MINUTES OF THE MEETING OF THE UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE December 6, 2017

The Undergraduate AP&P Committee met on Wednesday, December 6, 2017 at 3:00 p.m. in the William C. Strickland Conference Room of I.G. Greer Hall.

Committee members present: Dr. Jon Beebe, Dr. Denise Brewer, Dr. Jon Carter, Dr. Ellen Cowan, Dr. Christina Hayes, Dr. Jeff Hirst, Dr. Joe Klein, Dr. Cameron Lippard, Mr. Jason Miller, Dr. Tanga Mohr, Dr. Ben Powell, Dr. Teressa Sumrall, Mr. John Wiswell, Mr. Rice Neese

Committee members excused: Dr. C. A. Debelius

Committee members unexcused: Ms. Raiann Rosier

At 3:01 p.m., Dr. Ben Powell noted that we had a guorum and he called the meeting to order.

Subcommittee

Nothing to report

Approval of Minutes

November 1, 2017

VOTE 1 – To approve the November 1, 2017 minutes - PASSED

Announcements

- "For Information Only" memo/list of items approved by the General Education Council on November 17, 2017. See attached at end of the minutes.
- FIO Semester Offerings Changes

CSD 3340 changed from Fall, Spring to On Demand

LLC 3010 changed from Spring. Alternate years to Spring

LLC 3020 changed from Spring. Alternate years to Spring

NUT 3400 changed from Spring to On Demand

NUT 4555 changed from Fall; Spring to On Demand

ES 4555 dual-listed with NUT 4555 did not change (Fall; Spring)

New Business

Procedural note: All dual-listed graduate course changes are approved through the graduate AP&P Committee. The complete action of the proposal will be listed but only the undergraduate curriculum is voted on by UAP&P.

ORDER OF PRESENTATION (Total 59)

College of Arts and Sciences (11)

Walker College of Business (7)

Deans Council (2)

College of Fine and Applied Arts (32)

Beaver College of Health Sciences (1)

Hayes School of Music (6)

Dr. Dru Henson presented proposals from the **College of Arts and Sciences** (11) for the College of Arts and Sciences, the Department of Geological and Environmental Sciences and the Department of Mathematical Sciences.

The proposal from the **College of Arts and Sciences** (1) was approved as follows: (EFFECTIVE: Fall 2018)

The new program of study is at the end of the minutes.

U_CAS_CAS_2017_01 Add an <u>undergraduate minor in Southern Studies (205/05.0122).</u>

VOTE 2 – To approve the proposal from the College of Arts and Sciences - PASSED

The proposals from the **Department of Geological and Environmental Sciences** (5) were approved as follows: (EFFECTIVE: Fall 2018)

ENV 3100 – Issues in Environmental Science (1) Fall; Spring.

POS affected: 121A, 121B,

Course affected: ENV 4100, ENV 4110, GLY 4110

ENV 4100 – Environmental Science Seminar (3) Fall; Spring.

POS affected: 121A,

Course affected: ENV 3100

ENV 3105 - Preparation for Environmental Science Careers (3)

This course is open to Environmental Science (ENV) majors who have

When Offered: Fall:Spring

successfully completed R C 2001, the second year writing course. This course introduces students to the methods and skills in the discipline related primarily to environmental research methods and written communication. Student learning is augmented with peer-review of fellow students' work and participation in review and revision processes. A wide range of environmentally-related issues and current events act as the backdrop for the WID activities. Additional modules include scientific ethics and sustainability. All of these activities help prepare students to more effectively conduct projects and communicate with fellow STEM professionals in their future careers. Required readings and related discussions will include scientific journal articles, synthesis papers on environmental topics, opinion papers, and technology transfer articles.

Lecture two hours, laboratory three hours. Prerequisite: R C 2001 or its equivalent.

U CAS GES 2017 04 Course Addition:

ENV 4105 - Analysis and Implications of Environmental Issues (1)

When Offered: Fall; Spring

This capstone course emphasizes the critical thinking about environmental problems and solutions, grounded in a multi-disciplinary and systems approach. Students will analyze the causes and implications of

environmental problems at the global, national and local level from an issue-based perspective. Students will learn to use the concept of Earth System Science as a framework to assess and act upon environmental problems. The scientific literacy skills gained in this course will be pivotal to the continued success of our graduates in their environmentally-related and/or academic careers. Students are required to disseminate project results via written reports, oral presentations, and/or poster sessions. This course serves as the senior capstone course for students enrolled in the Bachelor of Science degree in Environmental Science.

Prerequisites: ENV 3105, ENV majors only, and senior standing or permission of the instructor.

U_CAS_GES_2017_05

Revise the program of study for the <u>Bachelor of Science in Environmental Science (121A/03.0104)</u> and the <u>Bachelor of Science in Environmental Science with a concentration in Environmental Professional (121B/03.0104).</u> The revised program of study is at the end of the minutes.

VOTE 3 – To approve the proposals from the Department of Geological and Environmental Sciences - PASSED

The proposals from the **Department of Mathematical Sciences** (5) were approved as follows: (EFFECTIVE: Fall 2018)

U_CAS_MAT_2017_03

Course Addition:

STT 4880 - Mathematical Statistics (3)

When Offered: Spring

A continuation of STT 3250, dealing with statistical inference and sampling distributions, estimation and properties of estimators, confidence intervals, and hypothesis testing. Estimation will include matching moments, percentile matching, and maximum likelihood. Properties discussed will include bias, variance, mean squared error, consistency, efficiency, and uniform minimum variance unbiased estimators. Confidence intervals will estimate means, differences of means, variances, and proportions. Hypothesis testing will include the Neyman-Pearson lemma, significance and power, likelihood ratio tests, and information criteria. Other tests covered will include those for mean, variance, contingency tables, and goodness of fit.

Prerequisite: STT 3250.

U_CAS_MAT_2017_04

Course Addition:

STT 4881 - Mathematical Statistics Capstone (1)

When Offered: Spring

This course satisfies the general education capstone requirement for mathematics majors with concentrations other than education. Students will explore current, relevant, or advanced undergraduate topics in statistics and the relationships of statistics with other fields. Oral and written communication skills are emphasized.

Graded on an S/U basis.

Corequisite: Must be taken concurrently with STT 4880.

U_CAS_MAT_2017_05

Revise the program of study for the <u>Bachelor of Science in Actuarial Science</u> (106A/52.1304). The revised program of study is at the end of the minutes.

U_CAS_MAT_2017_06

Revise the program of study for the <u>Bachelor of Arts in Mathematics</u>

(261A/27.0101). The revised program of study is at the end of the minutes.

U_CAS_MAT_2017_07

Revise the programs of study for the <u>Bachelor of Science in Mathematics</u> (260*/27.0101) with concentrations in <u>General Mathematics</u> (260B), Business (260D), <u>Computation</u> (260E), Life Sciences (260F), <u>Physical Sciences</u> (260G), <u>Statistics</u> (260H). The revised programs of study are at the end of the minutes.

VOTE 4 – To approve the proposals from the Department of Mathematical Sciences – PASSED

Dr. Sam Formby presented proposals from the **Walker College of Business** (7) for the Department of Finance, Banking and Insurance and the Department of Marketing.

The proposals from the **Department of Finance**, **Banking and Insurance** (6) were approved as follows: (EFFECTIVE: Fall 2018)

U_COB_FIN_2017_1 Change the prerequisite statement of **FIN 4660 – Advanced Financial Management (3) Fall; Spring** to read as follows:

Prerequisites: 84 earned hours and a minimum grade of "C" (2.0) in any Writing in the Discipline (WID) course, FIN 3690 and FIN 3990.

POS affected: 326A

U_COB_FIN_2017_2 Change the prerequisite statement of FIN 4950 – Enterprise Risk and Insurance Management (3) Fall; Spring to read as follows:

Prerequisites: 84 earned hours and a minimum grade of "C" (2.0) in any Writing in the Discipline (WID) course, FIN 3100 and FIN 3990.

Prerequisite or co-requisite: FIN 4600.

POS affected: 380A

U_COB_FIN_2017_3 Change the prerequisite statement of **FIN 3720 – Group Benefits**

Management (3) Fall to read as follows:

Prerequisite: 54 earned hours. Prerequisite or Corequisite: FIN 3700.

POS affected: 381

U_COB_FIN_2017_4 Change the prerequisite statement of **FIN 3730 – Health Plan**

Design and Management (3) Spring to read as follows:

Prerequisite: 54 earned hours. Prerequisite or Corequisite: FIN 3700.

POS affected: 284N, 381

U_COB_FIN_2017_5 Change the prerequisite statement of **FIN 3030 – Personal**

Financial Management (3) Fall; Spring to read as follows:

Prerequisites: 54 earned hours and FIN 3010 or FIN 3680.

POS affected: 326A, 346

U_COB_FIN_2017_6

Change the course number and prerequisite statement of **FIN 4600** [DELETE FIN 4600 and ADD FIN 3150] to read as follows:

FIN 3150. Commercial Insurance (3)

When Offered: Fall, Spring

Provides a comprehensive examination of commercial property and liability insurance including commercial property and commercial liability risk management; the legal environment of property and liability insurance; and

property and liability insurance function, practices and issues.

Prerequisites: 54 earned hours and FIN 3100.

POS affected: 380A

Course affected: FIN 4950

VOTE 5 - To approve the proposals from the Department of Finance, Banking and Insurance - PASSED

The proposal from the **Department of Marketing** (1) was approved as follows: (EFFECTIVE: Fall 2018)

U_COB_MKT_2017_1

Change the prerequisite statement of MKT 3050 – Principles of Marketing (3) Fall; Spring to read as follows:

Prerequisite: 54 earned hours.

VOTE 6 - To approve the proposal from the Department of Marketing - PASSED

Dr. Mark Ginn presented the proposals from **Deans Council** (2)

Proposals from Deans Council were approved as follows: (EFFECTIVE: Fall 2018)

DeansCouncil 2017 1

Course Addition:

U S 3801 - International Study: Internship, Practicum, Field Experience, or Clinical (1-12)

When Offered: Fall; Spring

A course title for Appalachian students including an internship, practicum, field experience, or clinical in their study abroad experience with an approved study abroad program. Course title is restricted to students approved by their academic department/unit for the internship, practicum, field experience, or clinical and certified by the Office of International Education & Development verifying country safety and the student's completion of required pre-departure paperwork. A course substitution form will be included in the student record in the Internship Inventory confirming the departmental course number to be used when the transcript is processed.

May be repeated as student's degree program allows.

DeansCouncil 2017 2

Add an additional matrix to the Standard Meeting Pattern Grid for standard meeting times in the Beaver College of Health Sciences Building. See new grid at the end of the minutes.

VOTE 7 – To approve the proposals from Deans Council - PASSED

Proposals were presented for the **College of Fine and Applied Arts (32)** for the Department of Applied Design, Department of Communication, Department of Sustainable Development, Department of Sustainable Technology and the Built Environment, and the Department of Theatre and Dance.

Dr. Don Corey presented proposals for the **Department of Applied Design**.

The proposals from the Department of Applied Design (3) were approved as follows: (EFFECTIVE: Fall 2018)

U_FAA_AD_ADM_2017_04 Revise the program of study for the <u>undergraduate minor in Apparel</u>
<u>Design and Merchandising (710/19.0901).</u> The revised program of

Design and Merchandising (7 10/19.0901). The revised program of

study is at the end of the minutes.

U_FAA_AD_IND_2017_01 Change the semester offering, course description, and prerequisite statement of IND 2311 – Human Factors in Design (3) Fall to read

as follows:

IND 2311 - Human Factors in Design (3)

When Offered: Fall, Spring

The study of human capabilities and the design of parameters to fit an environment, task or product. Topics include the range and application of human measurements and senses. The course also addresses ergonomic

design and design for challenged individuals.

Prerequisite INT 1002.

- Physical Principles for Designers (3) Spring to read as follows:

IND 2321. Product Systems Design (3)

When Offered: Spring

Many products are composed of interacting components with multiple functional requirements. This class is an opportunity for students to learn methods for complex product design; experiential learning by completing a series of projects. The complex product design projects will include

kinematics, multiple forces, and power systems.

POS affected: 576C

Change schedule type from Lecture/Lab to Lecture

VOTE 8 – To approve the proposals from the Department of Applied Design - PASSED

Dr. Jean DeHart presented proposals from the **Department of Communication** (10)

The proposals from the Department of Communication were approved as follows: (EFFECTIVE: Fall 2018)

U FAA COM 2017 01 Course Deletion:

COM 4418 – Public Relations Seminar (3) Fall; Spring.

POS affected: 521A

U_FAA_COM_2017_02 Change the course description of **COM 4318 – Public Relations**

Campaigns (3) Fall; Spring to read as follows:

COM 4318 - Public Relations Campaigns (3)

When Offered: Fall; Spring

An advanced course providing students with hands-on experience in researching, planning, implementing and evaluating public relations campaigns for various types of organizations. As part of this course, each student will also construct a professional portfolio.

Prerequisites: COM 2325, COM 3618 and COM 3928, or permission of the instructor.

U_FAA_COM_2017_03

Course Addition:

COM 4430 - Advanced Public Relations Campaigns (3)

When Offered: On Demand

This course provides students the opportunity to develop a public relations campaign for a national student competition. Students will apply advanced techniques to research, plan, execute, and evaluate their campaigns. Students will have the opportunity to submit their work to the national student competition.

Prerequisites: COM 2325, COM 3618, COM 3928 and COM 4318, or permission of the instructor.

U FAA COM 2017 04

Course Addition:

COM 3418 - Social Media Storytelling (3)

When Offered: Spring

This course provides students the opportunity to improve their writing and acquire storytelling skills. Students will learn to develop effective organizational narratives through written content and the use of audio and visuals appropriate for common social and digital media platforms. Students will also develop a portfolio of writing samples.

Prerequisites: COM 1300; or permission of the instructor.

U_FAA_COM_2017_05

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

U_FAA_COM_2017_06

Change the semester offering and prerequisite statement of **COM 4402** – **Advanced Advertising Campaigns (3) Spring** to read as follows:

COM 4402. Advanced Advertising Campaigns (3)

When Offered: Fall

A course designed to prepare students to apply the elements and conduct the strategic development of an advertising campaign for a national student competition. The course will cover advanced advertising campaign principles and techniques, and it will provide opportunities to implement both in an agency-like setting.

Prerequisites: COM 3928 and permission of the instructor.

U FAA COM 2017 07

Revise the program of study for the <u>Bachelor of Science in Communication Advertising (507A/09.0903).</u> The revised program of study is at the end of the minutes.

U_FAA_COM_2017_08

Change the course number, title, and course description of **COM 2600** [Delete COM 2600 and ADD COM 1300] to read as follows:

COM 1300. Journalism Matters: An Introduction to News Literacy and News Writing (3).

When Offered: Fall; Spring.

This course will explore the history and essential role of the free press in our democracy, while equipping students with the skills necessary to become engaged and informed citizens. Students will learn to evaluate sources and information, and they will learn the basics of news gathering, writing, and editing processes.

POS affected: 517A, 521A, 525A, 585A

Course affected: COM 2610, COM 3600, COM 3618, COM 4319

COM 1300 will be equivalent to COM 2600.

U_FAA_COM_2017_09 Revise the program of study for the <u>Bachelor of Science in</u>

Communication, Journalism (517A/09.0401). The revised program of

study is at the end of the minutes.

U_FAA_COM_2017_10 Change the course description of **COM 3317 – Social Media Strategies (3) Fall; Spring** to read as follows:

COM 3317 Social Media Strategies (3).

When Offered: Fall; Spring

The study of how to design, execute, and evaluate research-based

social media campaigns.

VOTE 9 – To approve the proposals from the Department of Communication - PASSED

Dr. Rick Rheingans presented proposals for the **Department of Sustainable Development** (6).

The proposals for the Department of Sustainable Development were approved as follows: (EFFECTIVE: Fall 2018)

U FAA SD 2017 02

Change the title and course description of **SD 3460 – What Work Means** (3) **On Demand** to read as follows:

SD 3460 - Labor, Social Justice, and Sustainable Development (3)

When Offered: On Demand

This course is an examination of the idea and practice of work from a cultural studies perspective with particular emphases on cultural meanings and values of work and their impact on labor and social justice. Students will study work experiences and their changing characteristics and how cultural expressions of work function within the context of sustainable development.

SD 3580 - Sustainable Development and Health (3).

When Offered: On Demand

Health is an integral part of sustainable development – both as cause and consequence. Key global health threats including malaria, undernutrition and HIV/AIDS can undercut and slow equitable and sustainable development. In contrast, sustainable development can provide both public and private goods essential for good health, including clean water, sanitation, air quality, access to basic healthcare, and healthy environments more generally. This

interconnectedness can lead to vicious circles and poverty traps. The course examines health threats at local, national, and global scales, providing an overview of key health issues and their relation to sustainable development. It examines how this interconnectedness can result in poverty traps and inequality, as well as potential strategies for breaking the cycle and using health interventions to support sustainable development.

U_FAA_SD_2017_04

Add to the Undergraduate Catalog a section titled Honors Program in Sustainable Development to read as follows:

Honors Program in Sustainable Development

The Goodnight Family Department of Sustainable Development offers an honors program to undergraduate students with distinguished academic records. In order to graduate with Honors in Sustainable Development, students must (a) complete 3 hours of honors thesis (SD 4510) under the guidance of a Sustainable Development faculty advisor; (b) complete an additional 9 credits of honors courses as described below; (c) earn a grade of "B" or higher in all honors classes; and (d) earn a cumulative GPA of 3.5 in all Sustainable Development classes.

In addition to the senior honors thesis (SD 4510), all honors students must complete 9 credits of honors work. These credits can be earned by taking honors-designated classes in the Department of Sustainable Development, by negotiating an honors contract for Sustainable Development courses at the 3000 level and above, and, with advance permission from an SD advisor, by taking Sustainable Development-related honors courses in other departments.

For admission into the honors program, students must have a minimum GPA of 3.5 in all coursework and must complete a departmental application to the honors program. Transfer students without a GPA at Appalachian State University should provide a transcript from their previous institution.

U FAA SD 2017 05

Change the title, credit hours, and course description of **SD 4510 – Thesis/Project (3) On Demand** to read as follows:

SD 4510 - Honors Thesis/Project (1-3)

When Offered: On Demand

Independent study and research for a sustainable development honors thesis or project. Directed and graded by a faculty member in the Sustainable Development Department. Enrollment is by invitation from a Sustainable Development faculty member or application by the student to their advisor.

U_FAA_SD_2017_06

Course Addition:

SD 4515 - Honors Seminar in Sustainable Development (3)

When Offered: On Demand

An opportunity for students to rigorously pursue study of variable topics in sustainable development in a seminar format. This seminar is open to honors and non-honors students but will be taught at an honors level.

Barring duplication of content, a student may repeat the course for a total credit of nine semester hours.

Prerequisites: Senior standing and permission of the instructor.

U_FAA_SD_2017_07

Course Addition:

SD 4600 - Land, Livelihoods, and Agrarian Development (3)

When Offered: On Demand.

This course introduces students to key concepts and debates in critical agrarian and peasant studies and deepens students' understanding of the connections between land rights and governance, sustainable livelihoods, and rural development. It examines the power relationships and North-South inequalities that are reproduced or challenged in policy discourses of agrarian development. The course provides students with historical and analytical frameworks to examine different trajectories of agrarian change within the broader contexts of colonialism, political economy, and the international system of sovereign nation-states.

Prerequisites: SD 2700; or permission of the instructor.

VOTE 10 – To approve the proposals from the Department of Sustainable Development - PASSED

Dr. Jason Miller presented the proposals from the Department of Sustainable Technology and the Built Environment (3).

The proposals from the Department of Sustainable Technology and the Built Environment were approved as follows: (EFFECTIVE: Fall 2018)

U FAA STBE 2017 1

Change the course prefix and prerequisite statement of **TEC 3009 –** Introduction to the Technology Teaching Profession (3) Fall to read as follows:

CTE 3009 - Introduction to the Technology Teaching Profession (3)

When Offered: Fall

An introduction to the career and technology education curriculum, as well as the professional roles and responsibilities of Technology Education and Trade and Industry teachers. Course expectations include lab activities related to career and/or technology education curriculum in North Carolina. interviews with master teachers, and field experiences in regional Career and Technical classrooms at the middle and high school levels.

Prerequisite or Co-requisite: TEC 2029.

POS affected: 456E

U FAA STBE 2017 2

Course Deletions:

TEC 1017 – Communications Technology (3)

POS affected: 151

TEC 2188 – Transportation Systems and Devices (3)

POS affected: 252J, 456E

TEC 4649 – Cooperative Vocational and Industrial Education (3) TEC 4910 – Practicum in the Career and Technology Education Classroom (1)

GU FAA STBE 2017 3

Course Deletions: (dual-listed)

TEC 4619/5619 – Curriculum development in Career and Technology

Education (3)

TEC 4629/5629 - Organization and Management of Career and Technology Education (3)

TEC 4639/5639 – Career and Technical Student Organizations (3) TEC 4660/5660 - Instructional Strategies in Career and Technology Education (3)

POS affected: TEC 4910

VOTE 11 – To approve the proposals from the Department of Sustainable Technology and the Built Environment - PASSED

Dr. Kevin Warner presented the proposals from the **Department of Theatre and Dance** (10).

The proposals from the Department of Theatre and Dance were approved as follows: (EFFECTIVE: Fall 2018)

U_FAA_TD_2017_1 Change the prerequisite statement of DAN 1420 – Jazz I (2) Fall; Spring

to read as follows:

Prerequisite: DAN 1400 or DAN 1410, or permission of the instructor.

POS affected: 515, 554Y, 581A, 611, 611A

U FAA TD 2017 2 Change the prerequisite statement of DAN 2107 – Production Running

Crew (0-1) Fall; Spring to read as follows:

Prerequisite: Permission of the instructor.

POS affected: 515, 581A

U_FAA_TD_2017_3 Course Deletion:

DAN 3400 – Advanced Dance Technique (1) Fall; Spring.

POS affected: 515

Change the schedule type from lecture to studio. (for clean-up in Banner)

Change the concentration title of the Bachelor of Arts in Theatre Arts U FAA TD 2017 5

> with a concentration in Performance (591C/50.0501) to the Bachelor of Arts in Theatre Arts with a concentration in Theatre Performance

(591F/50.0501).

U FAA TD 2017 10 Change the course number of DAN 1400 [DELETE DAN 1400 and ADD DAN

1405] to read as follows:

DAN 1405 - Modern Dance I (2)

When Offered: Fall; Spring **GEN ED: Wellness Literacy**

An introduction to modern dance as an art form with the beginning practice of movement technique. Emphasis will be on the discovery of skills to develop the articulation and expressiveness of the body. The course will be an introduction to the medium of modern dance through the concepts of time, space, force and direction while integrating alignment and placement. Historical perspectives as well as aesthetic values will be covered.

May be repeated one time for credit.

DAN 1405 will be equivalent to DAN 1400.

POS affected: 515, 553A, 554E, 554F, 554G, 554H, 554I, 554K, 554M, 554N, 554O, 554P, 554Q, 554R, 554T, 554U, 554V, 554W, 554X, 554Y, 554Z, 581A, 591C

Courses affected: DAN 1420, DAN 2400, DAN 3420, DAN 3450

U_FAA_TD_2017_11

Change the course number and prerequisite statement of **DAN 2400 to DAN 2405** [DELETE DAN 2400 and ADD DAN 2405] to read as follows:

DAN 2405 - Modern Dance II (2)

When Offered: Fall; Spring GEN ED: Wellness Literacy

A second (intermediate) level study of modern technique and basic elements of dance with more emphasis given to the refinement of skills and aesthetic

elements.

May be repeated one time for credit.

Prerequisite: DAN 1405 or permission of the instructor.

DAN 2405 will be equivalent to DAN 2400.

POS affected: 515, 554Y, 581A

Course affected: DAN 3405

U_FAA_TD_2017_12

Change the course number, lecture statement, and prerequisite statement of **THR 2445 to THR 3445** [DELETE THR 2445 and ADD THR 3445] to read as follows:

THR 3445 - Arts Management and Promotion (3)

When Offered: Fall

The theory and practice of business management, promotion and publicity, fund raising, ticket sales, and box office management as

applied to the performing arts.

Prerequisite: R C 1000, Junior standing.

THR 3445 will be equivalent to THR 2445.

POS affected: 591B, 591E

U_FAA_TD_2017_13

Change the title and course description of THR 4235 – Special Topics in **Design and Production (3) On Demand** to read as follows:

THR 4235 - Advanced Design and Production Studio (3)

When Offered: On Demand

The study of advanced design and production topics in a variety of production forms and styles. Content may vary.

May be repeated two times for credit. Prerequisite: permission of the instructor.

POS affected: 591D

THR 3235 - Intermediate Design and Production Studio (3)

When Offered: On Demand

The study of intermediate design and production topics in a variety

of production forms and styles. Content may vary.

May be repeated two times for credit. Prerequisite: permission of the instructor.

Schedule type should be studio.

U_FAA_TD_2017_15 Revise the program of study for the <u>Bachelor of Arts in Theatre Arts</u>

- Theatre Design/Technology (591D/50.0501). The revised program

of study is at the end of the minutes.

VOTE 12 – To approve the proposals from the Department of Theatre and Dance - PASSED

Dr. Denise Levy presented proposals from the **Beaver College of Health Sciences** (1) for the Department of Health and Exercise Science.

The proposal from the **Department of Health and Exercise Science** (1) was approved as follows: (EFFECTIVE: Fall 2018)

U_HS_HES_2017_2 Delete the <u>Bachelor of Science in Athletic Training (565A/51.0913).</u>

VOTE 13 – To approve the proposal from the Department of Health and Exercise Science – PASSED

Dr. James Douthit presented proposals from the Hayes School of Music (6).

The proposals from the Hayes School of Music were approved as follows: (EFFECTIVE: Fall 2018)

U_MUS_MUS_2017_2 Change the prerequisite statement of **MUS 2051 – Music Therapy**

Clinical Skills (1) Spring to read as follows:

Prerequisite: Either MUS 2050 or MUS 2052.

POS affected: 553A

U_MUS_MUS_2017_3 Change the prerequisite statement of **MUS 2071 – Music, the**

Brain, and Neurological Disorders (2) Spring to read as follows:

Prerequisites: Either MUS 2050 or MUS 2052 with a minimum grade of "B-" (2.7), and MUS 2051 with a minimum grade of "C" (2.0). Music Therapy majors must be enrolled concurrently in MUS 3900.

POS affected: 553A

U_MUS_MUS_2017_4 Change the prerequisite statement of **MUS 3061 – Functional**

Music Therapy Techniques (1) Spring to read as follows:

Prerequisites: MUS 1002, MUS 1008 and either MUS 2050 or MUS 2052.

POS affected: 553A

U_MUS_MUS_2017_5

Change the prerequisite statement of MUS 3070 – Developmental Music Therapy (2) Fall to read as follows:

Prerequisites: Either MUS 2050 or MUS 2052 with a minimum grade of "B-" (2.7), and MUS 2051 and MUS 2070 with a minimum grade of "C" (2.0) in each course. Music Therapy majors must be enrolled concurrently in MUS 3900.

POS affected: 553A

U_MUS_MUS_2017_6

Change the semester offering and prerequisite statement of MUS 3072 – Models of Music Therapy in Mental Health (2) Fall to read as follows:

When Offered: Spring

Prerequisites: Either MUS 2050 or MUS 2052 with a minimum grade of "B-" (2.7), and MUS 2051 with a minimum grade of "C" (2.0). Music Therapy majors must be enrolled concurrently in MUS 3900.

POS affected: 553A

U_MUS_MUS_2017_7

Change the credit hours and prerequisite statement of MUS 3900 – Music Therapy Practicum (1-3) Fall; Spring to read as follows:

MUS 3900 - Music Therapy Practicum (1-2)

Prerequisites: Either MUS 2050 or MUS 2052 with a minimum grade of "B-" (2.7) and MUS 2051 with a minimum grade of "C" (2.0).

POS affected: 553A

VOTE 14 – To approve the proposals from the Hayes School of Music - PASSED

Old Business

Other

Adjournment

Vote 15 – To approve the motion to adjourn – PASSED

UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE **December 6, 2017**

Unofficial Vote Record

Committee Members	1	2	3	4	5	6	7	8	9	10	11	12	13
Jon Beebe	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Denise Brewer	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Jon Carter	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Ellen Cowan	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
C. A. Debelius	-	-	-	-	-	ı	-	-	-	-	-	-	-
Christina Hayes	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Jeff Hirst	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Joe Klein	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Cameron Lippard	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Jason Miller	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Tanga Mohr	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Ben Powell	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Teressa Sumrall	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
John Wiswell	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Rice Neese	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Raiann Rosier	-	-	-	-	-	-	-	-	-	-	-	-	-

UNDERGRADUATE ACADEMIC POLICIES AND PROCEDURES COMMITTEE **December 6, 2017**

Unofficial Vote Record

Committee Members	14	15						
Jon Beebe	Υ	Υ						
Denise Brewer	Υ	Υ						
	Υ	Y						
Jon Carter								
Ellen Cowan	Υ	Υ						
C. A. Debelius	-	-						
Christina Hayes	Υ	Υ						
Jeff Hirst	Υ	Υ						
Joe Klein	Υ	Υ						
Cameron Lippard	Υ	-						
Jason Miller	Υ	Υ						
Tanga Mohr	Υ	Υ						
Ben Powell	Υ	Υ						
Teressa Sumrall	Υ	Υ						
John Wiswell	Υ	Υ						
Rice Neese	Υ	Υ						
Raiann Rosier	-	-						

The recommendations from the December 6, 2017 Undergraduate Academic Policies and Procedures Committee meeting are approved.

Darrell P. Kruger1/2/2018Darrell P. KrugerDateProvost and Executive Vice Chancellor

TO: AP&P

FROM: Michael Krenn, Director, General Education Program

DATE: November 21, 2017

RE: Memo of actions of the General Education Council on Nov. 17, 2017

The General Education Council took the following actions at its meeting on 11/17/17:

ACTION Items:

VOTE 1: Minutes from September 22, 2017 meeting

Yes: 11 No: 0 Abstain: 2 Minutes approved as written.

VOTE 2: Minutes from October 20, 2017 meeting

Yes: 10 No: 0 Abstain: 3 *Minutes approved as written.*

VOTE 3: Wellness Literacy (ADD), effective Fall 2018

PE 1747, Walking/Conditioning

PE 1774, Archery

PE 1784, Jiu Jitsu

PE 1812, Pickleball

PE 1827, Wallyball

Motion from the floor was made and seconded to table vote until assessment issue is addressed and simplified.

Yes: 12 No: 0 Abstain: 1

Motion to table is carried – courses not yet approved.

VOTE 4: Wellness Litaeracy (DELETE), effective Fall 2018

PE 1769, Personal Trainer Training (department is deleting course from curriculum)

Yes: 12 No: 0 Abstain: 1 Motion carried.

VOTE 5: New Rationale for Understanding Responsibilities of Community Membership

Yes: 0 No: 12 Abstain: 0 Motion failed.

VOTE 6: AMENDED Rationale for Understanding Responsibilities of Community Membership

Yes: 11 No: 0 Abstain: 1 Motion carried.

FIO Items:

Effective Fall 2018, change HED 1000, Personal and Family Health to HPE 1000

Effective Fall 2018, change PE 1748, Tai Chi, to PE 1778

Effective Fall 2016, delete WID credit from (other WID courses proposed for these majors, courses not re-proposed for WID during Gen Ed 2.0 re-proposal cycle but no proposals submitted for deletion): COM 3549, Selected Topics in Analyses

HED 2100, Introduction to Health Education

IDS 3000, Histories of Knowledges

TEC 3009, Introduction to the Technology Teaching Profession

2018-2019 Minor Program of Study

Minor in Southern Studies

Minor Code: xxx

Required: 18 hours

Select courses from the following clusters. Students must select courses from at least three clusters.

- -A minimum of 9 hours must be unique to the minor.
- -A minimum of 6 hours must be at or above the 3000 level.
- -A minimum of a 2.0 minor GPA is required for completion of the minor.

Note: No more than 9 hours may come from the following: HIS 3726, AS/MUS 2016, AS 2020, AS 2025, AS 2200, ENG 4720, ANT 2310, AS/GLY 2301, AS 3000, PS 3630, and SOC 3710.

I. History of the South

HIS 2603 African American History to the Civil War (3)

HIS 2604 African American History to Emancipation (3)

HIS 3226 The U.S. Civil War (3)

HIS 3242 The American Civil Rights Movement (3)

HIS 3720 The History of the Old South (3)

HIS 3722 The Post Civil War South (3)

HIS 3726 History of the Appalachian Region (3)

HIS 3728 History of North Carolina (3)

II. Film, Literature, and Music of the South

AS/MUS 2016 Appalachian Music (3)

A S 2020 Appalachia in Film (3)

A S 2025 Appalachian Strings (3)

AS 2200 Appalachian Stories (3)

ENG 2120 African-American Literature (3)

ENG 4580 Studies in African-American Literature (3)

ENG 4720 Appalachian Literature (3)

ENG 4725 Southern Literature (3)

HIS 3239 Country Music and American Culture (3)

WRC 3665 Black Mountain College (3)

III. People, Places, and Cultures of the South

ANT 2310 – Appalachian Culture (3)

ANT 3270 Archaeology of the Native South (3)

AS/GLY 2301 History of Coal from the Pennsylvanian to the Present (3)

AS 3000 Diversity in Appalachia (3)

GHY 3013 North Carolina (3)

GHY 3016 Geography of the American South (3)

GHY 3700 Geography of Food (3)

PS 3630 Appalachian Politics (3)

SOC 3710 Sociology of Appalachian Communities (3)

IV. Additional Southern Studies Courses, as Approved by Advisor and Curriculum Coordinator Courses may include: Honors College (HON) seminars with Southern Studies topics; special topics sections of IDS 2000, The Idea of America; or other special topics classes in various disciplines.

2017-20182018-2019 Undergraduate Bulletin

Appalachian State University

Environmental Science, BS



Program Code: 121A CIP Code: 03.0104

General Education Requirements (44 Hours)

• General Education Requirements

<u>CHE 1101/CHE 1110</u> & <u>CHE 1102/CHE 1120</u> fulfills Science Inquiry. MAT 1110 fulfills Quantitative Literacy requirement.

Major Requirements (79-76 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 (53 Hours)

- BIO 1801 Biological Concepts I (4)
- CHE 1101 Introductory Chemistry I (3)
- CHE 1110 Introductory Chemistry Laboratory I (1)
- BIO 1802 Biological Concepts II (4)
- CHE 1102 Introductory Chemistry II (3)
- <u>CHE 1120 Introductory Chemistry Laboratory II (1)</u>

•

- 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)

•

- ENV 1010 Introduction to Environmental Science and Engineering (3)
- GLY 1104 Water: Mountains to Sea (4)
- GLY 1101 Introduction to Physical Geology (4)
- MAT 1110 Calculus With Analytic Geometry I (4)
- GLY 2250 Evolution of the Earth (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- PHY 1150 Analytical Physics I (5)
- STT 3850 Statistical Data Analysis I (4)
- PHY 1151 Analytical Physics II (5)

Required Environmental Courses (17-19 Hours)

A writing course [WID] must be taken in the Junior year.

- BIO 3302 Ecology (4)
- ENV 3100 Issues in Environmental Science (1) [WID]
- ENV 3105 Preparation for Environmental Science Careers (3) [WID]
- GHY 3812 Introduction to GIS (3) *
- PLN 4460 Environmental Policy and Planning (3)

•

- GLY 3131 Environmental Geochemistry (3)
- or
- CHE 2550 Introduction to Environmental Chemistry (3)

•

• GLY 4630 - Hydrogeology (3)

Science Courses (12 Hours)

Must choose from at least 2 of these categories.

Environmental Science

- ENV 3010 Dynamics of Complex Systems (3)
- ENV 3560 Undergraduate Research (1-3) (Counts towards the 12 hours required in part C, but does not count as one of the 2 categories. By permit only.)
- ENV 3530-3549 Selected Topics (1-4)

•

- ENV 4110 Environmental Management and Impact Analysis (3) [CAP]
- or
- GLY 4110 Environmental Management and Impact Analysis (3)

•

 <u>ENV 4900 - Internship in Environmental Science (1-12)</u> (may only count 3 hours towards the major)

Chemistry

- 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)
- CHE 3560 Instrumental Methods of Analysis (3)
- CHE 3561 Instrumental Methods of Analysis Laboratory (1)
- CHE 4620 Environmental Chemistry (4)
- CHE 3530-3549 Selected Topics (1-4)

Geophysical Sciences

- CS 1445 Introduction to Programming with Interdisciplinary Applications (4)
- GHY 3110 Ecoregions and Dynamic Landforms (3) *
- GHY 3310 Environmental Remote Sensing (3)
- GHY 4812 Advanced GIS (3)
- GHY 4814 Principles of GeoComputation (3)
- GLY 3150 Principles of Structural Geology and Tectonics (3) *
- GLY 3333 Geomorphology (3)
- GLY 3800 Sedimentology and Stratigraphy (3)
- GLY 4705 Engineering Geology (3)
- ENV 3455 Quantitative Data Analysis for Earth and Environmental Scientists (3)
- GLY 3455 Quantitative Data Analysis for Earth and Environmental Scientists (3)
- PHY 3160 Introduction to Geophysics (3)
- GLY 3160 Introduction to Geophysics (3)
- PHY 3140 Environmental Physics (3)
- PHY 3150 Atmospheric Physics (3)
- PHY 3230 Thermal Physics (3) *
- PHY 3850 Environucleonics (3)
- PHY 3851 Environucleonics Laboratory (1)
- PHY 4330 Digital Electronics (4)
- PHY 4730 Analog Systems (4) *

•

- GLY 3530-3549 Selected Topics (1-4)
- or
- PHY 3530-3549 Selected Topics (1-4)

Biology

Pre: BIO 1801 for all BIO courses 2000 and above

All BIO courses at the 2000-level and above - except those listed above and except for <u>BIO 3500</u>, <u>BIO 3520</u>, <u>BIO 4011</u>, <u>BIO 4518</u>, <u>BIO 4519</u>, <u>BIO 4900</u>, <u>BIO 4910</u>

Note

*Pre-/Co-requisites are not included in the 123 hours required for the degree. Students may count these hours in AREA II.D. and/or AREA IV or seek instructor permission.

Science Electives (3 Hours)

Environmental Science Capstone Course (3at least-1 Hours)

(Pre: Senior Standing)

- ENV 4100 Environmental Science Seminar (3) [CAP]
- ENV 4105 Analysis and Solution of Environmental Problems (1) [CAP]
- ENV 4510 Senior Honors Research and Thesis (1-3) [CAP]

Minor (optional)

Electives (3 Hours)

Taken to a minimum of 123 hours for the degree

• 2 semester hours of free electives must be outside the major discipline

Total Required (123 Hours)



2017-20182018-2019 Undergraduate Bulletin

Appalachian State University

Environmental Science - Environmental Professional Concentration, BS

Print this Page

Program Code: 121*/121B

CIP Code: 03.0104

General Education Requirements (44 Hours)

• General Education Requirements

<u>CHE 1101</u> & <u>CHE 1110</u> & <u>CHE 1102</u> & <u>CHE 1120</u> fulfills Science Inquiry. <u>MAT 1110</u> fulfills Quantitative Literacy requirement.

Major Requirements (76-75 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 (53 Hours)

- 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)

•

- 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)

•

- ENV 1010 Introduction to Environmental Science and Engineering (3)
- GLY 1104 Water: Mountains to Sea (4)
- GLY 1101 Introduction to Physical Geology (4)
- MAT 1110 Calculus With Analytic Geometry I (4)
- GLY 2250 Evolution of the Earth (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- PHY 1150 Analytical Physics I (5)
- STT 3850 Statistical Data Analysis I (4)
- PHY 1151 Analytical Physics II (5)

Required Environmental Courses (17-19 Hours)

A writing course [WID] must be taken in the Junior year.

- BIO 3302 Ecology (4)
- ENV 3100 Issues in Environmental Science (1) [WID]
- ENV 3105 Preparation for Environmental Science Career (3) [WID]
- GHY 3812 Introduction to GIS (3) *
- PLN 4460 Environmental Policy and Planning (3)

•

- GLY 3131 Environmental Geochemistry (3)
- or
- CHE 2550 Introduction to Environmental Chemistry (3)

•

GLY 4630 - Hydrogeology (3)

Concentration Courses (12 Hours)

Must choose at least 1 course from Science category and at least 2 courses from Professional category.

Science

- ENV 3010 Dynamics of Complex Systems (3)
- ENV 3560 Undergraduate Research (1-3)
- ENV 3530-3549 Selected Topics (1-4)
- CHE 2202 Organic Chemistry II (3)
- CHE 2204 Organic Chemistry Laboratory II (1)
- CHE 2210 Quantitative Analysis (3)
- CHE 2211 Quantitative Analysis Laboratory (1)
- C S 1445 Introduction to Programming with Interdisciplinary Applications (4)
- GHY 3110 Ecoregions and Dynamic Landforms (3) *
- GHY 3310 Environmental Remote Sensing (3)
- GHY 4812 Advanced GIS (3)
- GHY 4814 Principles of GeoComputation (3)
- GLY 3150 Principles of Structural Geology and Tectonics (3) *
- GLY 3333 Geomorphology (3)
- GLY 3800 Sedimentology and Stratigraphy (3)
- GLY 4705 Engineering Geology (3)
- ENV 3455 Quantitative Data Analysis for Earth and Environmental Scientists (3)
- GLY 3455 Quantitative Data Analysis for Earth and Environmental Scientists (3)
- PHY 3160 Introduction to Geophysics (3)
- GLY 3160 Introduction to Geophysics (3)
- PHY 3140 Environmental Physics (3)
- PHY 3150 Atmospheric Physics (3)

- PHY 3230 Thermal Physics (3) *
- PHY 3850 Environucleonics (3)
- PHY 3851 Environucleonics Laboratory (1)
- PHY 4330 Digital Electronics (4)
- GLY 3530-3549 Selected Topics (1-4)
- PHY 3530-3549 Selected Topics (1-4)
- BIO 3530-3549 Selected Topics (1-4)
- All BIO courses at the 2000-level and above*; except those listed above, and except for BIO 3500, BIO 3520, BIO 3521, BIO 4011, BIO 4518, BIO 4519, BIO 4900, BIO 4910

Professional

- COM 3117 Environmental Communication (3)
- ENV 3110 Environmental Regulation and Enforcement (3)
- GLY 3110 Environmental Regulation and Enforcement (3)
- <u>ENV 4900 Internship in Environmental Science (1-12)</u> (may only count 3 hours towards the major)
- ECO 4621 Environmental Economics and Policy (3)
- IDS 3010 H2O: We are Water (3)
- PLN 3730 Land, Property, and Law (3) *
- P S 4670 Environmental Politics (3)

Note

*Pre-/Co- requisite is not included in the 123 hours required for the degree. Students may count these hours in AREA II.D. and/or AREA IV or seek instructor permission.

Science Electives (3 Hours)

Environmental Science Capstone Course (3 Hours)

(Pre: Senior Standing)

• <u>ENV 4</u>	110 - Environmental Management and Impact Analysis (3) [CAP]
• or	
• <u>GLY 4</u>	110 - Environmental Management and Impact Analysis (3)
•	
• <u>ENV 4</u>	1510 - Senior Honors Research and Thesis (1-3) [CAP]
Minor (option	nal)
Electives (3-4	Hours)
Taken to a mi	nimum of 123 hours for the degree
• 2 sem	nester hours of free electives must be outside the major discipline
Total Require	d (123 Hours)
Print this Pa	nge

Actuarial Science, BS_____

2018-2019



Program Code: 106A CIP Code: 52.1304

General Education Curriculum (44 Hours)

• General Education Requirements

Math 1110 will count toward Quantitative Literacy Gen Ed requirement. Some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information.

Major Requirements (65 Hours)

(Not including 4 hours counted in General Education Curriculum, above)

2.0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian. Course requirements for the Bachelor of Science degree in actuarial science are as follows (with program subject to the approval of the advisory committee). An acceptable program consists of at least 69 semester hours but no more than 80, with a minimum of 33 hours in the Department of Mathematical Sciences.

Mathematics (38 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 2240 Introduction to Linear Algebra (3)
- MAT 3330 Financial Mathematics (3)
- MAT 3340 Actuarial Models (3)

- MAT 4330 Senior Seminar in Actuarial Science (3) [CAP]
- <u>STT 3250 Fundamentals of Probability (4)</u>
- STT 3850 Statistical Data Analysis I (4)
- STT 3851 Statistical Data Analysis II (3) [WID]
- STT 4840 Regression and Time Series Forecasting (3)
- STT 4880 Mathematical Statistics (3)

Business (27 Hours)

- ACC 2100 Principles of Accounting I (3)
- ECO 2030 Principles of Microeconomics (3)
- ECO 2040 Principles of Macroeconomics (3)
- FIN 3100 Principles of Risk Management and Insurance (3)
- FIN 3680 Introduction to Finance (3)
- FIN 3690 Financial Management (3)
- FIN 3890 Survey of Investments (3)
- FIN 4770 Derivatives and Financial Risk Management (3)
- LAW 2150 Legal Environment of Business (3)

Electives (4 Hours)

Choose 4 hours from the courses listed below.

- MAT 2110 Techniques of Proof (4)
- MAT 3130 Introduction to Differential Equations (3)
- MAT 3310 Discrete and Continuous Mathematical Models (3)
- MAT 3350 Introduction to Mathematical Biology (3)
- MAT 3220 Introduction to Real Analysis I (3) [WID]
- MAT 4340 Introduction to Operations Research (3)
- C S 1440 Computer Science I (4)
- STT 4840 Regression and Time Series Forecasting (3)

Minor (Optional)
Electives (13 Hours)
(Taken to total 122 hours for the degree)
2 semester hours of free electives must be outside the major discipline. Total Required (122 Hours)

Mathematics, BA



Program Code: 261A CIP Code: 27.0101

General Education Requirements (44 Hours)

• General Education Requirements

MAT 1110 will count toward Quantitative Literacy general education requirement.

Language Requirements (6-12 Hours)

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

Language Course 1040

*

and

Language Course 1050

or

Language Course 1060

or

Higher level courses

Note: Language courses 1010 & 1020 or 1030 are prerequisites for *intermediate level courses.

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

Major Requirements (31 Hours)

Not including 4 hours counted in General Education Requirements, above

2. 0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> courses taken in the major department, plus any other courses under Major Requirements. No more than 46 semester hours of Mathematics courses may be counted toward the BA Degree.

Mathematics Major Requirements (29-30 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 2240 Introduction to Linear Algebra (3)

Choose One

- MAT 3130 Introduction to Differential Equations (3)
- STT 3850 Statistical Data Analysis I (4)

Choose One WID Course

(Pre for WID: <u>R C 2001</u>, <u>MAT 2110</u> or <u>MAT 2510</u>)

- 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]
- •
- STT 4880 Mathematical Statistics (3)
- STT 4881 Mathematical Statistics Capstone (1) [CAP]

Mathematics Electives (5-6 Hours)

(5-6 hours **to bring total hours in Major Requirements to 35 hours**) Any course listed above but <u>not used to meet requirements above</u>, 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 (3)
- 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)
- 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

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.

Minor Required (12-21 Hours)

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

Electives (20-29 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Mathematics - General Mathematics Concentration, BS

Print this Page

Program Code: 260*/260B

CIP Code: 27.0101

General Education Requirements (44 Hours)

• General Education Requirements

<u>MAT 1110</u> 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 <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (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]
- 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 Requirements (4 Hours)

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]

Approved Major Electives (8 Hours)

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)

A Career Support Concentration					
At least 21 hours, which must be approved by the mathematical sciences advisor					
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.					
Minor (Optional)					
Electives (17 Hours)					
Taken to total 122 hours for the degree					
 2 semester hours of free electives must be outside the major discipline 					
Total Required (122 Hours)					

Mathematics - Business Concentration, BS

Print this Page

Program Code: 260*/260D

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 <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (4)
- MAT 2240 Introduction to Linear Algebra (3)

Mathematics Courses for The Concentration (14 Hours)

- MAT 2130 Calculus With Analytic Geometry III (4)
- MAT 3220 Introduction to Real Analysis I (3) [WID]
- STT 3850 Statistical Data Analysis I (4)

Choose One

- 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]

•

- <u>STT 4840 Regression and Time Series Forecasting (3)</u>
- STT 4841 Regression and Time Series Forecasting Capstone (1) [CAP]

•

- STT 4880 Mathematical Statistics (3)
- STT 4881 Mathematical Statistics Capstone (1) [CAP]

•

Major Approved Electives

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)

Business Concentration

At least 21 advisor-approved hours in business courses

Concentration Electives (2 Hours)

• Advisor-approved elective in business or mathematical sciences

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.

Minor (Optional)

Electives (17 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Mathematics - Computation Concentration, BS

Print this Page

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.

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 <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (4)
- MAT 2240 Introduction to Linear Algebra (3)

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.

Mathematics Courses for The Concentration (13 Hours)

- 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]
- MAT 3220 Introduction to Real Analysis I (3) [WID]

Capstone Requirements (4 Hours)

Choose one option:

Option 1 (4 Hours)

- 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 Electives

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)

Computational Concentration (14 Hours)

- C S 1440 Computer Science I (4)
- <u>C S 2440 Computer Science II (4)</u>
- <u>C S 3430 Database (3)</u>
- C S 3460 Data Structures (3)

Electives

** Must be approved by mathematical sciences advisor.

• 9 hours** of Approved courses in the sciences, which may include computer science

Minor (Optional)

Electives (17 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Mathematics - Life Sciences Concentration, BS

Print this Page

Program Code: 260*/260F

CIP Code: 27.0101

General Education Requirements (44 Hours)

• General Education Requirements

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

Major Requirements (58 Hours)

Not including 12 hours counted in General Education Requirements, above

2.0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (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]

- 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]

•

- 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 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]

Life Sciences Concentration (30 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)
- 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)
- AND 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)

• 2 hours in mathematical sciences to bring total hrs in Major Requirements to 70 hours

Honors Students

You may substitute <u>MAT 2510</u> Sophomore Honors Seminar for <u>MAT 2110</u>, and <u>MAT 4510</u> 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)

Electives (20 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Mathematics - Physical Sciences Concentration, BS



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.

Major Requirements (61 Hours)

Not including 4 hours counted in General Education, above

2.0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (4)
- MAT 2240 Introduction to Linear Algebra (3)

Mathematics Courses for The Concentration (20 Hours)

- 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

- MAT 3110 Introduction to Modern Algebra (3) [WID]
- MAT 3220 Introduction to Real Analysis I (3) [WID]

Capstone Requirements (4 Hours)

Choose one option:

Option 1 (4 Hours)

- 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 Electives**

Physical Sciences Concentration (17 Hours)

** Must be approved by math sciences advisor.

- PHY 2010 Intermediate Physics I (4)
- PHY 2020 Intermediate Physics II (4)
- PHY 3210 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

You may substitute <u>MAT 2510</u> Sophomore Honors Seminar for <u>MAT 2110</u>, and <u>MAT 4510</u> 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 (17 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Mathematics - Statistics Concentration, BS

Print this Page

Program Code: 260*/260H

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 <u>all</u> 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 Hours)

- MAT 1110 Calculus With Analytic Geometry I (4)
- MAT 1120 Calculus With Analytic Geometry II (4)
- MAT 2110 Techniques of Proof (4)
- MAT 2240 Introduction to Linear Algebra (3)

Mathematics Courses for Concentration (16 Hours)

- 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]

MAT 4310 - Numerical Methods (3)

Capstone Requirements (4 Hours)

Choose one option:

Option 1 (4 Hours)

- 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]

•

- <u>STT 4830 Linear Regression Models (3)</u>
- 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 Electives

5 hours in mathematical sciences to bring total hrs in Major Requirements to 65

Statistics Concentration (25 Hours)

^{**} Must be approved by mathematical sciences advisor.

- STT 3250 Fundamentals of Probability (4)
- STT 3850 Statistical Data Analysis I (4)
- STT 3851 Statistical Data Analysis II (3) [WID]
- 5 hours of approved statistics electives** at or above <u>STT 3830</u> (excluding <u>STT 4811</u> and <u>STT 4812</u>)
- 9 hours of approved electives** in related coursework which may include courses from outside mathematical sciences

Minor (Optional)

Electives (17 Hours)

Taken to total 122 hours for the degree

• 2 semester hours of free electives must be outside the major discipline.

Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:50	8:00-9:15	8:00-8:50	8:00-9:15	8:00-8:50
9:00-9:50	9:30-10:45	9:00-9:50	9:30-10:45	9:00-9:50
10:00-10:50		10:00-10:50		10:00-10:50
11:00-11:50	11:00-12:15	11:00-11:50	11:00-12:15	11:00-11:50
12:00-12:50	12:30-1:45	12:00-12:50	12:20 1:45	12:00-12:50
1:00-1:50	12.30-1.45	1:00-1:50	12:30-1:45	1:00-1:50
2:00-2:50 or 2:00-3:15 MW	2:00-3:15	2:00-2:50 or 2:00-3:15 MW	2:00-3:15	2:00-2:50
3:00-3:50 or 3:30-4:45 MW	3:30-4:45	3:00-3:50 or 3:30-4:45 MW	3:30-4:45	3:00-3:50
4:00-4:50	3.30-4.43	4:00-4:50	3.30-4.43	4:00-4:50
5:00	5:00	5:00	5:00	5:00

Monday/Wednesday/Friday classes meet for 50 minutes on the hour

Tuesday/Thursday classes meet for 75 minutes at 8:00, 9:30, 11:00, 12:30, 2:00 and 3:30

Monday/Wednesday classes are allowed if they begin at 2:00 p.m. or after

BCHS Building Standard Class Meeting Times

Monday	Tuesday	Wednesday	Thursday	Friday
8:30-9:20	8:30-9:45	8:30-9:20	8:30-9:45	8:30-9:20
9:30-10:20	10:00-11:15	9:30-10:20	10:00-11:15	9:30-10:20
10:30-11:20		10:30-11:20		10:30-11:20
11:30-12:20	11:30-12:45	11:30-12:20	11:30-12:45	11:30-12:20
12:30-1:20	1:00-2:15	12:30-1:20	1:00-2:15	12:30-1:20
1:30-2:20		1:30-2:20		1:30-2:20
2:30-3:20 or 2:30-3:45 MW	2:30-3:45	2:30-3:20 or 2:30-3:45 MW	2:30-3:45	2:30-3:20
3:30-4:20		3:30-4:20		3:30-4:20
or 4:00-5:15 MW	4:00-5:15	or 4:00-5:15 MW	4:00-5:15	
4:30-5:20		4:30-5:20		4:30-5:20
5:30	5:30	5:30	5:30	5:30

Monday/Wednesday/Friday classes meet for 50 minutes on the half hour.

Tuesday/Thursday classes meet for 75 minutes at 8:30, 10:00, 11:30, 1:00, 2:30 and 4:00.

Monday/Wednesday classes are allowed if they meet at 2:30 p.m. or after.

The exam times for these classes will correspond to the exam time for classes that meet 30 minutes earlier on main campus.

Apparel Design and Merchandising Minor

Proposed



Minor Code: 710 CIP Code: 19.0901

Required Courses (6 Hours)

- ADM 1000 Apparel and Consumer Behavior (3)
- ADM 2000 Consumer Textiles (3)

Select Four Courses From The Following (12 Hours)

(6 SH minimum must be taken at the 3000 level or higher)

The Program Coordinator may waive course prerequisites for students interested in this minor.

- ADM 1200 Illustration I (3)
- ADM 2010 Survey of Fashion Merchandising (3)
- ADM 2020 Illustration II (3)
- ADM 2030 Apparel Design Studio I (3)
- ADM 2040 Apparel Design Studio II (3)
- ADM 3000 Styling for the Apparel Industry (3)
- ADM 3010 History of Apparel (3)
- ADM 3030 Apparel Design Studio III (3)
- ADM 3040 Visual Merchandising, Display and Promotion (3)
- ADM 4010 Sustainability in the Apparel Industry (3)
- ADM 4020 Fashion Buying and Retail Math (3)
- ADM 4030 Apparel Design Studio IV (3)

Total Required (18 Hours)

9 hours of the minor must be completed at Appalachian.

Contact: Dr. Nancy Oliver oliverna@appstate.edu



Communication, Public Relations, BS



Program Code: 521A CIP Code: 09.0902

Non-Teaching

General Education Requirements (44 Hours)

• 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 (51 Hours) 48 Hours

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 (30 Hours) 27 Hours

- COM 1300 Journalism Matters (3)
- COM 2325 Public Relations Principles (3)
- COM 2600 Introduction to Journalism (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]
- COM 3928 Communication Research Methods (3)
- COM 4318 Public Relations Campaigns (3) [CAP]
- COM 4418 Public Relations Seminar (3) [CAP]

Additional Requirements (15 Hours)

Professional Development Courses (Choose 9 Hours)

- COM 3305 Communication Law (3)
- COM 3312 Crisis 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 3900 Internship (3-12)
- COM 4430 Advanced Public Relations Campaign (3)

Immersion Courses

(Choose an additional 6 hours in consultation with your advisor. Suggested Courses:)

- COM 2131 Health Communication (3)
- COM 2610 News Reporting and Writing (3)
- COM 2700 Foundations of Advertising (3)
- COM 3117 Environmental Communication (3)
- COM 2124 Intercultural Communication (3)
- COM 3151 Gender Communication (3)
- COM 3155 Persuasion (3)
- COM 3315 Political Communication (3)
- COM 3680 Literary Journalism (3)
- COM 4101 Speechwriting (3)
- COM 4420 Multimedia Storytelling (3)

Minor Required (12-25 Hours)

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 (2-24 Hours) (5 - 24 Hours)

To total a minimum of 122 hours for this major

• 2 hours of free electives outside the major discipline are required.



Communication, Advertising, BS



Program Code: 507A CIP Code: 09.0903

Non-Teaching

General Education Requirements (44 Hours)

• General Education Requirements

(COM 2105 taken for the major may count toward General Education: Liberal Studies Experience).

Major Requirements (45 Hours)

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)
- O1
- COM 2105 Public Speaking in the Disciplines (3)

Major Courses (24 Hours)

- COM 2700 Foundations of Advertising (3)
- <u>COM 3155 Persuasion (3) [WID]</u>
- COM 3200 Internet Communication (3)
- OF
- IDS 3250 Internet Studies (3)

•

- COM 3317 Social Media Strategies
- COM 3305 Communication Law (3)
- COM 3928 Communication Research Methods (3)
- COM 4040 International Advertising (3)
- COM 4250 Professional Ethics in Advertising (3)
- COM 4400 Advertising Campaigns (3) [CAP]

Sequence Selection (9 Hours)

Choose three of the four courses, in one of the following two emphases

Business Emphasis

- COM 3152 Communication in Organizations (3)
- COM 3544 Selected Topics in Advertising Business (3)
- COM 3640 Media Planning (3)
- COM 4300 Media Sales (3)

Creative Emphasis

- COM 2618 Introduction to Media Publishing (3) (COM major)
- COM 3010 Media Graphics (3)
- COM 3302 Copywriting for Advertising (3)
- COM 3545 Selected Topics in Advertising Creative (3)

Major Electives (6 Hours)

• Choose any courses from the Communication Department course listing (must meet prerequisites)

Minor Required (12-25 Hours)

• 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 (11-24 Hours)8 – 24 Hours

• 2 hours of free electives outside the major discipline are required.

Communication, Journalism, BS



Program Code: 517A CIP Code: 09.0401

Non-Teaching

General Education Requirements (44 Hours)

• General Education Requirements

<u>COM 2105, COM 3130</u> if taken for the major may count toward General Education: ILE; OR-<u>COM 3300</u> if taken for the major may count toward General Education LSE. "COM 2105, if taken for the major, may count toward the LSE in General Education. A student may count COM 3130 toward the ILE OR COM 3300 toward the LSE in General Education."

Major Requirements (42 Hours)

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

- <u>COM 1200 Thinking Through Communication (3)</u>
- COM 2101 Public Speaking (3)
- 01
- COM 2105 Public Speaking in the Disciplines (3)

Major Courses (30 Hours)

- <u>COM 2600 Introduction to Journalism (3)</u> COM 1300 Journalism Matters: An Introduction to News Literacy & News Writing
- COM 2618 Introduction to Media Publishing (3)
- COM 3210 Copy Editing (3)

.

- COM 3305 Communication Law (3)
- COM 3320 Audio-Video Production (3)

_

- COM 3340 Journalism Ethics and a Free Society (3)
- COM 3600 Feature Writing (3) [WID]

.

- And one of the following:
- COM 2610 News Reporting and Writing (3)
- COM 2650 Selected Topics in Reporting (3)

•

- And one of the following:
- COM 3300 Mass Media and Society (3)
- COM 3130 Minorities in Media (3)
- COM 3132 Health and Mass Media (3)
- COM 3200 Internet Communication (3)
- COM 3650 Selected Topics in Mass Media (3)

•

- And one of the following:
- COM 4220 Photojournalism (3)
- COM 4310 Advanced Design for Digital Storytelling (3)
- COM 4420 Multimedia Storytelling (3)
- COM 4650 Selected Topics in Digital Media (3)

Capstone (3 Hours)

• <u>COM 4610 - Specialized Reporting (3) [CAP]</u>

Major Electives (3 Hours)

Journalism majors must complete 3 hours of Communication courses

Selected topics, independent study, and internships are included as coursework major electives

Minor Required (12-25 Hours)

• 9 hours of a minor must be completed at Appalachian

Free Electives (20-33 Hours 11-33 Hours)

To total a minimum of 122 hours for this major.

• 6 hours of free electives outside the major discipline are required



2018-2019 Proposed Copy

Theatre Arts - Theatre Design/Technology Concentration, BA

Program Code: 591*/591D

CIP Code: 50.0501

Non-Teaching

General Education Requirements (44 Hours)

• General Education Requirements

(<u>THR 2005</u> and <u>THR 3730</u> taken for the major may count toward General Education: Liberal Studies Experience; Integrative Learning Experience).

Language Requirements (6-12 Hours)

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

• Language Course 1040

*

and

• Language Course 1050

*

or

• <u>Language Course 1060</u>

*

or

Higher level courses

Note: Language courses 1010 & 1020 or 1030 are prerequisites for *intermediate level courses.

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

Major Requirements (46 Hours)

Note: Courses with an asterisk * require a minimum overall GPA of (2.7). 18 semester hours must be completed at Appalachian.

BA RULE: Students may not count more than 46 semester hours in THR above general education hours (52 hours maximum in THR)

- Junior Writing in the Discipline [WID]
- Senior Capstone Experience [CAP] must be met

BA Theatre Core (25 Hours)

- THR 2005 Page and Stage (3)
- THR 2009 The Stage Environment (3) *
- THR 2101 Production Running Crew (0-1) * 1 sh required for Theatre Core
- 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]

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 Design/Technology Concentration (15 Hours)

- THR 2101 Production Running Crew (0-1) * 1 sh required for concentration
- THR 2250 Stage Management (2) *
- THR 22____(3)* THR 2230*, THR 2235* or THR 2240* (remaining course not taken in the core above)
- THR 2250 Stage Management (2) *
- (move this course number to put courses in numerical order)
- THR 3235 Intermediate Design and Production Studio (3) *

- THR 4235 Advanced Design and Production Studio (3) *
- THR 4840 Capstone (3) [CAP]

Special Topics in Design & Production

(Prerequisite: Permission of the instructor) - (must be taken 2 times for credit)

- THR 4235 Special Topics in Design and Production (3) *
- THR 4235 Special Topics in Design and Production (3) *

Concentration Electives (6 Hours)

• Choose 6 hours from THR and/or other departments that are appropriate to the student's area focus (At least 3 sh must be at the 3000 level or above. **Must have advisor approval**)

Minor Required (12-24 Hours)

• 9 hours of a minor must be completed at Appalachian State University.

Free Electives (2-23 Hours)

To total a minimum of 122 hours for this major

• 2 hours of free electives outside the major discipline are required.

Total Required (122-128 Hours)

Formal admission to the concentration is by interview with Theatre Design/Technology faculty.

Participation in portfolio reviews is required each year. See http://www.theatreanddance.appstate.edu for additional requirements.