

















FORENSIC BIOLOGY, EMPHASIS


 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

Course Requirements


Code	Title	Credit Hours
Core Curriculum		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
	Critical Thinking Course (PSY 201 recommended for pre-professional)	3
	Critical Thinking Course	3
<i>Core 2</i>		
ENG 101 	Beginning Composition	3
ENG 201 	Advanced Composition	3
CMM 103 	Fund Speech-Communication	3
Select one of the following math requirements:		
MTH 140 	Applied Calculus	
MTH 229 	Calculus/Analytic Geom I (CT)	
BSC 120  & BSC 120L 	Principles of Biology I and Principles of Biology I Lab (Core II Physical/Natural Science)	4
	Core II Humanities	3
	Core II Social Science	3
	Core II Fine Arts	3
<i>Additional University Requirements</i>		
	Writing Intensive	3
	Writing Intensive	3
	Multicultural or International	3
BSC 491 	Capstone Experience (C) ¹	2
Major-Specific		
BSC 121  & BSC 121L 	Principles of Biology and Prin of Biology II Lab	3
CHM 211 	Principles of Chemistry I	3
CHM 217 	Principles of Chem Lab I	2
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
PHY 201 	College Physics I	3

PHY 202  General Physics I Laboratory 1



Select four of the following 300-level BSC core courses: 15-16

BSC 302	Principles of Microbiology
BSC 322	Principles Cell Biology
BSC 324	Principles of Genetics
BSC 332 & BSC 332L	Principles of Human Anatomy and Prin of Human Anatomy Lab
BSC 334 & BSC 334L	Principles of Human Physiology and Prin of Human Physiology Lab


Forensic Biology Emphasis



FSC 224  Intro to Forensic Science 4

Select one of the following: 3

CJ 200 	Intro to Criminal Justice
CJ 211 	Intro to Law Enforcement

Select one of the following: 3

CJ 314	Crime Scene Investigation
CJ 322	Criminal Law
CJ 323	Criminal Procedure
CJ 406 	Race, Ethnicity, Class & Crime
CJ 422	Law of Evidence

CHM 355	Organic Chemistry I
CHM 356	Organic Chemistry II
CHM 361	Intro Organic Chm Lab
CHM 365	Introductory Biochemistry
PHY 203  & PHY 204 	College Physics II and General Physics 2 Laboratory

Area of Emphasis Elective

Select ten hours of the following (3-4 courses): 10-12

BSC 304	Microbiology Lab
BSC 404	Cellular Physiology
BSC 435	Histology and Microtech
BSC 436	Vertebrate Embryology
BSC 417	Biostatistics
BSC 422	Animal Physiology
BSC 423	Comp Vertebrate Anatomy
BSC 424	Animal Parasitology
BSC 426	Medical Entomology
BSC 428	Neuroscience
BSC 443	Microbial Genetics
BSC 448	Introductory Immunology
BSC 450	Molecular Biology
BSC 451	Molecular Medicine
BSC 454	Princ Adv Techn Mol Biol
BSC 456	Genes and Development
BSC 463	Bioethics

BSC Technical Elective: Select one 300- or 400-level BSC or closely related courses for technical electives. The courses must be approved by the department chair. 3

Free Elective 3


¹ **Capstone Experience:** It is the responsibility of each student to consult his/her advisor regarding details of meeting the capstone requirement. The capstone may be a traditional independent study

research project under the supervision of a faculty member selected by the student, participation in a classroom-based capstone course, or the development and implementation of an internship, co-op, or community-based project. Students must have completed a minimum of 16 hours of BSC coursework before they will be permitted to register for Capstone.

Major Information

- Students must pass BSC 120 Principles of Biology I and BSC 120L Principles of Biology I Lab and earn a grade of C or better in BSC 121 Principles of Biology and BSC 121L Prin of Biology II Lab, CHM 211 Principles of Chemistry I and CHM 212 Principles Chemistry II before they can enroll in any upper-level BSC course except BSC 227 Human Anatomy, BSC 227L Human Anatomy Lab, BSC 228 Human Physiology, BSC 228L Human Physiology Lab and BSC 250 Microbiol & Human Disease, BSC 250L Microbio and Human Disease Lab.
- BSC 104 Introduction to Biology, BSC 104L Introduction to Biology Lab, BSC 105 Human Biology, BSC 105L Human Biology Lab, BSC 227 Human Anatomy, BSC 227L Human Anatomy Lab, BSC 228 Human Physiology, BSC 228L Human Physiology Lab, and BSC 250 Microbiol & Human Disease, BSC 250L Microbio and Human Disease Lab do not count towards a BSC major and cannot substitute for any required or elective BSC courses.
- A minimum of 15 hours of 400-level credit is required.
- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- In addition to the Core General Education requirements, the College of Science requires 3-5 hours of Calculus, and 40 hours of upper-level credit.
- Students who choose CHM 355, 356, and 361 will have the necessary coursework for a Chemical Sciences minor.
- Coursework listed as “elective” may vary for each student. Students are encouraged to use elective hours toward a 2nd minor or toward prerequisites.
- Students are strongly encouraged to select courses that meet two or more core or college requirements. For example, a writing intensive literature course could satisfy the Core II Humanities requirement as well as the university writing intensive requirement.
- Course offerings and attributes are subject to change. Please consult each semester's schedule of courses for availability and attributes.
- MTH 140 Applied Calculus requires an ACT Mathematics score of 24 or higher. Students with an ACT Mathematics score lower than 24 will be placed in the appropriate prerequisite mathematics courses.
- All biological science majors are required to complete a minimum of 40 hours of credits in the the Department of Biological Sciences. Biochemistry courses count toward those 40 hours in this Area of Emphasis.









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


Semester Plan

The Department of Biological Sciences is committed to teaching students about the science of life from molecular to global scales. A degree in Biological Sciences prepares students for careers and graduate study in diverse fields such as human and veterinary medicine, dentistry, biomedical and pharmaceutical research, environmental consulting, wildlife ecology, and K12 or higher education. Alumni of the Department work as health professionals, teach at all educational levels, serve as environmental researchers and regulators, conduct biomedical and pharmaceutical research, and hold positions in state and federal agencies.



First Year

First Semester		Credit Hours
BSC 120  	Principles of Biology I & BSC 120L 	4
MTH 140  or MTH 229 	Applied Calculus or Calculus/Analytic Geom I (CT)	3-5
CHM 211 	Principles of Chemistry I	3
CHM 217 	Principles of Chem Lab I	2
ENG 101 	Beginning Composition	3
UNI 100	Freshman First Class	1
Credit Hours		16-18


Second Semester

BSC 121  	Principles of Biology & BSC 121L 	4
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
FYS 100	First Yr Sem Critical Thinking	3
Core II Fine Arts		3
Credit Hours		15


Second Year








First Semester		Credit Hours
BSC Core Course		3-4
CHM 355	Organic Chemistry I	3
ENG 201  	Advanced Composition	3
Core II Social Science (PSY 201 or SOC 200 Recommended)		3
Free Elective (MTH 122 recommended for PHY Pre-req)		3
Credit Hours		15-16

Second Semester

BSC Core Course		3-4
CHM 356	Organic Chemistry II	3
CHM 361	Intro Organic Chm Lab	3
FSC 224 	Intro to Forensic Science	4
Core I Critical Thinking		3
Credit Hours		16-17

Third Year

First Semester		Credit Hours
BSC Core Course		3-4
CHM 365	Introductory Biochemistry	3
CMM 103 	Fund Speech-Communication	3

PHY 201	 College Physics I	3
PHY 202	 General Physics I Laboratory	1
AOE Elective (BSC 417 recommended)		3-4
Credit Hours		16-18
Second Semester		
BSC Core Course		3-4
CJ 200	 Intro to Criminal Justice	3
or CJ 211	 or Intro to Law Enforcement	
PHY 203	 College Physics II	3
PHY 204	 General Physics 2 Laboratory	1
Core II Humanities		3
Credit Hours		13-14
Fourth Year		
First Semester		
AOE Elective		3-4
AOE Elective		3-4
Core I: Critical Thinking		3
Multicultural or International		3
Writing Intensive		3
Credit Hours		15-17
Second Semester		
BSC 491	 Capstone Experience (C)	2
BSC Technical Elective		3
CJ Elective		3
Writing Intensive		3
AOE Elective		3-4
Credit Hours		14-15
Total Credit Hours		120-130