

BIOLOGICAL SCIENCES BASIC PROGRAM, SUPPORTING COURSES, & CORE

MICROBIOLOGY MICB (0404D)

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 st Behavioral & Social Science		
		SB 2 nd 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		
		Cultural Diversity 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

MICROBIOLOGY 0404D

27 minimum required credits

Advanced Program requirements apply to students matriculating **Fall 2011 or later**.

Students matriculating prior to Fall 2011 may use a previous Microbiology curriculum sheet as appropriate.

Contact your advisor if you have questions regarding the correct curriculum sheet for you to use.

1. Required courses 17 credits

Sem	Gr	Cr	
		4	BSCI283 Principles of Microbiology ¹
		4	BSCI412 Microbial Genetics w/ Lab
		3	BSCI443 Microbial Physiology
			Biochemistry
		3	BCHM461 Biochemistry I and
		3	BCHM462 Biochemistry II
			OR
		3	BCHM463 Biochemistry of Physiology and
		3	BCHM465 Biochemistry III

¹or BSCI223 with permission of Undergraduate Program Director
Students cannot get credit for both BSCI223 and BSCI283.

2. MICB Area courses 7 credits

- Must include a 300 or 400 level laboratory course.
- Lab courses offered as separate credit from lecture must be taken with lecture as co- or pre-requisite.

Sem	Gr	Cr		Sem	Gr	Cr	
		4	BSCI411 Bioinformatics and Integrated Genomics w/ Lab			3	BSCI437 General Virology
		3	BSCI417 Microbial Pathogenesis			3	BSCI348M Epidemiology of Microbial Pathogens
		3	BSCI422 Principles of Immunology			3	BSCI464 Microbial Ecology
		2	BSCI423 Immunology Lab				Special Topics Courses ² BSCI338, BSCI339 or BSCI348
		4	BSCI424 Pathogenic Microbiology w/ Lab			1	Departmental Honors Seminars ³ BSCI378H and BSCI398H

Total MICB Area credits _____

²Special Topics courses (BSCI338, BSCI339, or BSCI348) are allowed if specifically approved for upper-level courses in MICB. See Testudo for applicability of particular courses.

³One credit of Honors seminar may be applied to major requirements. Additional Honors seminar credits count as non-major electives.

3. Enrichment 3 credits

Enrichment Course: _____ Cr: _____ Sem: _____ 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: _____