

**BIOLOGICAL SCIENCES BASIC PROGRAM, SUPPORTING COURSES, & CORE**

**ECOLOGY & EVOLUTION ECEV (0404B)**

A minimum of 120 credits earned and a 2.0 cumulative GPA is needed to meet University graduation requirements. Major courses (Basic, Supporting, and Advanced) require a C- or better in each and a 2.0 average GPA.

**1. BASIC PROGRAM 15 - 16 credits**

Sem	Gr	Cr	
		4	BSCI105 Principles of Biology I *
		4	BSCI106 Principles of Biology II *
		3	BSCI207 Principles of Biology III *
		4	BSCI222 Principles of Genetics *
		1	Freshmen seminar UNIV100, GEMS100, HONR100, HLFC100, HEIP100 or ARHU105

\* These are required benchmark courses, see:

<http://bsci.umd.edu/benchmarks>

**2. SUPPORTING COURSES 32 credits**

Sem	Gr	Cr	
		4	MATH130 OR MATH140 Calculus I *
		4	MATH131 OR MATH141 Calculus II *
		3	CHEM131 General Chemistry I *
		1	CHEM132 General Chemistry I lab *
		3	CHEM231 Organic Chemistry I *
		1	CHEM232 Organic Chemistry I lab *
		3	CHEM241 Organic Chemistry II *
		1	CHEM242 Organic Chemistry II lab *
		2	CHEM271 Gen Chem & Energetics *
		2	CHEM272 Bioanalytical Chem lab *
		4	PHYS131 OR PHYS141 Physics I
		4	PHYS132 OR PHYS142 Physics II

**3. CORE General Education Requirements 27 – 33 credits**

Fundamental studies math and CORE Math & Science are satisfied by the BSCI major requirements

Sem	Gr	Course	Summary of credits	
Fundamental Studies			Required	Completed
		ENGL101 *		
		Professional writing course (ENGL39X)		
Distributive Studies				
		HL Literature		
		HA Arts		
		HO / HA / HL / IE Humanities Other / Interdisciplinary & Emerging Issues		
		SH Social / Political History		
		SB 1 <sup>st</sup> Behavioral & Social Science		
		SB 2 <sup>nd</sup> SB / IE		
Advanced Studies				
		6 credits, 2 courses, 300 – 400 level, outside of major. Must be taken after 60 credits. 3 credits can be satisfied by approved Capstone (taken after 86 credits) or Honors Thesis		
		<b>Cultural Diversity</b> may be a course that meets Distributive or Advanced Studies.		
			Basic Program (15 – 16 cr.)	_____
			Supporting Courses (32 cr.)	_____
			CORE (27 – 33 cr.)	_____
			Advanced Program (27 cr.)	_____
			Elective	_____
			Subtotal	_____
			Duplicate credits Subtract from subtotal	_____
			Total Credits (120 cr.)	_____

**4. Options for Advanced Program Specialization Areas** see reverse side for Advanced Program requirements

Cell Biology & Genetics	General Biology	Physiology & Neurobiology
Ecology & Evolution	Microbiology	Individualized Studies

**NOTES:**

Student name \_\_\_\_\_ UID \_\_\_\_\_

Advisor's signature \_\_\_\_\_ Date of audit \_\_\_\_\_

NOTE: The curriculum in Biological Sciences changes as faculty review and improve the program. The curriculum descriptions provided here are the latest versions. Your curriculum may look slightly different depending on when you declared the Biological Sciences major. Your academic advisor can provide you with the most accurate information on what curriculum you are following. Any questions can be referred to the Undergraduate Academic Programs Office, 301-405-6892.

updated 7/2015

**BIOLOGICAL SCIENCES ADVANCED PROGRAM**

Grade of C- or better required in each course

**ECOLOGY & EVOLUTION 0404B**

27 minimum required credits

**1. Required courses 10 credits**

Sem	Gr	Cr	
		4	BSCI361 Principles of Ecology
		3	BSCI370 Principles of Evolution

Sem	Gr	Cr	Statistics Course: one from below
		3	BIOM301 Introduction to Biometrics <b>OR</b> STAT400 Applied Probability & Statistics <b>OR</b> STAT464 Introduction to Biostatistics

**2. ECEV Area Courses minimum 14 credits**

- At least two courses designated as **Lab** must be taken
- At least two 400-level courses must be taken
- Lab courses offered as separate credit from lecture must be taken with lecture as co- or pre-requisite

Sem	Gr	Cr	
		4	BSCI330 Cell Biol. & Physiology w/Lab
		3	BSCI334 Mammalogy
		1	BSCI335 Mammalogy <b>Lab</b>
		4	BSCI337 Insect Biology w/Lab
		3	BSCI338B Marine Biology
		1	BSCI338Q Conservation Biology <b>Lab</b>
		3	BSCI338R Darwinian Medicine
		3	BSCI360 Animal Behavior
		3	BSCI363 Biology Conservation & Extinct.
		3	BSCI373 Natural History Chesapeake Bay
		3	BSCI392 Biology of Extinct Animals
		1	BSCI393 Biology of Extinct Animals <b>Lab</b>
		3	BSCI394 Vertebrate Form and Function
		3	BSCI410 Molecular Genetics
		3	BSCI430 Developmental Biology
		3	BSCI460 Plant Ecology
		2	BSCI461 Plant Ecology <b>Lab</b>
		3	BSCI462 Population Ecology
		3	BSCI464 Microbial Ecology

Sem	Gr	Cr	
		3	BSCI465 Behavioral Ecology
		4	BSCI467 Freshwater Biology w/Lab
		4	BSCI470 Evolutionary Mechanisms
		3	BSCI471 Molecular Evolution
		3	BSCI473 Marine Ecology
		4	BSCI474 Mathematical Biology w/Lab
		4	BSCI480 Arthropod Form & Function w/Lab
		4	BSCI481 Insect Diversity & Classification w/Lab
		4	BSCI483 Med. Vet. Entomology w/Lab
		3	BSCI493 Medicinal and Poisonous Plants
		3	BSCI494 Animal-Plant Interactions
		var.	<b>Special Topics Courses<sup>1</sup></b>
			BSCI328 Special Topics ENTM Depart.
			BSCI338 Special Topics BIOL Depart.
			BSCI339 Selected Topics BIOL Depart.
			BSCI348 Special Topics CBMG Depart.
			<b>Departmental Honors Seminars<sup>2</sup></b>
		1	BSCI378H and BSCI398H

<sup>1</sup> Special Topics courses are allowed if specifically approved for ECEV. See Testudo for applicability of specific courses.  
<sup>2</sup> One credit of Honors seminar may be applied to major requirements. Additional Honors seminar credits count as electives.

Total ECEV Area credits \_\_\_\_\_

**3. Enrichment 3 credits** Enrichment Course: \_\_\_\_\_ Credits: \_\_\_\_\_ Semester: \_\_\_\_\_ Grade: \_\_\_\_\_

**Minimum 3 credits from any 300- or 400-level BSCI, CHEM, or BCHM course.**

Courses from other departments can be used with permission of advisor.

Courses listed in the Advanced Program above can be used if they are not used to satisfy any category above.

Courses counted as enrichment do not satisfy the 300-or 400-level laboratory requirement.

Independent study or research credits, including H versions, are acceptable up to a maximum of 3 credits overall in the Advanced Program.

**Total credits in Advanced Program:** \_\_\_\_\_