

# Biological Sciences: Individualized Studies BIVS (0404F) effective August 2022

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	Course
		3	BSCI160 Ecology and Evolution *
		1	BSCI161 Ecology and Evolution Lab *
		3	BSCI170 Molecular and Cellular Biology *
		1	BSCI171 Molecular and Cellular Biology Lab *
		3	BSCI207 Principles of Biology III *
		4	BSCI222 Principles of Genetics *
		1	Freshmen seminar: UNIV100 <sup>1</sup> , HONR100, GEMS100, HLSC100, HACS100 <sup>2</sup> , HDCC105 <sup>2</sup> , HEIP143, HHUM105 <sup>3</sup> , BSCV181, IDEA101, BSGC100
<sup>1</sup> All Biological Sciences majors must take UNIV100 or another approved freshman seminar from the list above in their first semester. <sup>2</sup> Two credit course. <sup>3</sup> Three credit course. NOTE: Students who are enrolled in the Integrated Life Sciences Honors program will complete the following courses in lieu of the parenthetical course: HLSC207 (BSCI207), HLSC322 (BSCI222) and HLSC374 (BSCI374). * These are required benchmark courses, see: <a href="http://bsci.umd.edu/benchmarks">http://bsci.umd.edu/benchmarks</a>			

## 2. Supporting Courses 32 credits

Sem	Gr	Cr	Course
		4	MATH135 Discrete Mathematics *
		4	MATH136 Calculus * <b>OR</b>
		4	MATH140 Calculus I *
		4	MATH141 Calculus II * <b>OR</b>
		4	MATH140 Calculus I *
		4	MATH135 Discrete Mathematics *
		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. General Education Requirements (at least 27 credits) (For more information on General Education visit: [www.gened.umd.edu](http://www.gened.umd.edu).)

Fundamental Studies Math (MA), Analytic Reasoning (AR), Natural Sciences (NS) & Natural Sci. Lab (NL) are satisfied by major requirements.

Courses may double or triple count between Distributive Studies, I-Series, and Diversity.

Sem	Gr	Course
<b>Fundamental Studies</b>		
		Academic Writing (AW) (ENGL101)
		Professional Writing (PW)
		Oral Communication (OC)
<b>Distributive Studies</b>		
		History and Social Sciences (HS)
		History and Social Sciences (HS)
		Humanities (HU)
		Humanities (HU)
		Scholarship in Practice (SP)
		Scholarship in Practice (SP) outside major
<b>I-Series</b>		
		I-Series (IS)
		I-Series (IS)
<b>Diversity</b>		
		Understanding Plural Societies (UP)
		Understanding Plural Societies (UP) or Cultural Competence (CC) (1–3 credits)

Summary of credits	
Required	Completed
Basic Program (15–16)	_____
Supporting Courses (32)	_____
Gen. Ed. (27+)	_____
Advanced Program (27)	_____
Elective	_____
Subtotal	_____
Duplicate credits	_____
(Subtract from subtotal)	_____
<b>Total Credits</b>	_____

## 4. Advanced Program courses: Please see reverse page.

### 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 which curriculum you are under. Any questions can be referred to the Undergraduate Academic Programs Office, 301-405-6892.

*Updated 8/2022*

## Individualized Studies BIVS (0404F) Advanced Program

**27 credits minimum** ♦ At least two upper-level lab courses must be taken

**NOTE:** This specialization requires permission of the Assistant Dean, Undergraduate Academic Programs, 1322 Symons Hall. [jpresson@umd.edu](mailto:jpresson@umd.edu).

**BIVS requires the integration of biology topics with topics outside biology.**

**1. Required courses: 6 credits in biochemistry and/or quantitative coursework**

Sem	Gr	Cr	Course

**2. BIVS Area courses: 21 credits**

- Maximum of 4 credits at the 200-level
- At least 3 credits, but a maximum of 6 credits, from courses outside of BSCI
- Courses taken to satisfy Advanced Program must support BIVS topic
- At least two upper-level labs
- Lab courses offered as separate credit must be successfully completed with lecture as co- or pre-requisite
- Must include two credits for independent research paper related to BIVS topic, written under the direction of advisor

Sem	Gr	Cr	Course		Sem	Gr	Cr	Course
<b>Total BIVS Area credits: _____</b>								

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