



CATALOG YEAR 2014-2015
 (Please use separate form for each add/change)

COLLEGE/SCHOOL : College of Arts and Sciences
 Current Catalog Page(s) Affected:

Program: Add: ___ Change: X Attach new/changed Program of Study description and 4-year plan. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

Degree Requirements for the BS with a Major in Biology

1. **Hours Required:** A minimum of **124** semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "Requirements for Graduation" section of this catalog.
2. **University Core Curriculum:** **42** SCH as outlined in the suggested plans and as specified in the "Requirements for Graduation".
3. **MATH:** **4** SCH designated as MATH 1342 ~~and MATH 2413~~ and 1 SCH surplus credit from core.
4. **Major:** **48** SCH and the **7** SCH of BIOL 1306/1106 and 1311 taken as part of the core. Additional lower-level requirements: BIOL 1111, 1413 and 2421. Advanced requirements include BIOL 3406, 3410, 3412, 3413, 4170 and 22 SCH selected from BIOL 3403, 3404, 3407, 3414, 3416, **3425**, 3451, 4170, 4402, 4404, 4408, 4409, 4420, 4425, **4430**, 4440, 4441, **4460**, 4173-4473, 4371-4471, ENSC 3310, 3401, **4170**, 4173-4473, **4410** or 4430. BIOL 4173-4473 may be repeated for up to 8 SCH of credit within the degree program.
5. **Supporting Sciences Curriculum:** **24** SCH including CHEM 1311, **1111**, **1312**, **1112**, 2423, 2425, and PHYS 1301, 1101, 1302 and 1102.
6. **Electives:** **6** SCH at the 3000-4000 level.

Justification: Changes to match new core. Calculus I was dropped from degree program because calculus I is no longer required for admission to Texas medical schools. Some biology courses not listed in the advanced electives were included. There was some rearranging of courses in the degree plan. Degree was reduced from 127 SCH to 124 SCH.

Approvals:	Signature	Date
Chair Department Curriculum Committee	Neal McReynolds <small>Digitally signed by Neal McReynolds DN: cn=Neal McReynolds, o=Texas A&M International University, ou=Department of Biology and Chemistry, email=nmc Reynolds@tamiu.edu, c=US Date: 2013.12.16.10:07:18 -06'00'</small>	_____
Chair Department	Daniel Mott <small>Digitally signed by Daniel Mott DN: cn=Daniel Mott, o=Texas A.M. International University, ou=Biology and Chemistry, email=dmott@tamiu.edu, c=US Date: 2014.02.10 14:42:23 -06'00'</small>	_____
Chair College Curriculum Committee	Lynne L. Manganaro <small>Digitally signed by Lynne L. Manganaro DN: cn=Lynne L. Manganaro, o, ou, email=lynne.manganaro@tamiu.edu, c=US Date: 2014.02.10 14:45:55 -06'00'</small>	_____
Dean	Frances Bernat <small>Digitally signed by Frances Bernat DN: cn=Frances Bernat, o=COAS, ou=Public Affairs and Social Research, email=frances.bernat@tamiu.edu, c=US Date: 2014.02.10 16:22:34 -06'00'</small>	_____



 Provost's Signature
 Date _____

**BACHELOR OF SCIENCE
MAJOR IN BIOLOGY**

Following is **one** suggested four-year degree plan. Students are encouraged to see their advisor each semester for help with program decisions and enrollment; responsible for reviewing the **Program of Study Requirements**; and must meet **foreign language** and **writing intensive course** requirements for graduation. See Academic Regulations-Undergraduate online.

*See *Appendix A Core Curriculum and Optional Course Information*.

FALL	HOURS	SPRING	HOURS
FRESHMAN YEAR		FRESHMAN YEAR	
BIOL 1306 Principles of Biology I	3	BIOL 1311 Principles of Biology II	3
BIOL 1106 Principles of Biology I Lab	1	BIOL 1111 Principles of Biology II Lab	1
CHEM 1311 General Chemistry I	3	CHEM 1312 General Chemistry II	3
CHEM 1111 General Chemistry I Lab	1	CHEM 1112 General Chemistry II Lab	1
ENGL 1301 English Composition I	3	ENGL 1302 English Composition II	3
PSCI 2305 American National Govt	3	MATH 2412 Pre-Calculus	4
UNIV 1101 Learning in a Global Context I	<u>1</u>	UNIV 1102 Learning in a Global Context II	<u>1</u>
Total	15		16
SOPHOMORE YEAR		SOPHOMORE YEAR	
BIOL 1413 Principles of Biology III	4	BIOL 2421 Microbiology	4
CHEM 2423 Organic Chemistry I	4	CHEM 2425 Organic Chemistry II	4
MATH 1342 Introductory Statistics	3	PSCI 2306 American State Govt	3
ENGL Language, Philosophy, Culture*	3	ENGL 2311 Technical Writing	3
HIST 1301 The U.S. to 1877	<u>3</u>	HIST 1302 The U.S. Since 1877	<u>3</u>
MATH 2413 Calculus I	4	Activity/Wellness*	1
Total	17		17
JUNIOR YEAR		JUNIOR YEAR	
BIOL 3406 Evolution	4	BIOL 3410 Ecology	4
BIOL 3413 Intro to Genetics	4	BIOL 3412 Cell Biology	4
PHYS 1301 General Physics I	3	PHYS 1302 General Physics II	3
PHYS 1101 Physics I Lab	1	PHYS 1102 Physics II Lab	1
Creative Arts*	<u>3</u>	Soc/Behavioral Science*	<u>3</u>
Total	15		15
SENIOR YEAR		SENIOR YEAR	
BIOL Restricted Biology Elec ¹	4	BIOL Restricted Biology Elec ¹	4
BIOL Restricted Biology Elec ¹	4	BIOL 4170 Biology Seminar	1
BIOL Restricted Biology Elec ¹	4	BIOL Restricted Biology Elec ¹	4
Advanced Elective	<u>3</u>	BIOL Restricted Biology Elec ¹	2
Total	15	Advanced Elective	<u>3</u>
		Total	14

TOTAL SEMESTER CREDIT HOURS: 124

¹Restricted Advanced Biology electives: select 22 SCH from BIOL 3403, 3404, 3407, 3414, 3416, 3451, 4170, 4402, 4404, 4408, 4409, 4420, 4425, 4440, 4441, 4173-4473, 4371-4471; ENSC 3310, 3401, 4170, 4173-4473, 4310 or 4430. BIOL 4173-4473 may be repeated for up to 8 SCH of credit within the degree program.

*Actual degree plans may vary depending on availability of courses in a given semester.
Some courses may require prerequisites not listed.*