

# BIOCHEMISTRY AND BIOPHYSICS PH.D.

## DOCTOR OF PHILOSOPHY - BIOCHEMISTRY AND BIOPHYSICS

Degree Specific Credits: 60

Required Cumulative GPA: 3.0

- The Biochemistry and Biophysics doctoral program provides a dynamic environment where students engage in cutting-edge research in close collaboration with faculty.
- Students will learn to apply the tools of physical biochemistry and structural biology to exciting problems through research projects with Biochemistry Program Faculty Members.
- The Center for Biomolecular Structure and Dynamics and related research provide a rich context for graduate studies in Biochemistry & Biophysics at the University of Montana.
- Additional requirements include an original research proposal and exam.
- Coursework for Biochemistry & Biophysics graduate students is determined by the Advisory Committee. Electives may be substituted, if appropriate, with the approval of the student's Advisory Committee. All course work will normally be completed during the first two years of graduate study.

### Course Requirements

Code	Title	Hours
<b>Core Requirements</b>		
Complete all of the following courses:		
BCH 581	Physical Biochemistry	3
BCH 582	Proteins and Enzymes	3
BCH 584	Nucleic Acids	3
BMED 605	Biomedical Research Ethics	1
<b>Lab Rotations</b>		
Complete the following course:		
BCH 570	Intro to Research	1
<b>Electives</b>		
Complete 3 credits of the following courses: 3		
BCH 486	Biochemistry Research Lab	
BCH 595	Special Topics	
BCH 600	Cell Organization & Mechanisms	
BIOM 502	Advanced Immunology	
BIOM 535	Advanced Virology	
BMED 615	Molecular Pharmacology	
BMED 621	Drug Design	
CHMY 562	Organic Structure and Mechanisms	
CHMY 595	Special Topics	
CSCI 558	Intro to Bioinformatics	
NEUR 661	Neuroscience I	
NEUR 667	Topics in Neurobiology	
<b>Seminar, Data Club, and Research</b>		
Complete 46 credits of the following courses: 46		

BCH 547	Experimental Molecular, Cellular, and Chemical Biology <sup>1</sup>
BCH 597	Research
BCH 694	Biochemistry & Biophysics Seminar <sup>1</sup>
<b>Total Hours</b>	<b>60</b>

<sup>1</sup>

Students are required to register for 1 credit of BCH 547 and 1 credit of BCH 694 each fall and spring semester they are in the program.