

# BIOLOGICAL SCIENCES AT SHADY GROVE

## The Universities at Shady Grove

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<https://www.shadygrove.umd.edu/academics/degree-programs/bs-biological-sciences>

The Biological Sciences Program at the University of Maryland offers a degree program in Physiology and Neurobiology (PHNB) at the Universities at Shady Grove. The Biological Sciences Program at Shady Grove offers the Advanced Program courses normally taken in the junior and senior years.

All Biological Sciences majors complete a common sequence of introductory and supporting courses referred to as the Basic Program. For students matriculating at the Universities at Shady Grove most of these introductory and supporting courses are taken at a community college or at another four-year institution prior to admission to the Biological Sciences Program. Depending on space available, students who matriculated at College Park may transfer to the Shady Grove Program in their junior year, where they may complete the Advanced Program in Physiology and Neurobiology.

## Requirements

Course	Title	Credits
<b>General Education Program Requirements <sup>1</sup></b>		
Complete General Education		
<b>Basic Program in Biological Sciences <sup>1</sup></b>		
BSCI170 & BSCI171	Principles of Molecular & Cellular Biology and Principles of Molecular & Cellular Biology Laboratory	4
BSCI160 & BSCI161	Principles of Ecology and Evolution and Principles of Ecology and Evolution Lab	4
BSCI223	General Microbiology	4
BSCI222	Principles of Genetics	4
MATH130 or MATH140	Calculus I for the Life Sciences Calculus I	4
MATH131 or MATH141	Calculus II for Life Sciences Calculus II	4
CHEM131 & CHEM132	Chemistry I - Fundamentals of General Chemistry and General Chemistry I Laboratory	4
CHEM231 & CHEM232	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM241 & CHEM242	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM271 & CHEM272	General Chemistry and Energetics and General Bioanalytical Chemistry Laboratory <sup>2</sup>	4
<b>Courses taken at the Universities at Shady Grove</b>		
PHYS131 or PHYS331	Fundamentals of Physics for Life Sciences I Physics for Life Sciences I	4
PHYS132	Fundamentals of Physics for Life Sciences II	4

or PHYS332	Physics for Life Sciences II	
PHNB	Advanced Program in Physiology and Neurobiology	27
ELECT	Electives	22
Total Credits		97

- <sup>1</sup> Courses equivalent to be taken at an institution that offers lower level course work.
- <sup>2</sup> CHEM272 is not offered at most institutions. Students accepted into the UMCP Shady Grove Biological Sciences may substitute a General Chemistry II Lab for this course

## Advising

Advising is mandatory during each pre-registration period for all Biological Sciences majors. Advising for students interested in or enrolled in the Shady Grove Program is available from the Director. Call 301-738-6007 for an advising appointment.