BIOPHYSICS MINOR

Contact

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Minor Description

The Biophysics minor builds on the foundations of Physics I and Physics II to create a comprehensive understanding of how the laws of physics apply to organisms, explored from both the macroscopic and microscopic points of view.

With its organismal focus and relationship to modern technology, this minor is well-suited to complement majors in Chemistry, Biochemistry, Biology, Medical Biology, Neuroscience, and Marine Science, in addition to Pre-Medical, Pre-Dental, and Pre-Pharmacy programs of study.

Transfer Credit

See Undergraduate Admissions (https://catalog.une.edu/undergraduate/admissions/) for more information.

Admissions

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Financial Information

Tuition and fees for subsequent years may vary. Other expenses include books and housing. For more tuition and fee information, please consult this catalog's Financial Information (https://catalog.une.edu/undergraduate/financial-information-undergraduate-programs/) section.

Curricular Requirements

The Biophysics minor requires 18 hours of coursework.

Code	Title	Hours
Program Required Courses		
PHY 210	University Physics I [1]	4
PHY 211	University Physics II [1]	4
Select one of the following:		4
PHY 220	(Medical Physics)	
PHY 310	Biophysics: Structure & Motion	
PHY 410	(Topics in Physics)	
Six Credits of Program Specific Electives		6
Total Hours		**18**

[1] PHY 110 General Physics I w/Lab and PHY 111 General Physics II w/Lab may be accepted with program permission.

Program-Specific Electives

Code	Title	Hours
Program Required Courses [1]		
PHY 208	(Energy and Climate Change)	3
PHY 209	(Computational Physics)	3
PHY 220	(Medical Physics)	4
PHY 305	Revolutions of 20th Century Physics	3
PHY 306	(Math Methods of Modern Physics)	1
PHY 310	Biophysics: Structure & Motion	3
PHY 320	(Biomechanics)	3
PHY 410	(Topics in Physics)	3-4

[1] With permission, either MAR 368 Advanced Oceanography II: Chemical and Physical Oceanography (PHY/CHE, 3 credits) or CHE 370 Physical Chemistry I (4 credits) can be substituted for one elective course.

Please note: While some courses can fulfill both core and program requirements, the credits earned do not count twice towards the minimum total required credits for the degree.

Learning Outcomes

Upon completion of the minor in Biophysics, students will be able to:

- Describe basic physical, biophysical, and biomechanics concepts
- Demonstrate understanding of physical processes/instrumentation used to investigate biophysical and biomechanical phenomena
- Clearly communicate scientific information in both oral and written forms
- Work collaboratively in various team settings