

Approval Chart for Curriculum Changes

A = Approve I= Information Item¹ R= Advise & Respond²

Course Number _____ or Degree Plan(s) ANSC

State the requested change and reason. A memo may be attached if more space is necessary.

The goal of this revision is to incorporate an experiential learning component (ELC) in the learning of every student within the department. The ELC is 3 credit hours, drawn from a menu of the options a-c below

- a. a student-led research project
- b. an internship
- c. participation in a departmental study abroad, currently in association with Wildcats on Mission (WAM)

Rationale: Though students in A&E get much hands-on learning throughout the department's curriculum, they do not all get experiential learning; learning that challenges them with dissonance and reflection. We also recognize the practical advantage of students doing research or internships in entering graduate school or careers.

See attached proposal catalog changes.

Circle the number that corresponds to the requested change. Degree plan changes are on the second page.

		COUNCIL ³								
	Change to a Course	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	President
1.	Title (description unchanged)	A	A	A	I				I	I
2.	Description (not affecting content)	A	A	A	I				I	I
3.	Course term(s)	A	I	A	I				I	I
4.	Content (substantive change)	A	A	A	I				A	A
5.	Number of hours (lecture, lab, contact)	A	A	A	A				A	A
6.	Course number within the hundred	A	A	I	I				I	I
7.	Course number beyond the hundred	A	A	A	A				A	A
8.	Prerequisites	A	A	A	I				I	I
9.	Course fee(s)	A	--	A	--				A	I
10.	From U to G or G to U	A	A	A	A				A	A
11.	Cross list with another department: U or G level	A	A	A	A				A	A
12.	Department of record	A	A	A	A				A	A
13.	Open or close a course	A	A	A	A				A	A
14.	New course — See website for application and process. This change includes combining or splitting a course(s).	A	A	A	A				A	A

Note: When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

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		COUNCIL ³										
	Change to a Degree Plan	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	Faculty	President	Board of Trustees
1.	University Requirements — Change in approved course content ⁶	A	A	A	A				A	--	A	--
2.	University Requirements — Add or drop a required course from the University Requirements chart ⁶	A	A	A	A				A	A	A	--
3.	University Requirements — Add or drop a course from a menu within the University Requirements ⁶	A	--	--	A				A	--	A	--
4.	University Requirements — Change hours within a menu on the University Requirements chart ⁶	A	A	A	A				A	A	A	--
5.	Major — Revision of major ^{4,5}	A	A	A	A				A	--	A	--
6.	Major — Adopt or change admission requirements	A	A	A	A				A	--	A	--
7.	Major — Add ^{4,5}	A	A	A	A				A	A	A	I
8.	Major – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
9.	Major – Discontinue (proposed by the Provost)	See below.										
10.	GPA — Revise major or cumulative requirement	A	A	A	A				A	A	A	--
11.	Minor — Revise course selection	A	A	A	I				I	--	I	--
12.	Minor — Add	A	A	A	A				A	--	A	--
13.	Minor – Discontinue (proposed by the department or college)	A	A	A	A				A	--	A	--
14.	Minor – Discontinue (proposed by the Provost)	See below.										
15.	Degree — Add	A	A	A	A				A	A	A	I
16.	Degree – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
17.	Degree – Discontinue (proposed by the Provost)	See below.										
18.	Any change to a graduate degree program	A	A	A	A				A	--	A	--

COUNCIL ³										
	Provost-Proposed Change	Provost	Department	Dean	TEC	UUAC	Graduate	Faculty	President	Board of Trustees
1.	Major/Graduate Program – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I
2.	Minor – Discontinue (proposed by the Provost)	A	R	R	A			--	A	--
3.	Degree – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I

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COUNCIL ³										
	Change to the Catalog Information	Dept./School	College Academic	Deans	UGEC	UUAC	GRAD	Provost	Faculty	President
1.	General requirements for graduation including course requirements that are common to all majors for all degrees ⁷	--	--	--	A			A	A	A
2.	Admission requirements	--	--	--	A			A	A	A
3.	Policies governing academic probation and suspension	--	--	--	A			A	A	A
4.	Requirements for graduating with honors	--	--	--	A			A	A	A
5.	Other academic policy changes	--	--	--	A			A	--	A

¹ Councils may request additional information about "Information" items. These items are approved as "Consent Agenda."

² The Dean and Department should respond to the Provost's recommendation to close a program in writing. Advise & Respond (R) requires that the voting body should receive the written responses at least one week prior to the vote.

³ All courses that meet University Requirements for general education must go through UGEC. Courses or degrees offered only to students seeking teacher certification must go through the Teacher Education Council. All undergraduate changes must go before the UUAC. All graduate degree plan changes must go through the Graduate Council.

⁴ A minimum of 30 hours is required for a major. A maximum is specified for each degree (e.g., BA, BS). The university minimum for elective hours is 6, unless the requirements of external accrediting bodies make it impossible.

⁵ Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

⁶ Courses that satisfy ACU's University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and "not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession" (SACS 2.7.3). Departments may request exceptions to the first three criteria.

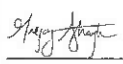
⁷ The UUAC approved the clarification that "general requirements for graduation" means the enumerated items in the "General Requirements for Bachelor's Degrees" section of the catalog.

Revised 3-8-17

Curriculum/Catalog Changes Signature Page

Department/School Chair(s)	
 Signature	09/10/2021 Approval date
_____ Signature	_____ Approval date

College Academic Council(s)	
 Signature	_____ Approval date
_____ Signature	_____ Approval date

Dean(s)	
 Signature	_____ Approval date
_____ Signature	_____ Approval date

Teacher Education Council	
_____ Chair's signature	_____ Approval date

General Education Council	
_____ Chair's signature	_____ Approval date

Undergraduate Academic Council	
_____ Chair's signature	_____ Approval date

Graduate Council	
_____ Chair's signature	_____ Approval date

Provost	
_____ Signature	_____ Approval date

Faculty	
_____ Chair of faculty senate	_____ Approval date

President	
_____ Signature	_____ Approval date

Justification for Curriculum Change in A&E Degree Plans

Experiential learning is known to enhance comprehension and application in learning, as well as improve marketability in graduates. Although the programs within the A&E department include a number of experiential opportunities, this change ensures that an intentional experiential learning component is part of the education of every student within the department.

See the attached course rotation, faculty load, and new requirement in the department home page.

Bachelor of Science Degrees (BS)

Admission Requirements

Before being admitted to a program, a student must satisfy the requirements listed in the ACT/SAT Placement Information section of this catalog.

Degree plans include academic and practical experience, including experiential learning. As part of the experiential learning requirement, students are required to complete 3 credit hours in an internship, independent research, or a departmental study abroad.

AES Faculty Load

Instructor	Appointment	Fall
Brokaw, J	Full-time Bio	BIOL 345/ENVR 345
Carpenter	Full-time	AENV 130, ENVR 320, ENVR 350, ENVR 455, AENV 384
Jernigan	Full-time	AENV 110*, AENV 130, AENV 371, ENVR 341
Willis	Full-time	AENV 110*, ANSC 111, ANSC 343, ANSC 360, ANSC 496
Craig	Adjunct	ENVR 410
Tulloch	Adjunct	ENVR 241
Needham	Adjunct	ANSC 235
Judah	Adjunct	

* AENV 110 is co-taught by Jernigan and Animal Science faculty (currently open)

Course Rotations

Course ID	Semester	Hour Split
AENV 110	Fall	2-2-3
AENV 130	Fall, Spring	3-0-3
AENV 371	Fall, even yrs	3-0-3
AENV 384	Fall	3-0-3
AGRB 261	Spring	3-0-3
AGRB 382	Spring	3-0-3
ANSC 111	Fall	2-3-3
ANSC 235	Fall	3-0-3
ANSC 336	Spring	2-3-3
ANSC 343	Fall-odd yrs	3-0-3
ANSC 360	Fall, Spring	2-3-3
ANSC 363	Spring, even yrs	3-0-3
ANSC 392	Spring	3-0-3
ANSC 483	Spring, odd yrs	3-0-3
ANSC 496	Fall, even yrs	3-0-3
ANSC 497	Spring	3-0-3
ENVR 112	Spring	2-3-3
ENVR 233	Spring	2-3-3
ENVR 241	Fall, odd years	2-3-3
ENVR 320	Fall, even yrs	2-3-3
ENVR 341	Fall, odd yrs	2-3-3
ENVR 345	Fall	2-3-3
ENVR 350	Fall, odd yrs	2-3-3
ENVR 354	Spring, even yrs	2-2-3
ENVR 410	Fall	3-0-3
ENVR 420	Spring	3-0-3
ENVR 455	Fall, even yrs	3-3-4
ENVR 458	Spring, odd yrs	2-3-3

Instructor	Appointment	Spring
Brokaw, J	Full-time Bio	
Carpenter	Full-time	AENV 130, ENVR 233, ENVR 354, ENVR 458
Jernigan	Full-time	AENV 130, ENVR 112, ENVR 420
Willis	Full-time	ANSC 336, ANSC 360, ANSC 363, ANSC 483, ANSC 497
Needham	Adjunct	ANSC 392
Judah	Adjunct	AGRB 261, AGRB 382

Animal Science, Livestock Production, BS (ANSC-LP)

BS: Animal Science Degree Plan (ANSC)

The animal science degree is designed to prepare students to effectively serve the livestock industry by producing graduates conversant in issues related to animal agriculture. The curriculum is designed for academically talented students interested in the application of biology and technology to the care, management and study of domestic animals. While the program emphasizes traditional farm species of dairy cattle, beef cattle and swine, it also addresses companion animals, small ruminants, and poultry. The animal science curriculum contains a fundamental animal science core accompanied by emphasis track. The tracks are pre-veterinary medicine and health, business and industry, livestock management, and biotechnology and research. Graduates are prepared for admission to professional and/or graduate programs for advanced studies or entry into career fields.

University Requirements

Please see the [University Requirements](#) section of this catalog.

Major Requirements

Agricultural and Environmental Sciences Core

- [AENV 110 - Introduction to Agricultural and Environmental Systems and Technology](#) Credit Hours: 3
- [AGRB 261 - Principles of Agricultural and Applied Economics](#) Credit Hours: 3 *
- [ANSC 111 - General Animal Science](#) Credit Hours: 3
- [ENVR 112 - Plant Science](#) Credit Hours: 3
- [ENVR 233 - Soil Science](#) Credit Hours: 3
-
- *Hours may also fulfill university requirements and are not included in total major hours.

Experiential Learning

Students are required to complete an experiential learning component.

Choose one option from the list below:

- [AENV 381 – International Applications in Agricultural & Environmental Sciences](#) Credit Hours: 3
- [AENV 384 – Internship in Agricultural & Environmental Sciences](#) Credit Hours: 3
- [AENV 399 – Research in Agricultural & Environmental Sciences](#) Credit Hours: 3*

AENV 399 is offered for variable credit, 1-3 hours. A total of 3 hours must be taken to meet the experiential learning requirement. The course may be repeated for up to 3 hours.

Total: 12~~15~~ Credit Hours

Animal Science Core

- [ANSC 336 - Animal Nutrition](#) Credit Hours: 3
- [ANSC 343 - Animal Reproduction](#) Credit Hours: 3
- [ANSC 392 - Animal Health](#) Credit Hours: 3
- [ANSC 496 - Animal Breeding](#) Credit Hours: 3
- [ANSC 497 - Special Problems in Animal Science](#) Credit Hours: 3 (capstone and writing-intensive course)

Total: 15 Credit Hours

Livestock Production (LP)

- [AGRB 382 - Agribusiness Management](#) Credit Hours: 3

Choose 15 credit hours from the following menu:

(Choose no more than 9 hours within a single discipline.)

- [AENV 371 - Experimental Designs and Data Analysis](#) Credit Hours: 3
- [ANSC 235 - Companion Animal Management](#) Credit Hours: 3
- [ANSC 360 - Horses and Horsemanship](#) Credit Hours: 3
- (Note: If ANSC 360 is taken, 1 hour counts for University PEAC activity and 2 hours count for transfer requirements.)
- [ANSC 363 - Monogastric Livestock Production](#) Credit Hours: 3
- [ANSC 483 - Ruminant Livestock Production](#) Credit Hours: 3
- [ENVR 341 - Water Resources](#) Credit Hours: 3
- [ENVR 345 - Range and Wildland Plants](#) Credit Hours: 2
- [ENVR 346 - Range and Wildland Plants Laboratory](#) Credit Hours: 1
- [ENVR 350 - Rangeland Ecology](#) Credit Hours: 3
- [ENVR 354 - Range Science](#) Credit Hours: 3
- [ENVR 455 - Wildlife Ecology](#) Credit Hours: 4

Mathematics

- [MATH 123 - Elementary Statistics](#) Credit Hours: 3 *
- *or*
- [MATH 377 - Statistical Methods I](#) Credit Hours: 3 *
-
- *Hours may also fulfill university requirements and are not included in total major hours

Science Requirements

- [BIOL 121 - Introductory Biology I](#) Credit Hours: 3 *
- [BIOL 122 - Introductory Biology I Laboratory](#) Credit Hours: 1
- [BIOL 123 - Introductory Biology II](#) Credit Hours: 3
- [BIOL 124 - Introductory Biology II Laboratory](#) Credit Hours: 1
- [BIOL 351 - Genetics](#) Credit Hours: 3
-
- [CHEM 113 - Introductory Chemistry](#) Credit Hours: 3 *
- [CHEM 111 - Introductory Chemistry Laboratory](#) Credit Hours: 1
- *or*
- [CHEM 133 - General Chemistry I](#) Credit Hours: 3 *
- [CHEM 131 - General Chemistry Laboratory I](#) Credit Hours: 1
-
- *Hours may also fulfill university requirements and are not included in total major hours

Total: 27 Credit Hours

Supplement for Major

- [ACCT 210 - Financial Accounting](#) Credit Hours: 3
- [CHEM 112 - Introductory Organic and Biological Chemistry Laboratory](#) Credit Hours: 1
- [CHEM 114 - Introductory Organic and Biological Chemistry](#) Credit Hours: 3
- [FIN 416 - Personal Financial Planning](#) Credit Hours: 3

Choose 3 hours from the courses below:

- [ACCT 211 - Managerial Accounting](#) Credit Hours: 3
- [MKTG 320 - Principles of Marketing](#) Credit Hours: 3

Total: 13 Credit Hours

Electives

Minimum - 52 Credit Hours

Total Major Hours: 72

Other Graduation Requirements

Minimum GPA for graduation: 2.00

Minimum advanced hours: 33

Minimum total hours: 128

*Courses numbered 0** do not count in minimum hours required for degree.*

Animal Science, Pre-Veterinary Medicine and Health, BS (ANSC-PVH)

BS: Animal Science Degree Plan (ANSC)

The animal science degree is designed to prepare students to effectively serve the livestock industry by producing graduates conversant in issues related to animal agriculture. The curriculum is designed for academically talented students interested in the application of biology and technology to the care, management and study of domestic animals. While the program emphasizes traditional farm species of dairy cattle, beef cattle and swine, it also addresses companion animals, small ruminants, and poultry. The animal science curriculum contains a fundamental animal science core accompanied by emphasis track. The tracks are pre-veterinary medicine and health, business and industry, livestock management, and biotechnology and research. Graduates are prepared for admission to professional and/or graduate programs for advanced studies or entry into career fields.

University Requirements

Please see the [University Requirements](#) section of this catalog.

Major Requirements

Agricultural and Environmental Sciences Core

[AENV 110 - Introduction to Agricultural and Environmental Systems and Technology](#) Credit Hours: 3

[AGRB 261 - Principles of Agricultural and Applied Economics](#) Credit Hours: 3 *

[ANSC 111 - General Animal Science](#) Credit Hours: 3

[ENVR 112 - Plant Science](#) Credit Hours: 3

[ENVR 233 - Soil Science](#) Credit Hours: 3

*Hours may also fulfill university requirements and are not included in total major hours.

Experiential Learning

Students are required to complete an experiential learning component.

Choose one option from the list below:

- [AENV 381 – International Applications in Agricultural & Environmental Sciences](#) Credit Hours: 3
- [AENV 384 – Internship in Agricultural & Environmental Sciences](#) Credit Hours: 3
- [AENV 399 – Research in Agricultural & Environmental Sciences](#) Credit Hours: 3*

AENV 399 is offered for variable credit, 1-3 hours. A total of 3 hours must be taken to meet the experiential learning requirement. The course may be repeated for up to 3 hours.

Total: 12 15 Credit Hours

Animal Science Core

[ANSC 336 - Animal Nutrition](#) Credit Hours: 3

[ANSC 343 - Animal Reproduction](#) Credit Hours: 3

[ANSC 392 - Animal Health](#) Credit Hours: 3

[ANSC 496 - Animal Breeding](#) Credit Hours: 3

[ANSC 497 - Special Problems in Animal Science](#) Credit Hours: 3 (capstone and writing-intensive course)

Total: 15 Credit Hours

Pre-Veterinary Medicine and Health (PVH)

Choose a minimum of 5 hours from the following menu:

[ANSC 235 - Companion Animal Management](#) Credit Hours: 3

[ANSC 360 - Horses and Horsemanship](#) Credit Hours: 3

(Note: If ANSC 360 is taken, 1 hour counts for University PEAC activity and 2 hours count for track requirements.)

[ANSC 363 - Monogastric Livestock Production](#) Credit Hours: 3

[ANSC 483 - Ruminant Livestock Production](#) Credit Hours: 3

Mathematics

[MATH 377 - Statistical Methods I](#) Credit Hours: 3 *

*Hours may also fulfill university requirements and are not included in total major hours

Science Requirements

[BIOL 121 - Introductory Biology I](#) Credit Hours: 3 *

[BIOL 122 - Introductory Biology I Laboratory](#) Credit Hours: 1

[BIOL 123 - Introductory Biology II](#) Credit Hours: 3

[BIOL 124 - Introductory Biology II Laboratory](#) Credit Hours: 1

[BIOL 351 - Genetics](#) Credit Hours: 3

[CHEM 133 - General Chemistry I](#) Credit Hours: 3 *

[CHEM 131 - General Chemistry Laboratory I](#) Credit Hours: 1

*Hours may also fulfill university requirements and are not included in total major hours

Total: 14 Credit Hours

Supplement for Major

[BIOL 355 - Microbiology](#) Credit Hours: 3

[BIOL 357 - Microbiology Laboratory](#) Credit Hours: 1

[CHEM 132 - General Chemistry Laboratory II](#) Credit Hours: 1

[CHEM 134 - General Chemistry II](#) Credit Hours: 3

[CHEM 221 - Organic Chemistry Laboratory I](#) Credit Hours: 1

[CHEM 223 - Organic Chemistry I](#) Credit Hours: 3

[CHEM 322 - Organic Chemistry Laboratory II](#) Credit Hours: 1

[CHEM 324 - Organic Chemistry II](#) Credit Hours: 3

[CHEM 453 - Biochemistry I: Foundations of Biochemistry](#) Credit Hours: 3

[PHYS 110 - General Physics I](#) Credit Hours: 3

[PHYS 111 - General Physics I Laboratory](#) Credit Hours: 1

[PHYS 112 - General Physics II](#) Credit Hours: 3

[PHYS 113 - General Physics II Laboratory](#) Credit Hours: 1

Total: 27 Credit Hours

Electives

Minimum ~~4~~ 1 Credit Hours

Total Major Hours: 72

Other Graduation Requirements

Minimum GPA for graduation: 2.00

Minimum advanced hours: 33

Minimum total hours: 128

*Courses numbered 0** do not count in minimum hours required for degree.*