed prior to registering for courses indicated with an asterisk.*

**CTE 3340 - Business Communications (3) [WID]**

or

**ENG 3100 - Business Writing (3) [WID]**

(min. grade of "C" in **CTE 3340/ENG 3100** required to take 4000 level business courses)

**FIN 3680 - Introduction to Finance (3)**

**MGT 3630 - Introduction to Organizational Behavior (3)**

**MKT 3050 - Principles of Marketing (3)**

**SCM 3650 - Production and Operations Management (3)**

**MGT 4750 - Strategic Management (3)** \* (prereq: CTE 3340 or ENG 3100 with a minimum grade of "C" (2.0), FIN 3680, MKT 3050, SCM 3650 and final semester of coursework)

**BUS 4000 - Business Capstone Experience (1) [CAP]** \* (Capstone Requirement) (prereq: CTE 3340 or ENG 3100 with a minimum grade of "C" (2.0), FIN 3680, MKT 3050, SCM 3650 and final semester of coursework)

### **Global Issues Requirement**

---

Met within the other degree requirements - does not require additional course work

**The Global Issues requirement can be met by satisfying one of the following:**

International business course (See list below)

Business faculty led study abroad (minimum 3 hours)

Semester long study abroad for credit

Full-time 400-hour minimum international internship for credit

Foreign language courses at or above the 3000 level

#### **International Business Course**

---

**ACC 3590 - Assessing Sustainability in a Global Business Environment (3)**

**ACC 4730 - Accounting and International Business (3)**

**BUS 4065 - Holland Fellows International Business Study in Asia II (3)**

**CIS 3620 - Global Information Technologies (3)**

**ECO 3410 - International Trade (3)**

**ECO 3430 - Economic Growth and Development (3)**

**ECO 4640 - International Macroeconomics (3)**

**ENT 3190 - International Entrepreneurship (3)**

**ENT 3600 - Entrepreneurship Study Abroad (3-6)**

**FIN 3350 - International Business Transactions (3)**

**FIN 4750 - International Business Finance (3)**

**FIN 4800 - International Insurance Markets (3)**

**MGT 3670 - International Human Resource Management (3)**

**MGT 3800 - International Management (3)**

**MKT 4550 - International Marketing (3)**

**SCM 3680 - Supply Chain Technologies in a Global Environment (3)**

**SCM 3690 - Global Supply Chain and Logistics (3)**

and others upon approval

### **Other Prerequisite Information**

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No more than five business courses at the 3000 level or above, including graduate-level courses, can be taken by students not admitted to the COB.

Please see course descriptions for important prerequisite information for 3000 level and 4000 level business courses.

### **Note**

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***\*\*\* IN ORDER TO GRADUATE, COMPUTER INFORMATION SYSTEMS MAJORS MUST ACHIEVE AN AVERAGE GPA OF 2.5 IN THE FOLLOWING 24 HOURS OF REQUIRED AND ELECTIVE 3000/4000-LEVEL COMPUTER INFORMATION SYSTEM COURSES. \*\*\****

## Required Core- Computer Information Systems (15 Hours)

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CIS 3580 - Networking and IT Infrastructures (3)

CIS 3680 - Programming Software Solutions (3)

CIS 3750 - Database Management (3)

CIS 4250 - Systems Analysis and Design (3)

CIS 4850 - Information System Project (3)

## CIS Major Electives (9 Hours)

---

Choose nine hours from

CIS 3000 or 4000 level or SCM 4870 (cannot include CIS 3520)

## College of Business Electives (3000/4000 Level) (3 Hours)

---

Cannot use FIN 3010 or MGT 3010

## Free Electives (12 Hours)

---

Taken to total 120 hours for the degree

12 hours any level inside or outside of the COB (*cannot use ACC 1050, FIN 3010 or MGT 3010*)

## Total Required (120 Hours)

---

92 hours major requirements/electives **PLUS** 44 hours Gen Ed requirements **MINUS** 16 hours of major requirements already counted in Gen Ed

Appalachian State University

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**Program of Study for CIS-Cybersecurity Sheryl used old CIS major to mark up to show new concentration.**

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**Computer Information Systems-Cybersecurity Concentration, BSBA**

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Program Code: 310CA

CIP Code: 52.1201

## General Education Requirements (44 Hours)

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### **General Education Requirements**

*The following 16 hours of major requirements can also count in the General Education Program:*

**R C 1000** and **R C 2001** (6 hours) count towards the General Education Writing Across the Curriculum requirement

**MAT 1035** (3 hours) and 1 hours of **ECO 2100** fulfill the General Education Quantitative Literacy requirement

**ECO 2030** and **ECO 2040** (6 hours) count towards the General Education Liberal Studies Experience requirement

## WCOB Core Requirements

---

### **WCOB Admission Requirements (16 Hours)**

---

2.6 cumulative GPA (based on 12+ graded hours at ASU), 45 earned hours and completion of the following:

**R C 1000 - Expository Writing (3)** minimum grade of "C" (2.0) required

**MAT 1035 - Business Mathematics With Calculus (3)** minimum grade of "C-" (1.7) required

**ACC 2100 - Principles of Accounting I (3)** minimum grade of "C-" (1.7) required

**BUS 2001 - Business Career Development (1)** minimum grade of "C" (2.0) required

**CIS 1060 - Business Analytics using Spreadsheet Technology (3)** minimum grade of "C-" (1.7) required

**ECO 2030 - Principles of Microeconomics (3)** minimum grade of "C-" (1.7) required

### **WCOB Lower Level Core (18 hours)**

---

2.0 average required

Business majors are encouraged to complete all WCOB Lower Level Core courses before taking 4000 level business courses.

**ACC 2110 - Principles of Accounting II (3)** minimum grade of "C-" (1.7) required

**ECO 2040 - Principles of Macroeconomics (3)** \* minimum grade of "C-" (1.7) required

**ECO 2100 - Business and Economic Statistics I (3)** \* minimum grade of "C-" (1.7) required (can sub. STT 2810 or STT 2820)

**ECO 2200 - Business and Economic Statistics II (3)** (can sub. STT 3820)

**LAW 2150 - Legal Environment of Business (3)** minimum grade of "C-" (1.7) required

**R C 2001 - Introduction to Writing Across the Curriculum (3)** minimum grade of "C" (2.0) required

(hours already counted in Gen Ed)

#### **Note**

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*Students cannot be admitted to the COB with any outstanding grades of "I".*

*\*MAT 1035, ECO 2030, ECO 2040, and one hour of ECO 2100 already count in Gen Ed.*

### **WCOB Upper Level Core (19 hours)**

---

## **2.0 average required**

*\*A senior check and, for students graduating in the term in which these are taken, a graduation application, must be completed prior to registering for courses indicated with an asterisk.*

**CTE 3340 - Business Communications (3) [WID]**

or

**ENG 3100 - Business Writing (3) [WID]**

(min. grade of "C" in **CTE 3340/ENG 3100** required to take 4000 level business courses)

**FIN 3680 - Introduction to Finance (3)**

**MGT 3630 - Introduction to Organizational Behavior (3)**

**MKT 3050 - Principles of Marketing (3)**

**SCM 3650 - Production and Operations Management (3)**

**MGT 4750 - Strategic Management (3)** \* (prereq: **CTE 3340** or **ENG 3100** with a minimum grade of "C" (2.0), **FIN 3680**, **MKT 3050**, **SCM 3650** and final semester of coursework)

**BUS 4000 - Business Capstone Experience (1) [CAP]** \* (Capstone Requirement) (prereq: **CTE 3340** or **ENG 3100** with a minimum grade of "C" (2.0), **FIN 3680**, **MKT 3050**, **SCM 3650** and final semester of coursework)

## **Global Issues Requirement**

---

Met within the other degree requirements - does not require additional course work

**The Global Issues requirement can be met by satisfying one of the following:**

International business course (See list below)

Business faculty led study abroad (minimum 3 hours)

Semester long study abroad for credit

Full-time 400-hour minimum international internship for credit

Foreign language courses at or above the 3000 level

#### **International Business Course**

---

**ACC 3590 - Assessing Sustainability in a Global Business Environment (3)**

**ACC 4730 - Accounting and International Business (3)**

**BUS 4065 - Holland Fellows International Business Study in Asia II (3)**

**CIS 3620 - Global Information Technologies (3)**

**ECO 3410 - International Trade (3)**

**ECO 3430 - Economic Growth and Development (3)**

**ECO 4640 - International Macroeconomics (3)**

**ENT 3190 - International Entrepreneurship (3)**

**ENT 3600 - Entrepreneurship Study Abroad (3-6)**

**FIN 3350 - International Business Transactions (3)**

**FIN 4750 - International Business Finance (3)**

**FIN 4800 - International Insurance Markets (3)**

**MGT 3670 - International Human Resource Management (3)**

**MGT 3800 - International Management (3)**

**MKT 4550 - International Marketing (3)**

**SCM 3680 - Supply Chain Technologies in a Global Environment (3)**

**SCM 3690 - Global Supply Chain and Logistics (3)**

and others upon approval

## **Other Prerequisite Information**

---

No more than five business courses at the 3000 level or above, including graduate-level courses, can be taken by students not admitted to the COB.

Please see course descriptions for important prerequisite information for 3000 level and 4000 level business courses.

## **Note**

---

***\*\*\*IN ORDER TO GRADUATE, COMPUTER INFORMATION SYSTEMS MAJORS MUST ACHIEVE AN AVERAGE GPA OF 2.5 IN THE FOLLOWING ~~24-33~~ HOURS OF REQUIRED AND ELECTIVE 3000/4000-LEVEL COMPUTER INFORMATION SYSTEM COURSES. \*\*\****

## **Required Core- Computer Information Systems (15 Hours)**

---

**CIS 3580 - Networking and IT Infrastructures (3)**

**CIS 3680 - Programming Software Solutions (3)**

**CIS 3750 - Database Management (3)**

**CIS 4250 - Systems Analysis and Design (3)**

**CIS 4850 - Information System Project (3)**

## **Computer Information Systems-Cybersecurity Concentration Required Courses (6 Hours)**

[CIS 3740 – Audit Analytics \(3\)](#)

[CIS 3840 – Managing Security \(3\)](#)

## **Computer Information Systems – Cybersecurity Concentration Electives (3 Hours)**

Select one of the following:

[CIS 3820: Ethics and Privacy \(3\)](#)

[CIS 3880 – Ethical Hacking and Countermeasures \(3\)](#)

## **CIS Major Electives (6~~9~~ Hours)**

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Choose ~~nine~~six hours from

CIS 3000 or 4000 level or [SCM 4870](#) (cannot include [CIS 3520](#))

## **College of Business Electives (3000/4000 Level) (3 Hours)**

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Cannot use [FIN 3010](#) or [MGT 3010](#)

## **Free Electives (12~~6~~ Hours)**

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Taken to total 120 hours for the degree

| **12-6** hours any level inside or outside of the COB (*cannot use ACC 1050, FIN 3010 or MGT 3010*)

## Total Required (120 Hours)

---

*92 hours major requirements/electives **PLUS** 44 hours Gen Ed requirements **MINUS** 16 hours of major requirements already counted in Gen Ed*

<b>Program</b>	<b>Program Code</b>
<a href="#">Anthropology, BA</a>	202A
<a href="#">Art and Visual Culture - Art History Concentration, BA</a>	549B
<a href="#">Art and Visual Culture - Art Management Concentration, BA</a>	549D
<a href="#">Art and Visual Culture - Studio Art Concentration, BA</a>	549C
<a href="#">Biology, BA</a>	208A
<a href="#">Chemistry, BA</a>	216A
<a href="#">Dance Studies, BA</a>	581A
<a href="#">Economics - Environmental Economics and Policy Concentration, BA</a>	315B
<a href="#">Economics - General Economics Concentration, BA</a>	315C
<a href="#">Economics - International Economics Concentration, BA</a>	315D
<a href="#">Economics - Regional Economic Development Concentration, BA</a>	315E
<a href="#">English - Creative Writing Concentration, BA</a>	233B
<a href="#">English - Film Studies Concentration, BA</a>	233D
<a href="#">English - Literary Studies Concentration, BA</a>	233E
<a href="#">English - Professional Writing Concentration, BA</a>	233C
<a href="#">English, Secondary Education, BS</a>	234A
<a href="#">Gender, Women's and Sexuality Studies, BA</a>	134A
<a href="#">Geography, BA</a>	242A
<a href="#">Geology, BA</a>	119A
<a href="#">Global Studies, BA</a>	601A
<a href="#">History, BA</a>	254A
<a href="#">Interdisciplinary Studies - Individually Designed Concentration, BA</a>	250E
<a href="#">Languages, Literatures, and Cultures - East Asian Languages and Cultures Concentration, BA</a>	136D
<a href="#">Languages, Literatures, and Cultures - French and Francophone Studies Concentration, BA</a>	136B
<a href="#">Languages, Literatures, and Cultures - German Concentration, BA</a>	136E
<a href="#">Languages, Literatures, and Cultures - Spanish and Hispanic Studies Concentration, BA</a>	136F
<a href="#">Mathematics, BA</a>	261A
<a href="#">Philosophy, BA</a>	101A
<a href="#">Physics, BA</a>	269A
<a href="#">Political Science, BA</a>	271A
<a href="#">Psychology, BA</a>	251A

<a href="#"><u>Religious Studies, BA</u></a>	102A
<a href="#"><u>Sociology, BA</u></a>	290A
<a href="#"><u>Sustainable Development - Environmental Studies Concentration, BA</u></a>	603B
<a href="#"><u>Theatre Arts - General Theatre Concentration, BA</u></a>	591B
<a href="#"><u>Theatre Arts - Theatre Design/Technology Concentration, BA</u></a>	591D
<a href="#"><u>Theatre Arts - Theatre Education Concentration, BA</u></a>	591E
<a href="#"><u>Theatre Arts - Theatre Performance Concentration, BA</u></a>	591F
<a href="#"><u>World Languages and Cultures Second Academic Concentration</u></a>	SAC Code: CHN, FRE, GER, JPN, SNH

# Elementary Education, BS

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Program Code: 441A

CIP Code: 13.1202

Teaching

## General Education Requirements (44 Hours)

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- **General Education Requirements**

SPECIAL NOTE: [It is recommended that](#) Elementary Education majors ~~must~~ take nine (9) semester hours from the Cultivating Creative Expression theme as the Integrative Learning Experience in General Education: ENG 2360 ~~is required~~ along with two (2) other courses from this theme. [Transfer students](#)[Students with transfer credit](#) will be advised on required General Education coursework on an individual basis.

9 hours from the Second Academic Concentration may be double counted from General Education and Major.

Additional courses marked with an asterisk (\*) may be double counted in General Education.

## Professional Education Requirements (24 Hours)

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MUST complete with a minimum grade of "C" (2.0)

- [C I 2300 - Teaching and Learning in the Digital Age \(2\)](#)
- [FDN 2400 - Critical Perspectives on Learning and Teaching \(2\)](#)
- [PSY 3010 - Psychology Applied to Teaching \(3\) \\*](#)
- [SPE 3300 - Creating Inclusive Learning Communities \(3\)](#)

- **C I 3400 - Policies and Practices in Educational Assessment (2)**
- **C I 4900 - Internship/Student Teaching (6-12)** [CAP] Students must complete 12 hours of Student Teaching

## Major Requirements (**64-66 Hours**)

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MUST complete with a minimum grade of “C” (2.0) ~~and before Block II~~

- ~~**MAT 2030 - Mathematics for the Elementary School Teacher (3)** (MUST be completed before admission to Block I)~~
- ~~—~~
- ~~**ENG 3240 - World Literature for Children (3)**~~
- ~~or~~
- ~~**R E 3240 - World Literature for Children (3)**~~
- ~~—~~
- ~~**GHY 3013 - North Carolina (3)**~~
- ~~or~~
- ~~**HIS 3728 - History of North Carolina (3)**~~
- ~~—~~
- ~~**THR 3857 - Teaching Theatre, K-5 (2)**~~
- ~~and~~
- ~~**THR 3858 - Theatre Pedagogy Practicum (1)**~~
- ~~or~~
- ~~**C I 3021 - Visual Art in the Elementary School (3)**~~
- ~~or~~
- ~~**MUS 2024 - Music Methods for the Classroom Teacher (3)**~~
- ~~—~~
- ~~**C I 3750 - Integrating Media and Technology into Teaching (3)**~~
- ~~**HPE 3645 - Health Education in the Elementary School (3)**~~

### Block I (6 Hours)

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MUST take concurrently after admission to teacher education before Block II with a minimum grade of “C” (2.0). It is recommended that a student take one course from the Themed Strands as well as the Directed Elective during the same semester as Block I

- [\*\*MAT 2030 - Mathematics for the Elementary School Teacher \(3\)\*\*](#)
- [\*\*SPE 3300 - Creating Inclusive Learning Communities \(3\) \(10 hrs. service learning included\)\*\*](#)

## **Block II (12 Hours)**

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MUST take concurrently after admission to teacher education with a minimum grade of “C”, after Block I, and before Block III

- [\*\*C I 3230 - Investigating Mathematics and Learning \(3\)\*\*](#)
- or
- [\*\*MAT 3230 - Investigating Mathematics and Learning \(3\) \[WID\] \[WID\]\*\*](#)
- [\*\*C I 3000 - Learner Diversity: Teaching English Language Learners \(3\) \[WID\] \[WID\]\*\*](#)
- or
- [\*\*C I 3110 - Social Studies in the Elementary School \(3\) \(10 hrs. service learning included\)\*\*](#)
- or
- [\*\*R E 3030 - Foundations of Literacy \(3\)\*\*](#)

## **Themed Strands (12 Hours)**

MUST complete with a minimum grade of “C” (2.0) and before Block III. 12 hours of the major requirements are from the Themed Strands. Choose 3 hours from each Theme Strand.

### **Integrating the Arts**

- [\*\*C I 3021 - Visual Art in the Elementary School \(3\)\*\*](#)
- or
- [\*\*MUS 2024 - Music Methods for the Classroom Teacher \(3\)\*\*](#)
- or
- [\*\*THR 3857 - Teaching Theatre, K-5 \(2\)\*\*](#)
- and
- [\*\*THR 3858 - Theatre Pedagogy Practicum \(1\)\*\*](#)

### **Health, Wellness, and Life Systems**

- or

- [CI 3401 - Teaching about Life and Environments in the Elementary School \(3\)](#)
- [CI 3552 – Environmental Literacy in 21<sup>st</sup> Century Schools and Society \(3\)](#)
- [HPE 3645 – Health Education in Elementary School \(3\)](#)
- 

#### Creating Positive Learning Environments

- [CI 3402 – Children as Citizens: Building Classroom Community \(3\)](#)
- [CI 3750 – Integrating Media and Technology into Teaching \(3\)](#)

#### Expanding Teacher Content Knowledge

- [CI 3404 – Investigating Critical Literacy in Multiple Media Genres \(3\)](#)
- [ENG 3240 – World Literature for Children \(3\)](#)
- [Or](#)
- [RE 3240 – World Literature for Children \(3\)](#)
- [GHY 3013 – North Carolina \(3\)\\*](#)
- [HIS 3728 – History of North Carolina \(3\)](#)

#### **Directed Elective (3 Hours)**

---

**Choose one** of the following courses for 3 hours or an appropriate substitution approved by an advisor

- [C I 3551 - Teacher, Leader, Citizen \(3\)](#)
- [C I 3552 - Environmental Literacy in 21st Century Schools and Society \(3\)](#)
- [C I 3553 - Issues of Language and Culture in Public Schools \(3\)](#)
- [C I 3554 - Investigating the Past and Present through the Experiences of Children \(3\)](#)
- [C I 3555 - Beyond the Numbers \(3\)](#)
- [C I 3556 - Children at Risk \(3\)](#)
- [C I 3557 - Build It! Design Technology and Elementary STEAM Education \(3\)](#)
- [C I 3530-3549 - Selected Topics \(1-4\)](#) (3 hours required for the major)

#### **Block I**

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~~MUST take concurrently after admission to teacher education before Block II with a minimum grade of “C” (2.0). Block I must be taken along with SPE 3300.~~

- ~~MAT 3230 - Investigating Mathematics and Learning (3) [WID]~~ [WID]
- ~~or~~
- ~~C I 3230 - Investigating Mathematics and Learning (3) [WID]~~ [WID]
- ~~or~~
- ~~R E 3030 - Foundations of Literacy (3)~~
- ~~or~~
- ~~C I 3000 - Learner Diversity: Teaching English Language Learners (3)~~ (10 hrs. service learning included)
- ~~Or~~
- ~~SPE 3000 - Learner Diversity: Teaching English Language Learners (3)~~ (10 hrs. service learning included)
- ~~or~~

## **Block II**

---

~~MUST take concurrently after admission to teacher education with a minimum grade of “C”, after Block I, and before student teaching~~

- ~~C I 4030 - Teaching Mathematics in the Elementary School (3)~~
- ~~R E 4030 - Development of Literacy for Learning (3)~~
- ~~C I 3110 - Social Studies in the Elementary School (3)~~ (10 hrs. service learning included)
- ~~C I 4000 - Elementary School Curriculum and Instruction (4)~~

~~C I 4401 - Methods of Elementary Science Teaching (3)~~

## **Block III (15 Hours)**

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~~MUST take concurrently after admission to teacher education with a minimum grade of “C”, after Block II, and before student teaching~~

- ~~C I 3400 - Policies and Practices in Educational Assessment (2)~~
- ~~C I 4000 - Elementary School Curriculum and Instruction (4)~~
- ~~C I 4030 - Teaching Mathematics in the Elementary School (3)~~

- [C I 4401 - Methods of Elementary Science Teaching \(3\)](#)
- [R E 4030 - Development of Literacy for Learning \(3\)](#)

## Second Academic Concentration (18 Hours)

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9 hours may be double counted from General Education and Major

- [Diversity Studies](#)
- [English / Language Arts](#)
- [World Languages and Cultures](#)
- [Exceptional Learners](#)
- [Global Issues](#)
- [Language and Literacy](#)
- [Math, Science, and Technology](#)
- [Mathematics](#)
- [Media Studies](#)
- [Music](#)
- [The Sciences](#)
- [Psychology](#)
- [Public Health](#)
- [Social Studies](#)
- [The Arts](#)
- [Theater](#)
- [Visual Arts](#)

## Electives (Minimum ~~0-3~~[0-1](#) Hours)

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## Total Required (120 Hours)

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A student must have at least a 2.70 grade-point average to be admitted to the teacher education program and must maintain a 2.70 grade-point average overall through student teaching.

## Teacher Education for Theatre Arts Minor

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Minor Code: 438

CIP Code: 13.1299

### Minor In Teacher Education for Theatre Arts (18 Hours)

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This minor is intended to provide an option for acquiring courses for those exploring [professional teacher](#) education that could contribute to achieving NC licensure for students enrolled in theatre arts with a theatre education concentration. Specifically, the Teacher Education program's Professional Education Core courses plus 6 credit hours of electives will be used to fulfill the requirements of a minor. This minor is offered only for Theatre Arts majors.

This minor will develop the skills, knowledge and dispositions of students seeking a minor in education to complete the course and early field experience requirements that will assist them in becoming future teachers. This minor alone does not result in an endorsement for professional licensure through the North Carolina Department of Public Instruction without the fulfillment of all additional licensure requirements including student teaching.

**[C I 2300 - Teaching and Learning in the Digital Age \(2\)](#)**

**[FDN 2400 - Critical Perspectives on Learning and Teaching \(2\)](#)**

**[PSY 3010 - Psychology Applied to Teaching \(3\)](#)**

**[SPE 3300 - Creating Inclusive Learning Communities \(3\)](#)**

**[C I 3400 - Policies and Practices in Educational Assessment \(2\)](#)**

**[THR 3071 - Teaching Theatre, 9-12 \(2\)](#)**

**[THR 3857 - Teaching Theatre, K-5 \(2\)](#)**

**[THR 4357 - Teaching Theatre, 6-8 \(2\)](#)**

**Note:**

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STUDENTS MUST MEET WITH THE ASSOCIATE DEAN FOR STUDENT AFFAIRS AND PROGRAM SERVICES IN THE REICH COLLEGE OF EDUCATION PRIOR TO TAKING COURSES IN THE MINOR.

Contact: Dr. Terry McClannon

[mcclannontw@appstate.edu](mailto:mcclannontw@appstate.edu)

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# Communication, Public Relations, BS

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Program Code: 521A

CIP Code: 09.0902

Non-Teaching

## General Education Requirements (44 Hours)

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- **General Education Requirements**

(**COM 2105**, **COM 2124** and **COM 3315** if taken for the major may count toward General Education if completing a theme or Liberal Studies Experience)

## Major Requirements (48 Hours)

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A cumulative GPA of 2.5 based on earned semester hours at Appalachian is required prior to declaring the Communication, Public Relations major.

Transfer students may be allowed to declare this major prior to earning 12 semester hours at Appalachian if they have earned a 2.5 cumulative GPA on coursework completed prior to entering Appalachian.

An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian.

- Junior Writing in the Discipline (WID)
- Senior Capstone Experience (CAP) must be met.

## Core Courses (6 Hours)

---

**A 2.0 GPA is required in the core courses**

- **COM 1200 - Thinking Through Communication (3)**
- **COM 2101 - Public Speaking (3)**
- or
- **COM 2105 - Public Speaking in the Disciplines (3)**

## Major Courses (27 Hours)

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- **COM 1300 - Journalism Matters: An Introduction to News Literacy and News Writing (3)**
- **COM 2325 - Public Relations Principles (3)**
- **COM 2618 - Introduction to Media Publishing (3)**

- COM 3010 - Media Graphics (3)
- COM 3220 - Professional Ethics in Public Relations (3)
- COM 3300 - Mass Media and Society (3)
- COM 3618 - Public Relations Writing (3) [WID] [WID]
- COM 3928 - Communication Research Methods (3)
- COM 4318 - Public Relations Campaigns (3) [CAP] [CAP]

### **Additional Requirements (15 Hours)**

### **Professional Development Courses (Choose 9 Hours)(15 Hours)**

- COM 2124 - Intercultural Communication (3)
- COM 2131 - Health Communication (3)
- COM 2610 - News Reporting and Writing (3)
- COM 2700 - Foundations of Advertising (3)
- COM 3117 - Environmental Communication (3)
- COM 3151 - Gender Communication (3) [WID]
- COM 3155 - Persuasion (3) [WID]
- COM 3305 - Communication Law (3)
- COM 3312 - Crisis Communication (3) [WID]
- COM 3315 - Political Communication (3)
- COM 3320 - Audio-Video Production (3)
- COM 3317 - Social Media Strategies (3)
- COM 3418 - Social Media Storytelling (3)
- COM 3538 - Selected Topics in Public Relations (3)
- COM 3620 - Principles of Fund Raising (3)
- COM 3680 - Literary Journalism (3)
- COM 3900 - Internship (3-12)
- COM 4101 - Speechwriting (3)
- COM 4420 - Multimedia Storytelling (3)
- COM 4430 - Advanced Public Relations Campaigns (3)

### **Immersion Courses**

**(Choose an additional 6 hours in consultation with your advisor. Suggested Courses:)**

- COM 2124 - Intercultural Communication (3)
- COM 2131 - Health Communication (3)
- COM 2610 - News Reporting and Writing (3)
- COM 2700 - Foundations of Advertising (3)
- COM 3117 - Environmental Communication (3)

- [COM 3151 - Gender Communication \(3\) \[WID\]](#)
- [COM 3155 - Persuasion \(3\) \[WID\]](#)
- [COM 3315 - Political Communication \(3\)](#)
- [COM 3680 - Literary Journalism \(3\)](#)
- [COM 4101 - Speechwriting \(3\)](#)
- [COM 4420 - Multimedia Storytelling \(3\)](#)

## **Minor Required (12-25 Hours)**

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9 hours of a minor must be completed at Appalachian. Students should choose a minor in consultation with their advisor. Suggested minors include: English, General Business, International Business, Marketing, Non-Profit Management, Political Science, Psychology, or Sociology.

## **Free Electives (3-25 Hours)**

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To total a minimum of 120 hours for the degree

## **Total Required (120 Hours)**

# Communication, Advertising, BS

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Program Code: 507A

CIP Code: 09.0903

Non-Teaching

## General Education Requirements (44 Hours)

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- **General Education Requirements**

(COM 2105 taken for the major may count toward General Education: Liberal Studies Experience).

## Major Requirements (45 Hours)

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A cumulative GPA of 2.5 based on earned semester hours at Appalachian is required prior to declaring the Communication, Advertising major.

Transfer students may be allowed to declare this major prior to earning 12 semester hours at Appalachian if they have earned a 2.5 cumulative GPA on coursework completed prior to entering Appalachian.

An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian.

- Junior Writing in the Discipline (WID)
- Senior Capstone Experience (CAP) must be met.

## Core Courses (6 Hours)

---

A 2.0 GPA is required in the core courses

- **COM 1200 - Thinking Through Communication (3)**
- **COM 2101 - Public Speaking (3)**
- or
- **COM 2105 - Public Speaking in the Disciplines (3)**

## Major Courses (24 Hours)

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- **COM 2700 - Foundations of Advertising (3)**
- **COM 2618 - Introduction to Media Publishing (3)** (COM major)
- **COM 3245 – Introduction to Promotional Video (3)**
- **COM 3155 - Persuasion (3) [WID] [WID]**

- [COM 3305 - Communication Law \(3\)](#)
- [COM 3928 - Communication Research Methods \(3\)](#)
- [COM 3317 - Social Media Strategies \(3\)](#)
- [COM 3428 – Advertising Research \(3\)](#)
- [COM 3430 – Professional Ethics in Advertising \(3\) \(WID\)](#)
- [COM 4040 - International Advertising \(3\)](#)
- [COM 4250 - Professional Ethics in Advertising \(3\)](#)
- [COM 3317 - Social Media Strategies \(3\)](#)
- [COM 4400 - Advertising Campaigns \(3\) \[CAP\]](#) [CAP]

## Sequence Selection (9 Hours)

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Choose three of the four courses, in one of the following two emphases

### **Business Emphasis Strategic Advertising Emphasis**

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- [COM 3152 - Communication in Organizations \(3\)](#)
- [COM 3544 - Selected Topics in Advertising - Business \(3\)](#)
- [COM 3640 - Media Planning \(3\)](#)
- [COM 3860 – Client Development and Services \(3\)](#)
- [COM 3936 – Consumer Insights \(3\)](#)
- [COM 4300 - Media Sales \(3\)](#)

### **Creative Advertising Emphasis**

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- [COM 2618 - Introduction to Media Publishing \(3\) \(COM major\)](#)
- [COM 3010 - Media Graphics \(3\)](#)
- [COM 3015 – Advertising Graphics \(3\)](#)
- [COM 3302 - Copywriting for Advertising \(3\)](#)
- [COM 3545 - Selected Topics in Advertising - Creative \(3\)](#)
- [COM 3830 – Advanced Creative Advertising \(3\)](#)

## Major Electives (6 Hours)

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- Choose any courses from the Communication Department course listing (must meet prerequisites)

## Minor Required (12-25 Hours)

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- 9 hours of a minor must be completed at Appalachian. Suggested minors include: Art, English, General Business, International Business, Marketing, Political Science, Psychology, and Sociology.

## Free Electives (6-22 Hours)

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To total a minimum of 120 hours for the degree

## **Total Required (120 Hours)**

# Sustainable Technology, BS

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◀ Return to: [The College of Fine and Applied Arts](#)

Program Code: 571A

CIP Code: 15.0507

Non-Teaching

## General Education (44 Hours)

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### General Education Requirements

Eighteen hours of major requirements fulfill General Education requirements:

**MAT 1020** or higher fulfills Quantitative Literacy. Minimum grade of "C" (2.0) is required for the major.  
Science Sequence fulfills Science Inquiry.

**TEC 2029** ILE: Sustainability and Global Resources and the Social Sciences

**TEC 2601** Liberal Studies Experience

Elective courses in the major may fulfill up to an additional nine hours of General Education requirements:

**ECO 2620** and **PLN 2410** Liberal Studies Experience

**IND 2012** **IND 1401** Liberal Studies Experience and Fine Arts designation

**PHY 1830**, **PHL 2015**, and **S D 2400** ILE: Sustainability and Global Resources

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## Major Requirements (93 - 95 Hours)

Proposed

An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian.

Junior Writing in the Discipline (WID)

and

Senior Capstone Experience (CAP) must be met

### **General Education courses also required for the major (12 Hours)**

---

[\*\*MAT 1020 - College Algebra with Applications \(4\)\*\*](#) (or higher) Note: MAT 1025 will NOT count for Gen Ed Literacy. Minimum grade of "C" (2.0) is required for the major.

[\*\*BIO 1201 - Biology in Society I \(3\)\*\*](#) and

[\*\*BIO 1202 - Biology in Society II \(3\)\*\*](#) and

[\*\*BIO 1203 - Biology in Society Laboratory \(2\)\*\*](#)

or

[\*\*CHE 1101 - Introductory Chemistry I \(3\)\*\*](#) and

[\*\*CHE 1110 - Introductory Chemistry Laboratory I \(1\)\*\*](#)

[\*\*CHE 1102 - Introductory Chemistry II \(3\)\*\*](#) and

[\*\*CHE 1120 - Introductory Chemistry Laboratory II \(1\)\*\*](#)

or

[\*\*PHY 1103 - General Physics I \(4\)\*\*](#)

[\*\*PHY 1104 - General Physics II \(4\)\*\*](#)

### **Introductory Sustainable Technology & the Built Environment Coursework (23 Hours)**

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[\*\*TEC 1708 - Construction Methods I \(3\)\*\*](#)

[\*\*TEC 1728 - Architectural Graphics and Modeling I \(3\)\*\*](#)

[\*\*TEC 2024 - Introduction to Electronics \(3\)\*\*](#)

[\*\*TEC 2029 - Society and Technology \(3\)\*\*](#)

[\*\*TEC 2601 - Energy Issues and Technology \(3\)\*\*](#)

[\*\*TEC 2718 - Building Services \(3\)\*\*](#)

[\*\*TEC 3807 - Construction Safety \(2\)\*\*](#)

[\*\*TEC 3638 - Foundations of Sustainable Technology \(3\) \[WID\]\*\*](#) [WID]

### **Interdisciplinary Coursework (18 Hours)**

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Select 6 courses. See the Sustainable Technology Program Director for complete list.

Proposed

Recommended courses include:

- [BIO 3312 - Environmental Studies \(3\) \[WID\]](#)
  - [ECO 2620 - Environmental and Resource Economics \(3\)](#)
  - [GHY 2812 - Geospatial Technology in a Changing World \(3\)](#)
  - [GHY 3820 - GIS for the Environmental and Social Sciences \(3\)](#)
  - [IND 2012 - Product Design \(3\)](#)
  - [IND 2110 - Introduction to Fabrication \(3\)](#)
  - [IND 3004 - Welding \(3\)](#)
  - [MGT 3010 - Survey of Management \(3\)](#)
  - [PHL 2015 - Environmental Ethics \(3\)](#)
  - [PHY 1830 - The Physical Principles of Energy and Sustainability \(3\)](#)
  - [PHY 3140 - Environmental Physics \(3\)](#)
  - [PLN 2410 - Town, City and Regional Planning \(3\)](#)
  - [PLN 4240 - Sustainable Transportation Planning \(3\)](#)
  - [SD 2400 - Principles of Sustainable Development \(3\)](#)
  - [SD 3100 - Principles of Agroecology \(3\)](#)
  - [SD 4100 - Agroecology Practices, Systems, and Philosophies \(3\)](#)
- Technical Specialization (40 - 42 Hours)**
- 

The following are required courses. (15 Hours)

- [TEC 3609 - Introduction to PV Technology \(3\)](#)
- [TEC 3610 - Computer Applications for Renewable Energy Systems \(3\)](#)
- [TEC 4607 - Wind and Hydro Power Technology \(3\)](#)
- [TEC 4628 - Solar Thermal Energy Technology \(3\)](#)
- [TEC 4638 - Contemporary Problems in Sustainable Technology \(3\) \[CAP\]](#) [CAP] "C" (2.0) minimum required  
Or
- [TEC 4900 - Internship \(3-12\) \[CAP\]](#) [CAP] [3 sh required for major]

**Select 9 courses from the following (25 - 27 Hours)**

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- [TEC 3520 - Instructional Assistance \(1\)](#)
- [TEC 3530-3549 - Selected Topics \(1-4\)](#)
- [TEC 3604 - Sustainable Transportation \(3\)](#)
- [TEC 3605 - Sustainable Resource Management \(3\)](#)

Proposed

[TEC 3606 - Sustainable Water and Wastewater Technology \(3\)](#)

[TEC 3612 - Instrumentation for Renewable Energy Systems \(3\)](#)

[TEC 3704 - E-bike Technology \(3\)](#)

[TEC 3748 - Building Science \(3\)](#)

[TEC 4515 - PV Operations and Maintenance \(3\)](#)

[TEC 4520 - PV Business \(3\)](#)

[TEC 4530-4549 - Selected Topics \(1-4\)](#)

[TEC 4613 - EV Design \(3\)](#)

[TEC 4615 - Renewable Energy Project Development \(3\)](#)

[TEC 4616 - Solar Vehicle Design \(3\)](#)

[TEC 4618 - Sustainable Building Design and Construction \(3\)](#)

[TEC 4633 - Battery-Based PV Systems \(3\)](#)

[TEC 4700 - Bioenergy Technology \(3\)](#)

[TEC 4900 - Internship \(3\)](#)

## Minor Not Required

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## Free Electives (8-10 Hours)

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To total a minimum of 120 hours for the degree.

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## Total Required (120 Hours)

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◀ Return to: [The College of Fine and Applied Arts](#)

Proposed

# Sustainable Technology Minor

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◀ Return to: [The College of Fine and Applied Arts](#)

Minor Code: 593

CIP Code: 15.0507

Students may earn a minor in Sustainable Technology by completing the following **18 hours** of coursework. N must be completed at ASU.

## Required Courses (6 hours)

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[TEC 2029 - Society and Technology \(3\)](#)

[TEC 2601 - Energy Issues and Technology \(3\)](#)

## Select any four of the following courses (12 hours)

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[TEC 2024 - Introduction to Electronics \(3\)](#)

[TEC 3530-3549 - Selected Topics \(1-4\)](#)

[TEC 3604 - Sustainable Transportation \(3\)](#)

[TEC 3605 - Sustainable Resource Management \(3\)](#)

[TEC 3606 - Sustainable Water and Wastewater Technology \(3\)](#)

[TEC 3610 - Computer Applications for Renewable Energy Systems \(3\)](#)

[TEC 3704 - E-bike Technology \(3\)](#)

[TEC 4613 - EV Design \(3\)](#)

~~[TEC 4700 - Bioenergy Technology \(3\)](#)~~

◀ Return to: [The College of Fine and Applied Arts](#)

# **Building Sciences - Architectural Technology and Design Concentration, BS**

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◀ Return to: [The College of Fine and Applied Arts](#)

Program Code: 577\*/577B

CIP Code: 52.2001

## **General Education (44 hours)**

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### **General Education Requirements**

Fifteen hours of major requirements fulfill General Education requirements:

[MAT 1020](#) fulfills Quantitative Literacy.

[PHY 1103](#) and [PHY 1104](#) fulfills Science Inquiry.

[TEC 2029](#) (Integrative Learning Experience: Sustainability and Global Resources and the Social Science)

Elective courses in the major may fulfill up to an additional six hours of General Education requirements:

[PLN 2410](#) (Liberal Studies Experience)

[IND 2012](#) [IND 1401](#) (LSE and Fine Arts designation)

## **Major Requirements (91 hours)**

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18 semester hours must be completed at Appalachian. A laptop computer is required.

Junior Writing in the Discipline (WID) and

Senior Capstone Experience (CAP) must be met.

## **Foundation Coursework (15 hours)**

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**Minimum grade of "B" (3.0) in MAT 1020 or higher and "C" (2.0) in other listed courses is required.**

**MAT 1020 - College Algebra with Applications (4)** (or higher). Note: MAT 1025 does not fulfill Gen Ed Quantitative Literacy.

**TEC 2029 - Society and Technology (3)**

**PHY 1103 - General Physics I (4)**

**PHY 1104 - General Physics II (4)**

## **Introductory Coursework (21 hours)**

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**Minimum grade of "C" (2.0) in each course required**

**TEC 1708 - Construction Methods I (3)** Note: MAT 1020 or higher is required for building majors

**TEC 1728 - Architectural Graphics and Modeling I (3)** Note: MAT 1020 or higher is required for ~~building~~ Building Science majors

**TEC 2718 - Building Services (3)** Note: MAT 1020 or higher is required for ~~building~~ Building Science majors

**TEC 2739 - Materials and Structures I (3)** Note: MAT 1020 or higher is required for ~~building~~ Building Science majors

**INT 1001 - Visual Literacy I (3)**

**INT 1002 - Visual Literacy II (3)**

**INT 2310 - History of Interior Design and Architecture II (3)**

## **Advanced Coursework (41 hours)**

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**Minimum grade of "C" (2.0) in each course required**

**INT 3001 - Architecture and Design Internship Workshop (1)**

**INT 4320 - Professional Practices in Design (2)**

**TEC 3038 - Construction Methods II (3)**

**TEC 3718 - Construction Estimating (3)**

**TEC 3719 - Surveying Methods (1)**

**TEC 3728 - Architectural Design Studio I (3)**

**TEC 3738 - Materials and Structures II (3)**

**TEC 3739 - Materials and Structures III (3)**

**TEC 3748 - Building Science (3)**

[TEC 3758 - Architectural Design Studio II \(3\)](#)

[TEC 4738 - Architectural Design Studio III \(4\)](#)

[TEC 4748 - Architectural Design Studio IV \(4\)](#)

[TEC 4758 - Planning and Scheduling \(3\)](#)

[TEC 4900 - Internship \(3-12\) \[CAP\]](#) (3 sh required for major)

[TEC 4901 - Internship Portfolio \(3\) \[WID\]](#)

### Major Electives (14 hours)

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Choose from the following:

[IND 2012 IND 1401- Product Design \(3\)](#)

[IND 2110 - Introduction to Fabrication \(3\)](#)

[IND 2201 IND 1201 - Design Drawing I \(3\)](#)

[INT 2200 - Interior Design Systems I \(3\)](#)

[INT 2300 - History of Interior Design and Architecture I \(3\)](#)

[INT 3001 - Architecture and Design Internship Workshop \(1\)](#)

[PLN 2410 - Town, City and Regional Planning \(3\)](#)

[PLN 3432 - Planning Techniques \(4\) \[WID\]](#)

[PLN 3730 - Land, Property, and Law \(3\)](#)

[TEC 2601 - Energy Issues and Technology \(3\)](#)

[TEC 3035 - Architectural Field Study \(1-3\)](#)

[TEC 3036 - Construction Management Field Study \(1-3\)](#)

[TEC 3037 - Sustainable Building Systems Field Study \(1-3\)](#)

[TEC 3520 - Instructional Assistance \(1\)](#)

[TEC 3530-3549 - Selected Topics \(1-4\)](#)

[TEC 3604 - Sustainable Transportation \(3\)](#)

[TEC 3605 - Sustainable Resource Management \(3\)](#)

[TEC 3606 - Sustainable Water and Wastewater Technology \(3\)](#)

[TEC 3609 - Introduction to PV Technology \(3\)](#)

[TEC 3610 - Computer Applications for Renewable Energy Systems \(3\)](#)

[TEC 3807 - Construction Safety \(2\)](#)

[TEC 3900 - Internship: Field Experience \(3\)](#)

[TEC 4530-4549 - Selected Topics \(1-4\)](#)

[TEC 4618 - Sustainable Building Design and Construction \(3\)](#)

[TEC 4628 - Solar Thermal Energy Technology \(3\)](#)

[TEC 4700 - Bioenergy Technology \(3\)](#)

[TEC 4729 - Healthy Buildings \(3\)](#)

[TEC 4768 - Construction Administration \(3\)](#)

## **Minor Not Required**

---

Recommended minors are Community and Regional Planning or Sustainable Technology

### **Free Electives (0 - 6 hours)**

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To total a minimum of 120 hours for the degree

**Total Hours Required: 120**

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◀ Return to: [The College of Fine and Applied Arts](#)

# **Building Sciences - Construction Management Concentration, BS**

---

◀ Return to: [The College of Fine and Applied Arts](#)

Program Code: 577\*/577C

CIP Code: 52.2001

Non-Teaching

## **General Education Requirements (44 Hours)**

---

### **General Education Requirements**

Fifteen hours of major requirements fulfill General Education requirements:

[MAT 1020](#) fulfills Quantitative Literacy.

[PHY 1103](#) and [PHY 1104](#) fulfills Science Inquiry.

[TEC 2029](#) (Integrative Learning Experience: **Sustainability** Sustainability and Global Resources and the Social Science designation)

Elective courses in the major may fulfill up to an additional three hours of General Education requirements:

[ECO 2030](#), [PLN 2410](#), and [TEC 2601](#) (Liberal Studies Experience)

## **Major Requirements (91 hours)**

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18 semester hours must be completed at Appalachian. A laptop computer is required.

Junior Writing in the Discipline (WID) and  
Senior Capstone Experience (CAP) must be met

## **Foundation Coursework (15 Hours)**

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Minimum grade of "B" (3.0) in MAT 1020 or higher and "C" (2.0) in all other listed courses is required.

[\*\*MAT 1020 - College Algebra with Applications \(4\)\*\*](#) (or higher) Note: MAT 1025 does not count for Gen Ed Quantitative Literacy.

[\*\*TEC 2029 - Society and Technology \(3\)\*\*](#)

[\*\*PHY 1103 - General Physics I \(4\)\*\*](#)

[\*\*PHY 1104 - General Physics II \(4\)\*\*](#)

## **Introductory Coursework (12 Hours)**

---

Minimum grade of "C" (2.0) in each course is required

[\*\*TEC 1708 - Construction Methods I \(3\)\*\*](#) Note: MAT 1020 or higher is required for **building** Building Science majors

[\*\*TEC 1728 - Architectural Graphics and Modeling I \(3\)\*\*](#) Note: MAT 1020 or higher is required for **building** Building Science majors

[\*\*TEC 2718 - Building Services \(3\)\*\*](#) Note: MAT 1020 or higher is required for **building** Building Science majors

[\*\*TEC 2739 - Materials and Structures I \(3\)\*\*](#) Note: MAT 1020 or higher is required for **building** Building Science majors

## **Advanced Coursework (35 Hours)**

---

Minimum grade of "C" in each course is required

[\*\*TEC 3038 - Construction Methods II \(3\)\*\*](#)

[\*\*TEC 3718 - Construction Estimating \(3\)\*\*](#)

[\*\*TEC 3719 - Surveying Methods \(1\)\*\*](#)

[\*\*TEC 3728 - Architectural Design Studio I \(3\)\*\*](#)

[\*\*TEC 3738 - Materials and Structures II \(3\)\*\*](#)

[\*\*TEC 3739 - Materials and Structures III \(3\)\*\*](#)

TEC 3748 - Building Science (3)

TEC 4758 - Planning and Scheduling (3)

TEC 4768 - Construction Administration (3)

TEC 4778 - Integrated Project Design and Delivery (4)

TEC 4900 - Internship (3-12) [CAP] (3 sh required for major)

TEC 4901 - Internship Portfolio (3) [WID]

**Major Electives (20 Hours)**

---

CIS 2050 - Information Technology in the Organization (3)

ECO 2030 - Principles of Microeconomics (3)

FIN 3010 - Survey of Finance (3)

MGT 3010 - Survey of Management (3)

MKT 3050 - Principles of Marketing (3)

PLN 2410 - Town, City and Regional Planning (3)

PLN 3432 - Planning Techniques (4) [WID]

PLN 3730 - Land, Property, and Law (3)

TEC 2601 - Energy Issues and Technology (3)

TEC 3035 - Architectural Field Study (1-3)

TEC 3036 - Construction Management Field Study (1-3)

TEC 3037 - Sustainable Building Systems Field Study (1-3)

TEC 3520 - Instructional Assistance (1)

TEC 3530-3549 - Selected Topics (1-4)

TEC 3604 - Sustainable Transportation (3)

TEC 3605 - Sustainable Resource Management (3)

TEC 3606 - Sustainable Water and Wastewater Technology (3)

TEC 3609 - Introduction to PV Technology (3)

TEC 3610 - Computer Applications for Renewable Energy Systems (3)

TEC 3807 - Construction Safety (2)

TEC 3900 - Internship: Field Experience (3)

TEC 4103 - Leadership in Technical Settings (3)

TEC 4530-4549 - Selected Topics (1-4)

TEC 4618 - Sustainable Building Design and Construction (3)

TEC 4628 - Solar Thermal Energy Technology (3)

TEC 4700 - Bioenergy Technology (3)

[\*\*TEC 4729 - Healthy Buildings \(3\)\*\*](#)

[\*\*SNH 1010 - Beginning Spanish I \(3\)\*\*](#)

[\*\*SNH 1020 - Beginning Spanish II \(3\)\*\*](#)

or

[\*\*SNH 1030 - Accelerated Beginning Spanish \(6\)\*\*](#)

## **Interdisciplinary Coursework (9 Hours)**

---

Minimum grade of "C" (2.0) in each course is required

[\*\*COM 2101 - Public Speaking \(3\)\*\*](#)

or

[\*\*COM 2105 - Public Speaking in the Disciplines \(3\)\*\*](#)

[\*\*ACC 1050 - Survey of Accounting \(3\)\*\*](#)

[\*\*LAW 2150 - Legal Environment of Business \(3\)\*\*](#)

## **Minor Not Required**

---

Recommended minors are General Business, Community and Regional Planning, or Sustainable Technology

## **Free Electives (0-3 Hours)**

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To total a minimum of 120 hours for the degree

## **Total Required (120 Hours)**

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◀ Return to: [\*\*The College of Fine and Applied Arts\*\*](#)

# **Building Sciences - Sustainable Building Systems Concentration, BS**

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◀ Return to: [The College of Fine and Applied Arts](#)

Program Code: 577\*/577D

CIP Code: 52.2001

Non-Teaching

## **General Education Requirements (44 hours)**

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### **General Education Requirements**

Eighteen (18) hours of major requirements fulfill General Education requirements:

[MAT 1020](#) fulfills Quantitative Literacy.

[PHY 1103](#) and [PHY 1104](#) fulfills Science Inquiry.

[TEC 2029](#) (Integrative Learning Experience: **Sustainability** Sustainability and Global Resources and the Social Science)

[TEC 2601](#) (Liberal Studies Experience)

Elective courses in the major may fulfill up to an additional six (6) hours of General Education requirements:

[PHY 1830](#) and [PHL 2015](#) 9(ILE: Sustainability and Global Resources)

[ECO 2620](#) (Liberal Studies Experience)

## **Major Requirements (91 Hours)**

---

18 semester hours must be completed at Appalachian. A laptop computer is required).

Junior Writing in the Discipline (WID)

and

Senior Capstone Experience (CAP) must be met.

## **Foundation Coursework (15 Hours)**

---

Minimum grade of "B" (3.0) in MAT 1020 or higher and "C" (2.0) in all other listed courses is required.

**MAT 1020 - College Algebra with Applications (4)** (or higher) Note: MAT 1025 does not count for Gen Ed Qualitative Literacy.

**TEC 2029 - Society and Technology (3)**

**PHY 1103 - General Physics I (4)**

**PHY 1104 - General Physics II (4)**

## **Introductory Coursework (18 Hours)**

---

Minimum grade of "C" in each course is required

**TEC 1708 - Construction Methods I (3)** Note: MAT 1020 or higher is required for building Building Science majors

**TEC 1728 - Architectural Graphics and Modeling I (3)** Note: MAT 1020 or higher is required for building Building Science majors

**TEC 2024 - Introduction to Electronics (3)**

**TEC 2601 - Energy Issues and Technology (3)**

**TEC 2718 - Building Services (3)** Note: MAT 1020 or higher is required for building Building Science majors

**TEC 2739 - Materials and Structures I (3)** Note: MAT 1020 or higher is required for building Building Science majors

## **Advanced Coursework (41 Hours)**

---

Minimum grade of "C" (2.0) in each course is required

**TEC 3038 - Construction Methods II (3)**

**TEC 3612 - Instrumentation for Renewable Energy Systems (3)**

**TEC 3718 - Construction Estimating (3)**

**TEC 3719 - Surveying Methods (1)**

**TEC 3728 - Architectural Design Studio I (3)**

**TEC 3738 - Materials and Structures II (3)**

[TEC 3739 - Materials and Structures III \(3\)](#)

[TEC 3748 - Building Science \(3\)](#)

[TEC 4618 - Sustainable Building Design and Construction \(3\)](#)

[TEC 4729 - Healthy Buildings \(3\)](#)

[TEC 4758 - Planning and Scheduling \(3\)](#)

[TEC 4788 - Integrated Energy and Building Systems \(4\)](#)

[TEC 4900 - Internship \(3-12\) \[CAP\]](#) (3 sh required for major)

[TEC 4901 - Internship Portfolio \(3\) \[WID\]](#)

## **Major Electives (17 Hours)**

---

Minimum grade of "C" (2.0) in each course is required

Choose from the following:

[ACC 1050 - Survey of Accounting \(3\)](#)

[ECO 2620 - Environmental and Resource Economics \(3\)](#)

[LAW 2150 - Legal Environment of Business \(3\)](#)

[PHL 2015 - Environmental Ethics \(3\)](#)

[PHY 1830 - The Physical Principles of Energy and Sustainability \(3\)](#)

[PHY 3140 - Environmental Physics \(3\)](#)

[TEC 3035 - Architectural Field Study \(1-3\)](#)

[TEC 3036 - Construction Management Field Study \(1-3\)](#)

[TEC 3037 - Sustainable Building Systems Field Study \(1-3\)](#)

[TEC 3520 - Instructional Assistance \(1\)](#)

[TEC 3530-3549 - Selected Topics \(1-4\)](#)

[TEC 3604 - Sustainable Transportation \(3\)](#)

[TEC 3605 - Sustainable Resource Management \(3\)](#)

[TEC 3606 - Sustainable Water and Wastewater Technology \(3\)](#)

[TEC 3609 - Introduction to PV Technology \(3\)](#)

[TEC 3610 - Computer Applications for Renewable Energy Systems \(3\)](#)

[TEC 3807 - Construction Safety \(2\)](#)

[TEC 4103 - Leadership in Technical Settings \(3\)](#)

[TEC 4530-4549 - Selected Topics \(1-4\)](#)

[TEC 4628 - Solar Thermal Energy Technology \(3\)](#)

[TEC 4700 - Bioenergy Technology \(3\)](#)

[TEC 4768 - Construction Administration \(3\)](#)

[TEC 3900 - Internship: Field Experience \(3\)](#)

## **Minor Not Required**

---

Recommended minors are General Business, Community and Regional Planning, or Sustainable Technology

### **Free Electives (0 -9 Hours)**

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To total a minimum of 120 hours for the degree

### **Total Required (120 Hours)**

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◀ Return to: [The College of Fine and Applied Arts](#)

# Theatre Arts - Theatre Education Concentration, BA

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Program Code: 591\*/591E

CIP Code: 50.0501

Teaching

## General Education Requirements (44 Hours)

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- **General Education Requirements**

(**THR 2005** and **THR 3730** taken for the major may count toward General Education: Liberal Studies Experience; Integrative Learning Experience)

## Language Requirements (6-12 Hours)

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Completion of 6 semester hours at the \*intermediate level or higher

- **Intermediate Language Course I**  
\*  
and
- **Intermediate Language Course II**  
\*  
or
- **Combined Intermediate Language Course**  
\*  
or
- Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

## Major Requirements (46-52 Hours)

---

An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian State University.

- Junior Writing in the Discipline [WID]

- Senior Capstone Experience [CAP] must be met.

## **BA Theatre Core (25 Hours)**

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- THR 2005 - Page and Stage (3)
- THR 2009 - The Stage Environment (3)
- THR 2101 - Production Running Crew (1) 1 sh required for major
- THR 2620 - Acting I: Beginning Scene Study (3)
- THR 2625 - Voice and Movement for the Stage (3)
- THR 3730 - Early Theatre History and Literature (3)
- THR 3735 - Modern Theatre History and Literature (3) [WID] [WID]

Choose 6 Hours from the Following

---

- THR 2230 - Scenery and Properties (3)
- THR 2235 - Theatrical Costume and Makeup (3)
- THR 2240 - Lighting and Sound (3)

## **Theatre Education Concentration Requirements (21-27 Hours)**

---

- THR 2250 - Stage Management (2)
- THR 22\_\_\_\_\_ (3) THR 2230 or THR 2235 or THR 2240 (remaining course not taken in the BA core above)
- THR 3445 - Arts Management and Promotion (3)
- THR 3520 - Instructional Assistance (1)
- THR 3901 - Theatre Education Teaching Practicum (1)
- THR 3630 - Theatre Directing Techniques (3)
- THR 3656 - Theatre Performance and Production for Young Audiences (3)
- 
- C I 4900 - Internship/Student Teaching (6-12) [CAP] [CAP] Students must take 12 hours of this course for K-12 Teaching Theatre NC Licensure
- OR(for students who do not wish to be licensed to teach in NC must take the capstone course below and an additional 3 hours of a free THR elective)
- THR 4840 - Capstone (3) [CAP] [CAP]
- THR Elective (3)

## **Teacher Education for Theatre Arts Minor Required (18 Hours)**

---

A minimum grade of "C" is required in each professional education course.

**# Admission to Teacher Education Required.** To be admitted to the Teacher Education Program students must take and satisfy testing requirements for all areas of PRAXIS I Core, (Reading, Writing, and Math) or SAT and/or ACT scores in lieu of PRAXIS I Core. There is no PRAXIS II Area Exam required for the BA in Theatre Arts with a concentration in Theatre Education. Teacher licensure programs require a minimum 2.7 cumulative GPA from admission into the teacher education program until graduation, including for admission to student teaching. For more detailed information please go to Reich College of Education.

- C I 2300 - Teaching and Learning in the Digital Age (2)
- FDN 2400 - Critical Perspectives on Learning and Teaching (2)
- PSY 3010 - Psychology Applied to Teaching (3)
- SPE 3300 - Creating Inclusive Learning Communities (3) #
- C I 3400 - Policies and Practices in Educational Assessment (2) #
- THR 3857 - Teaching Theatre, K-5 (2)
- THR 4357 - Teaching Theatre, 6-8 (2)
- THR 3071 - Teaching Theatre, 9-12 (2)

## Free Electives (0-15 Hours)

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To total a minimum of 120 hours for the degree

## Total Required (120 Hours)

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For more information please visit: <http://www.theatre.appstate.edu>

# Theatre Arts Minor

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Minor Code: 586

CIP Code: 50.0501

A minor in Theatre Arts consists of **a minimum of 18 semester hours.** 9 semester hours must be completed at ASU.

## Required Courses (**10 9** Hours)

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- **THR 2005 - Page and Stage (3)**
- **THR 2009 - The Stage Environment (3)**
- ~~THR 2101 - Production Running Crew (1)~~
- **THR 2625 - Voice and Movement for the Stage (3)**

## Electives (**a minimum of 8 9** Hours)

---

Choose **a minimum of 8 9** semester hours of THR prefixed courses. Students are encouraged to consult with a minor advisor in completing minor requirements and choosing elective courses.

# Theatre Arts - Theatre Performance Concentration, BA

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Program Code: 591\*/591F

CIP Code: 50.0501

Non-Teaching

## General Education (44 hours)

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- [General Education Requirements](#)

([THR 2005](#) and [THR 3730](#) taken for the major may count toward Gen Ed: Liberal Studies Experience; Integrative Learning Experience).

- [DAN 1405 - Modern Dance I \(2\)](#) Required for the major fulfills Wellness Literacy in General Education  
Or
  - [DAN 1410 - Beginning Ballet I \(2\)](#) Required for the major fulfills Wellness Literacy in General Education

## Language Requirements (6-12 Hours)

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Completion of 6 semester hours at the \*intermediate level or higher

- [Intermediate Language Course I\\*](#)  
and
- [Intermediate Language Course II\\*](#)  
or
- [Combined Intermediate Language Course\\*](#)  
or
- Higher level language courses

Note: Beginning language course I & II or beginning combination language course are prerequisites for \*intermediate level courses.

Language courses 1050 or 1060 may be used in General Education *Liberal Studies Experience*.

# Major Requirements (**46** **48** hours)

Note: Courses with an asterisk \* require a minimum grade (B-) overall GPA of (2.7). 18 semester hours must be completed at Appalachian.

Junior Writing in the Discipline (WID) & Senior Capstone Experience (CAP) must be met.

## BA Theatre Core (**25** **19** hours)

- [THR 2005 - Page and Stage \(3\)](#)
- [THR 2009 - The Stage Environment \(3\)](#)
- [THR 2101 - Production Running Crew \(1\)](#) 1 sh required for major
- ~~[THR 2620 - Acting I: Beginning Scene Study \(3\) \\*](#)~~
- ~~[THR 2625 - Voice and Movement for the Stage \(3\) \\*](#)~~
- [THR 3730 - Early Theatre History and Literature \(3\)](#)
- [THR 3735 - Modern Theatre History and Literature \(3\) \[WID\]](#) [WID]

Choose 6 Hours from the Following:

- [THR 2230 - Scenery and Properties \(3\)](#)
- [THR 2235 - Theatrical Costume and Makeup \(3\)](#)
- [THR 2240 - Lighting and Sound \(3\)](#)

## Performance Concentration Requirements (**21** **29** hours)

A Cumulative 2.7 GPA is required in the following asterisked courses:

- [THR 2620 - Acting I: Beginning Scene Study \(3\) \\*](#)
- [THR 2625 - Voice and Movement for the Stage \(3\) \\*](#)
- [THR 3620 - Acting II: Advanced Scene Study \(3\) \\*](#)
- [THR 3625 - Advanced Voice Techniques \(3\) \\*](#)
- [THR 3635 - Alexander and Advanced Movement Technique \(3\) \\*](#)
- [THR 4320 - Acting III: Styles \(3\) \\*](#)
- ~~[THR 4840 - Capstone \(3\) \[CAP\]](#) [CAP]~~

## Concentration Electives (6 hours)

Choose ~~9~~ **6** hours **Minimum** from the Following:

- ~~[THR 2617 - Improvisation \(1\) \\*](#)~~
- ~~[THR 2635 3645 - Stage Combat \(2 3\) \\*](#)~~
- [THR 3628 - Acting for the Camera \(3\)](#)
- [THR 3630 - Theatre Directing Techniques \(3\)](#)
- [THR 3640 - Solo and Group Performance \(3\)](#)
- [THR 3656 - Theatre Performance and Production for Young Audiences \(3\)](#)
- ~~[THR 4320 - Acting III: Styles \(3\) \\*](#)~~
- Other THR 3000 - 4000 courses that are appropriate to the student's area focus (Must have advisor approval)

## **Additional Required Courses for the major (5 Hours)**

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- **THR 4840 - Capstone (3) [CAP] [CAP]**
  - **DAN 1405 - Modern Dance I (2)** Required for the major fulfills Wellness Literacy in  
Or  
in General Education
  - **DAN 1410 - Beginning Ballet I (2)** Required for the major fulfills Wellness Literacy  
in General Education
- 

## **Minor Required (12-24 hours)**

- **9 hours of a minor must be completed at Appalachian.**

## **Free Electives (0-21 hours)**

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**To total a minimum of 120 hours for the degree**

## **Total Hours Required: 120**

Admission to the program by interview only. Do not use this program of study if you have not interviewed with the department. See <http://www.theatre.appstate.edu> for additional requirements.

# American Sign Language Minor

Minor Code: 819

CIP Code: 16.1601

Non-Teaching

Department Chair: Dr. Gail Donaldson

828-262-7182 [donaldsongs@appstate.edu](mailto:donaldsongs@appstate.edu)

Program Director: Dr. Jennifer Buff

828-262-6065 [buffjc@appstate.edu](mailto:buffjc@appstate.edu)

[comdis.appstate.edu](mailto:comdis.appstate.edu)

## Minor Requirements (15 Hours)

ASL Minor GPA requirements: A cumulative GPA of 2.0 is required for courses in the minor.

### Required Courses (12 Hours)

[\*\*CSD 3370 - American Sign Language II \(3\)\*\*](#)

[\*\*CSD 3372 - American Sign Language III \(3\)\*\*](#)

[\*\*CSD 3374 - American Sign Language IV \(3\)\*\*](#)

[\*\*CSD 3380 - Deaf Culture \(3\)\*\*](#)

### Elective Courses (3 Hours)

Select one [of the following](#) elective courses in consultation with your advisor:

[\*\*ANT 1415 Understanding Culture \(3\)\*\*](#)

[\*\*COM 2110 Introduction to Nonverbal Communication \(3\)\*\*](#)

[\*\*COM 2124 Intercultural Communication \(3\)\*\*](#)

[\*\*CSD 2259 Communication Disorders \(3\) \(for non-CSD majors only\)\*\*](#)

[\*\*LLC 2050 Say What? Language in Mind and Society \(3\)\*\*](#)

[\*\*SW 2615 Cultural Competence for the Helping Professions \(3\)\*\*](#)

[\*\*Other courses with department approval\*\*](#)

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2020-2021 Undergraduate Bulletin

Appalachian State University

### Health Care Management Minor

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Minor Code: 845

Department Chair: Dr. Margaret Barth

CIP Code: 51.0701

828-262-8619 [barthmm@appstate.edu](mailto:barthmm@appstate.edu)

Program Director: Dr. Trent Spaulding

828-262-8993 [spauldingtj@appstate.edu](mailto:spauldingtj@appstate.edu)

#### Minor Requirements (18 Hours)

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HCM minor GPA requirements: A cumulative GPA of 2.0 is required for courses in the minor.

#### Required Courses (6 Hours)

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- [HCM 2110 - Introduction to Health System Organization \(3\)](#)
- [HCM 2130 - Managing Health Care Organizations \(3\)](#)

#### Other Related Areas (6 Hours)

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- [ECO 2030 - Principles of Microeconomics \(3\)](#)
- [ACC 1050 - Survey of Accounting \(3\)](#)
- [ACC 2100 - Principles of Accounting I \(3\)](#)
- [ECO 2030 - Principles of Microeconomics \(3\)](#)

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### **Elective Courses (6 hours)**

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Choose two of the following (all prerequisites must be met):

- HCM 3590 - Quality Management and Process Improvement in Health Care (3)
- HCM 3680 - Human Resource Management in Health Service Organizations (3)
- HCM 3700 - Health Information Systems (3)
- HCM 4570 - Health Services Financial Management (3)
- HCM 4630 - Principles of Leadership for Health Service Organizations (3)
- HCM 4910 - Health Law and Policy (3)
- HCM 4930 - Ethics in Health Care (3)

**Note:**

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ACC 2100 – Principles of Accounting I (3) and ACC 2110 – Principles of Accounting II (3) are acceptable substitutes for ACC 1050.

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Appalachian State University  
Current POS 2020-2021

## Nutrition and Foods - Nutrition and Wellness Concentration, BS

---

Program Code: 840\*/840D

CIP Code: 51.3101

Non-Teaching

Department Chair: Dr. Margaret Barth

828-262-2661 [bathmm@appstate.edu](mailto:bathmm@appstate.edu)

Program Director: Melissa Bryan

828-262-6215 [bryanmm@appstate.edu](mailto:bryanmm@appstate.edu)

### General Education (44 Hours)

---

#### General Education Requirements

The following major ~~requirements~~[requirements](#) may also count in General Education:

**NUT 2202 - Nutrition and Health (3)** (Note: 2 hours of NUT 2202 may be counted in

General Education)

**PSY 1200 - Psychological Foundations (3)**

**CHE 1101 - Introductory Chemistry I (3)**

**CHE 1102 - Introductory Chemistry II (3)**

**CHE 1110 - Introductory Chemistry Laboratory I (1)**

**CHE 1120 - Introductory Chemistry Laboratory II (1)**

**STT 2810 - Introduction to Statistics (3)**

or

**STT 2820 - Reasoning with Statistics (4)**

### Major Requirements (74-75 Hours)

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NUT and Wellness GPA requirements: 2.5 cumulative GPA required for declaration, 2.5 cumulative GPA required for retention, and 2.5 cumulative GPA required for graduation.

NUT and Wellness grade requirements: All NUT and Wellness majors must earn a minimum grade of "C" (2.0) in each required course in the major.

### **Nutrition and Foods Courses (45 Hours)**

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- NUT 1202 - Basic Food Science (3)**
- NUT 2201 - Foods and Nutrition for Children (3)**
- NUT 2202 - Nutrition and Health (3)**
- NUT 2203 - Organization and Management in Food Service (3)**
- NUT 2210 - Introduction to the Profession (1)**
- NUT 2351 - Global Nutrition: Emerging Health Challenges (3)**
- NUT 3120 - Intermediate Nutrition (3) [WID]** [WID]
- NUT 3205 - Nutrition and the Life Cycle (3)**
- NUT 3300 - Nutrition Education (2)**
- NUT 3400 - Cultural Foods (3)**
- NUT 4300 - Effective Rural Practice for Health Professionals (3)**
- NUT 4504 - Foodsystems Management (3)**
- NUT 4509 - Quantity Food Production (3)**
- NUT 4552 - Medical Terminology/Records (1)**
- NUT 4560 - Community Nutrition (3)**
- NUT 4600 - Professional Development (1)**
- NUT 4900 - Capstone Experience (1-8) [CAP]** 4 credit hours required for NUT majors

#### **Other Related Areas (29-30 Hours)**

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- ACC 1050 - Survey of Accounting (3)**
- BIO 1801 - Biological Concepts I (4)**
- BIO 2200 - Human Microbiology (4)**
- CHE 1101 - Introductory Chemistry I (3)**
- CHE 1110 - Introductory Chemistry Laboratory I (1)**
- CHE 1102 - Introductory Chemistry II (3)**
- CHE 1120 - Introductory Chemistry Laboratory II (1)**

E S 2040 - Human Anatomy (4), E S 2030 – Concepts in Human Anatomy and Physiology

(4)

PSY 1200 - Psychological Foundations (3)

STT 2810 - Introduction to Statistics (3)

or

STT 2820 - Reasoning with Statistics (4)

## **Minor (12-18 Hours)**

Minor options: Public Health, Sustainable Development, Global Studies, General Business, Marketing, Non-Profit Organizations, Health Care Management, Child Development, Hospitality and Tourism Management, Biology, or another selected minor with permission from the program director.

## **Elective Hours (0-9 Hours)**

## **General Education Courses Taken For The Major (- up to 20 Hours)**

## **Total Required (120 Hours)**

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Appalachian State University

### **Recreation Management - Commercial Recreation & Tourism Management Concentration, BS**

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Program Code: 574\*/574G

Department Chair: Dr. Melissa Weddell

CIP Code 31.0301

828-262-6303 [weddellmj@appstate.edu](mailto:weddellmj@appstate.edu)

Non-Teaching

Program Director: Dr. Joy James

828-262-6322 [jamesjj@appstate.edu](mailto:jamesjj@appstate.edu)

#### **General Education Requirements (44 Hours)**

- 
- **General Education Requirements**

The following major requirements may also count in General Education:

- **R M 2100 - Leisure in Society (3)**

#### **Major Requirements (53 Hours)**

---

R M CRTM GPA requirements: 2.0 cumulative GPA required for declaration and 2.0 cumulative GPA required for graduation. There are no GPA retention requirements.

R M CRTM grade requirements: All RM CRTM majors must earn a minimum grade of "C" (2.0) in the following courses: **R M 2100**, **R M 3315**, and **R M 4210**.

#### **Core Requirements (38 Hours)**

- 
- **R M 2100 - Leisure in Society (3)**
  - or
  - **R M 2110 - Introduction to Recreation and Leisure (3)**
  - 
  - **R M 2120 - Leadership and Group Dynamics in Recreation (3)**

- R M 2210 - Recreation Site and Facility Management (3)
- R M 2310 - Introduction to Administration of Recreation (3)
- R M 2410 - Recreation Program Planning (3)
- R M 3210 - Inclusive Recreation (3)
- R M 3315 - Career Development in Leisure Services and Recreation (1)
- R M 3561 - Leisure Services Promotions (3)
- R M 3610 - Financial and Risk Management in Recreation (3) [WID]
- R M 4110 - Evaluation in Recreation and Leisure Service Management (3)
- R M 4210 - Senior Seminar (2) [CAP]
- R M 4900 - Internship (8-12)

Commercial Recreation & Tourism Management Concentration (CR&TM) (15 Hours)

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- R M 2130 - Principles of Commercial Recreation and Tourism (3)
  - R M 3241 - Travel and Tourism (3)
  - R M 4450 - Seminar in Tourism Development (3)

Note

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6 hours of RM / HOS electives must be approved by a Recreation Management Advisor. HOS is the prefix for Hospitality Management. Examples include, but not limited to:

- R M 2140 - Natural Resources: Becoming an Informed Citizen (3)
- R M 2220 - Principles of Outdoor Experiential Education (3)
- R M 3140 - Camp Management/Conference Center Management (3)
- R M 3155 - Wilderness First Responder (3)
- R M 3220 - Planning and Design of Leisure Facilities (3)
- R M 3221 - Aquatic Facility Management (3)
- R M 3222 - Lifeguarding Instructor (3)
- R M 3223 - Aquatics/Water Safety Instructor (3)
- R M 3235 - Introduction to Sport Management (3)
- R M 3236 - Sports Officiating I (3)
- R M 3237 - Sports Officiating II (3)
- R M 3242 - Tourism in Costa Rica (3)
- R M 3243 - The Cruise Line Industry in a Cultural Context (3)
- R M 3244 - Coastal Tourism: A Field-Based Understanding (3)

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- HOS 2000 - Survey of the Hospitality and Tourism Industry (3)
- Any RM course approved by Advisor (3)

**Minor (12-18 Hours)**

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**Elective Hours (up to 14 Hours)**

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**General Education Courses Taken for Major (-0 to -3 Hours)**

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**Total Required (120 Hours)**

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