

Approval Chart for Curriculum Changes

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

Course Number _____ or Degree Plan(s) BIOT- BIOT and BIOT-BTCS

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

Please find the documents titled 'Explanation of Revision of the Major' and and 'Proposed Changes to BIOL BS BIOT and BTCS'. The Department of Biology has performed a curriculum review and seeks to make the following updates to the Biology BS (BIOT-BIOT) - Biology Teaching Life Sciences – Grades 7-12. The revision also led to changes in the degree plan for Biology BS (BIOT-BTCS) - Biology Teaching Composite Sciences — Grades 7-12.

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 <i>or</i> 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							--
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.

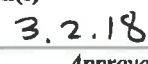
⁶ Courses that satisfy ACU’s University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and “not narrowly focus on those skills, techniques, and procedures specific to a particular occupation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

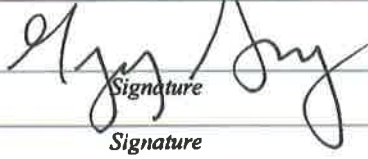
⁷ The UUAC approved the clarification that “general requirements for graduation” means the enumerated items in the “General Requirements for Bachelor’s Degrees” section of the catalog.

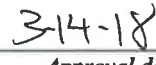
Revised 3-8-17

Curriculum/Catalog Changes Signature Page

Department/School Chair(s)	
	
Signature	Signature
	
Approval date	Approval date

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

Dean(s)	
	
Signature	Signature
	
Approval date	Approval date

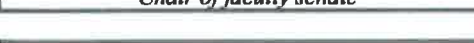
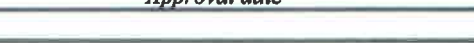
Teacher Education Council	
	
Chair's signature	Signature
	
Approval date	Approval date

General Education Council	
	
Chair's signature	Approval date
	
Approval date	Approval date

Undergraduate Academic Council	
	
Chair's signature	Approval date
	
Approval date	Approval date

Graduate Council	
	
Chair's signature	Approval date
	
Approval date	Approval date

Provost	
	
Signature	Approval date
	
Approval date	Approval date

Faculty	
	
Chair of faculty senate	Approval date
	
Approval date	Approval date

President	
	
Signature	Approval date
	
Approval date	Approval date

Explanation of Revision of the Major for Teacher Education

The Department of Biology has performed a curriculum review and seeks to make the following updates to the Biology BS BIOT (Biology Teaching Life Sciences) and BTCS (Biology Teaching Composite Sciences).

Summary of changes:

1. The most fundamental change to the program is a change to the courses that Biology majors take as sophomores.
 - a. In our former degree plan, sophomores must choose between enrollment in either Animal Biology or Plant Biology in the fall followed by Cell Biology in the spring.
 - b. In the proposed program, most students begin their sophomore year with Cell Biology in the fall followed by Genetics in the spring. Furthermore many of the TEKS address concepts in genetics, and the students must have a solid understanding of these topics.
 - c. The proposed plan allows sophomore students to focus on fundamental concepts in biology rather than choosing a specialization in one group of organisms. In the junior and senior years, biology majors will have several courses to choose from that are more narrowly focused on specific groups of organisms.
2. Biology majors will still be required to study the diversity of organisms. Students must choose one (or more) courses from a menu of 400-level courses that require a term paper reviewing a specific aspect of organismal diversity from an evolutionary context. These courses are designed to provide students with valuable writing experience and an opportunity to apply knowledge of biological diversity to address important questions.
3. BIOL 492/495 Physiology has been removed as a required course. The reason this course was originally on both tracks is because at the time of the last revision of this track, physiology lab was the only inquiry-based lab in our department. The teacher education students needed to experience inquiry-based labs. This is now remedied by BIOL 114 and BIOL 115 labs in the freshman year all being inquiry-based and already required. Not requiring this course should give them a little bit more flexibility in the upper-level course that they can fit into their schedule the fall of their senior year while they are taking the required EDUC 432/EDUC 412.
4. BIOL 353/354 General Microbiology was previously required for both certifications. This is not a majors class and is not appropriate for someone earning a B.S. in Biology. If a student has been successful enough to earn a C or better in BIOL 112-115 (General Biology I and II), they should have no problems in BIOL 355/357 Microbiology. Half of this lab is inquiry-based as well.
5. MATH 131 Calculus for Application is also added as a an additional option to fulfill the math requirement.

High School Teacher Certification - Life Science, BS (BIOT-BIOT)

BS: High School Teacher Certification

University Requirements

Please see the University Requirements section of this catalog.

Major Requirements

Biology

BIOL 112 - General Biology I Credit Hours: 3 *

BIOL 114 - General Biology I Laboratory Credit Hours: 1

BIOL 113 - General Biology II Credit Hours: 3

BIOL 115 - General Biology II Laboratory Credit Hours: 1

~~BIOL 221 - Animal Biology Credit Hours: 3~~

~~BIOL 223 - Animal Biology Laboratory Credit Hours: 1~~

or

~~BIOL 222 - Plant Biology Credit Hours: 3~~

~~BIOL 224 - Plant Biology Laboratory Credit Hours: 1~~

BIOL 312 - Cell Biology Credit Hours: 3

BIOL 355 - Microbiology Lectures: 3

BIOL 357 - Microbiology Laboratory Credit Hours: 1

~~BIOL 353 - General Microbiology Credit Hours: 3~~

~~BIOL 354 - General Microbiology Lab Credit Hours: 1~~

BIOL 362 - Ecology Credit Hours: 3

BIOL 364 - Ecology Laboratory Credit Hours: 1

BIOL 401 - Secondary Science Teaching Methods Credit Hours: 3

~~BIOL 492 - Physiology Credit Hours: 3~~

~~BIOL 495 - Physiology Laboratory Credit Hours: 1~~

BIOL 497 - Seminar in Biology Credit Hours: 3

Choose 4 hours from: BIOL 380, 481, 486, 487

Choose 4 hours not previously taken from: BIOA or BIOL 300-399 ~~Additional Advanced Selection from BIOA or BIOL Credit Hours: 3~~

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

Total: 33 Credit Hours

Supplement for Major

Biology Teaching Life Sciences - Grades ~~8~~7-12

CHEM 133 - General Chemistry I Credit Hours: 3 *

CHEM 131 - General Chemistry Laboratory I Credit Hours: 1

CHEM 134 - General Chemistry II Credit Hours: 3
CHEM 132 - General Chemistry Laboratory I Credit Hours: 1

MATH 124 - Precalculus II Credit Hours: 3 *

or

MATH 131 - Calculus for Applications Credit Hours: 3*

or

MATH 185 - Calculus I Credit Hours: 3 *

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

Total: 5 Credit Hours

Professional Education Requirements

EDUC 211 - Educational Foundations and Multicultural Perspectives Credit Hours: 3 *

EDUC 221 - Educational Psychology Credit Hours: 3 *

EDUC 412 - Secondary Curriculum and Media Credit Hours: 3 (capstone course)

EDUC 432 - Secondary Management and Methods Credit Hours: 3 (writing-intensive and capstone course)

EDUC 476 - Effective Teaching Strategies for English Language Learners Credit Hours: 3

EDUC 490 - Clinical Teaching Credit Hours: 6 (capstone course)

READ 322 - Reading in Secondary Content Areas Credit Hours: 3

SPED 371 - Teaching Students with Special Needs Credit Hours: 3

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

Total: 21 Credit Hours

Electives

Minimum - 13 Credit Hours

Total Major Hours: 72

Criteria for Admission to Teacher Education

In accordance with Texas state law, students must meet the admission criteria.

Other Graduation Requirements

Minimum grade for majors courses: C

Minimum GPA for graduation: 2.75

Minimum advanced hours: 33

Minimum total hours: 128

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

High School Teacher Certification - Composite Sciences, BS (BIOT-BTCS)

BS: High School Teacher Certification

University Requirements

Please see the University Requirements section of this catalog.

Major Requirements

Biology

BIOL 112 - General Biology I Credit Hours: 3 *

BIOL 114 - General Biology I Laboratory Credit Hours: 1

BIOL 113 - General Biology II Credit Hours: 3

BIOL 115 - General Biology II Laboratory Credit Hours: 1

~~BIOL 221 - Animal Biology Credit Hours: 3~~

~~BIOL 223 - Animal Biology Laboratory Credit Hours: 1~~

or

~~BIOL 222 - Plant Biology Credit Hours: 3~~

~~BIOL 224 - Plant Biology Laboratory Credit Hours: 1~~

BIOL 312 - Cell Biology Credit Hours: 3

BIOL 351 - Genetics Credit Hours: 3

BIOL 355 - Microbiology Lectures: 3

BIOL 357 - Microbiology Laboratory Credit Hours: 1

~~BIOL 353 - General Microbiology Credit Hours: 3~~

~~BIOL 354 - General Microbiology Lab Credit Hours: 1~~

BIOL 362 - Ecology Credit Hours: 3

BIOL 364 - Ecology Laboratory Credit Hours: 1

BIOL 401 - Secondary Science Teaching Methods Credit Hours: 3

~~BIOL 492 - Physiology Credit Hours: 3~~

~~BIOL 495 - Physiology Laboratory Credit Hours: 1~~

BIOL 497 - Seminar in Biology Credit Hours: 3

Choose 4 hours from: BIOL 380, 481, 486, 487

Choose 4 hours not previously taken from: BIOA or BIOL 300-399 ~~Additional Advanced Selection from BIOA or BIOL Credit Hours: 3~~

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

Total: 33 Credit Hours

Supplement for Major

Biology Teaching Composite Sciences - Grades 78-12

CHEM 133 - General Chemistry I Credit Hours: 3 *

CHEM 131 - General Chemistry Laboratory I Credit Hours: 1
CHEM 134 - General Chemistry II Credit Hours: 3
CHEM 132 - General Chemistry Laboratory I Credit Hours: 1
CHEM 223 - Organic Chemistry I Credit Hours: 3
CHEM 221 - Organic Chemistry Laboratory I Credit Hours: 1

PHYS 110 - General Physics I Credit Hours: 3
PHYS 111 - General Physics I Laboratory Credit Hours: 1
or
PHYS 220 - Engineering Physics I Credit Hours: 3
PHYS 221 - Engineering Physics I Laboratory Credit Hours: 1

PHYS 112 - General Physics II Credit Hours: 3
PHYS 113 - General Physics II Laboratory Credit Hours: 1
or
PHYS 222 - Engineering Physics II Credit Hours: 3
PHYS 223 - Engineering Physics II Laboratory Credit Hours: 1

MATH 124 - Precalculus II Credit Hours: 3 *
or
Math 131 – Calculus for Applications Credit Hours: 3*
or
MATH 185 - Calculus I Credit Hours: 3 *

*Hours may also fulfill university requirements and are not included in total major hours
Total: 17 Credit Hours

Professional Education Requirements

EDUC 211 - Educational Foundations and Multicultural Perspectives Credit Hours: 3 *
EDUC 221 - Educational Psychology Credit Hours: 3 *
EDUC 412 - Secondary Curriculum and Media Credit Hours: 3 (capstone course)
EDUC 432 - Secondary Management and Methods Credit Hours: 3 (writing-intensive and capstone course)
EDUC 476 - Effective Teaching Strategies for English Language Learners Credit Hours: 3
EDUC 490 - Clinical Teaching Credit Hours: 6 (capstone course)
READ 322 - Reading in Secondary Content Areas Credit Hours: 3
SPED 371 - Teaching Students with Special Needs Credit Hours: 3

*Hours may also fulfill university requirements and are not included in total major hours
Total: 21 Credit Hours

Electives

Minimum - 1 Credit Hours

Total Major Hours: 72

Criteria for Admission to Teacher Education

In accordance with Texas state law, students must meet the admission criteria.

Other Graduation Requirements

Minimum grade for majors courses: C

Minimum GPA for graduation: 2.75

Minimum advanced hours: 33

Minimum total hours: 128

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

BS: Life Science for Certification (Grades 7-12) Track

For Students Entering Fall 2018

This is a sample schedule to illustrate how long it will take to complete this degree plan. Additional semesters may be necessary if you are required to complete courses listed in the right-hand column or if you repeat courses. Consult with your academic advisor before changing the sequence of courses. Some courses are not offered every semester and **some courses have prerequisites**. Check the course description in the current catalog for details. Failure to complete courses in the recommended sequence may delay graduation. Each block represents 3 hours unless otherwise noted.

FR Fall 17 hrs	† BIBL 101 Life and Teachings of Jesus	† ENGL 111 Composition & Rhetoric	BIOL 112/114 General Biology I and Lab 4 hrs	CHEM 131/133 General Chemistry I and Lab 4 hrs	† CORE 110 Cornerstone		Required if condition of Admission:
FR Spring 17 hrs	† BIBL 102 Early Christians: Life, Literature & Community	† ENGL 112 Composition & Literature	BIOL 113/115 General Biology II and Lab 4 hrs	CHEM 132/134 General Chemistry II and Lab 4 hrs			
Summer 6 hrs	@ COMM 211 Speech and Rhetoric	@ EDUC 211 [CULTURAL AWARENESS]					
SO Fall 15 hrs	FREE ELECTIVE	• ENGL LITERATURE	BIOL 312 Cell Biology or BIOL 351 Genetics	ELECTIVE	MATH 124, MATH 131, or MATH 185		May be required based on ACT or SAT scores: MATH: MATW 019 MATW 120/020 MATW 130/030 ENGLISH: ENGL 003/004 ENGL 106/006 ENGL 107/007
SO Spring 16 hrs	• BIBL 211 Message of the Old Testament	HISTORICAL LITERACY	BIOL 312 Cell Biology or BIOL 351 Genetics	PEAC 100 Lifetime Wellness or PEAC Activity 1 hr	ELECTIVE	EDUC 221 [SOCIAL SCIENCE]	
JR Fall 17 hrs	ADVANCED BIBLE	BIOL 362/364 Ecology and Lab 4 hrs	BIOL 355/357 General Microbiology and Lab 4 hrs	READ 322 Reading in Secondary Content Areas	SPED 371 Special Education		
JR Spring 17 hrs	ADVANCED BIBLE	BIOL 401 Secondary Science Teaching Methods	* BIOL DIVERSITY 4 hrs	EDUC 476 Effective Strategies for English Language Learners	ELECTIVE	PEAC Activity 1hr	
SR Fall 17 hrs	BIOL/BIOA Selection 4 hrs	BIOL 497 Biology Seminar	EDUC 432 Secondary Management Methods	EDUC 412 Secondary Curriculum and Media	UNIVERSITY REQUIREMENT SELECTION	ELECTIVE 1 hr	
SR Spring 6 hrs	EDUC 490 Secondary Student Teaching 6 hrs						
							Total Hours = 128

Symbol Key: † Freshman Requirement. @ Course typically available in a summer term.

• This course or its equivalent is offered at one of ACU's semester-long Study Abroad sites. Those planning to study abroad should save these courses. See www.acu.edu/study-abroad for updated courses.

Please confer with your advisor or the catalog for additional information. Several courses are available during the summer on campus and online, please talk to your advisor regarding summer options.

* BIOL DIVERSITY choices include: BIOL 380, 481, 486, 487.

BS: Life Science for Certification (Grades 7-12) Track

For Students Entering Fall 2018

This is a sample schedule to illustrate how long it will take to complete this degree plan. Additional semesters may be necessary if you are required to complete courses listed in the right-hand column or if you repeat courses. Consult with your academic advisor before changing the sequence of courses. Some courses are not offered every semester and **some courses have prerequisites**. Check the course description in the current catalog for details. Failure to complete courses in the recommended sequence may delay graduation. Each block represents 3 hours unless otherwise noted.

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FR Spring 17 hrs	† BIBL 102 Early Christians: Life, Literature & Community	† ENGL 112 Composition & Literature	BIOL 113/115 General Biology II and Lab 4 hrs	CHEM 132/134 General Chemistry II and Lab 4 hrs	UNIVERSITY REQUIREMENT SELECTION		
Summer 6 hrs	@ COMM 211 Speech and Rhetoric	HISTORICAL LITERACY					
SO Fall 15 hrs	• BIBL 211 Message of the Old Testament	CHEM 223/221 Organic Chemistry I and Lab 4 hrs	BIOL 312 Cell Biology or BIOL 351 Genetics	@ EDUC 211 [CULTURAL AWARENESS]	PEAC 100 Lifetime Wellness or PEAC Activity 1 hr	ELECTIVE 1 hr	May be required based on ACT or SAT scores: MATH: MATW 019 MATW 120/020 MATW 130/030 ENGLISH: ENGL 003/004 ENGL 106/006 ENGL 107/007
SO Spring 17 hrs	BIOL 362/364 Ecology and Lab 4 hrs	• ENGL LITERATURE	BIOL 312 Cell Biology or BIOL 351 Genetics	PEAC Activity 1hr	MATH 124, MATH 131, or MATH 185	EDUC 221 [SOCIAL SCIENCE]	
JR Fall 17 hrs	PHYS 110/111 General Physics I and Lab 4 hrs	FREE ELECTIVE	BIOL 355/357 General Microbiology and Lab 4 hrs	READ 322 Reading in Secondary Content Areas	SPED 371 Special Education		
JR Spring 17 hrs	PHYS 112/113 General Physics II and Lab 4 hrs	ADVANCED BIBLE	BIOL 401 Secondary Science Teaching Methods	EDUC 476 Effective Strategies for English Language Learners	* BIOL DIVERSITY 4 hrs		
SR Fall 16 hrs	BIOL/BIOA Selection 4 hrs	BIOL 497 Biology Seminar	EDUC 432 Secondary Management Methods	EDUC 412 Secondary Curriculum and Media	ADVANCED BIBLE		
SR Spring 6 hrs	EDUC 490 Secondary Student Teaching 6 hrs						Total Hours = 128

Symbol Key: † Freshman Requirement. @ Course typically available in a summer term.

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