

Molecular Biophysics Degree Plan

Year		Term	Title	Credit Hour	Total Credit Hrs/Term	
First Year		Fall	DBS Core Course	9		
			Ethics	1		
			Rotations	2	Semester Total: 12	
	Required Courses		Spring	Ethics	1	
				Modern Methods in Structural Biology	1.5	
				Quantitative Modeling of Biochemical Signaling Systems I	1.5	
				Advanced coursework*	Variable	
				Rotations	Variable	Semester Total: 12
		Summer	Research	6	Semester Total: 6	
Second Year	Required Courses	Fall	Ethics	1		
			Contemporary Topics	1.5		
			Research	Variable		
			Physical Biochemistry I	1.5		
			Molecular Biophysics: Spectroscopy	1.5		
	Electives			Advanced Coursework*	Variable	Semester Total: 9
		Spring	Contemporary Topics	1.5		
			Research	Variable		
			Advanced Coursework*	Variable	Semester Total: 9	
Electives	Summer	Research	6	Semester Total: 6		
Third Year	Fall	Dissertation Research/Research	7.5			
		Contemporary Topics	1.5	Semester Total: 9		
	Spring	Dissertation Research/Research	7.5			
		Contemporary Topics	1.5	Semester Total: 9		
	Summer	Dissertation Research	6	Semester Total: 6		
Fourth Year & Beyond	Fall	Dissertation Research	7.5			
		Contemporary Topics	1.5	Semester Total: 9		
	Spring	Dissertation Research	7.5			
		Contemporary Topics	1.5	Semester Total: 9		
	Summer	Dissertation Research	6	Semester Total: 6		
Minimum Credit Hours for PhD					102	

*Advanced Coursework	Credit Hour	
Advanced NMR Spectroscopy	1.5	First year DBS students take 12 credit hours in fall and spring, and 6 credit hours in the summer semesters. In subsequent years they are enrolled in 9 credit hours in fall and spring, and 6 credit hours in the summer. Typically, didactic coursework is completed in the first two years, and in subsequent years students are enrolled for research, seminars, or journal clubs totaling full-time enrollment equivalency. Advancement of the student to Ph.D. candidacy is dependent upon successful completion of the oral proposal examination which takes place in the late Spring of the second year.
Protein Structure & Folding	1.5	
Advanced X-Ray Crystallography	1.5	
Physical Biochemistry II	1.5	
Quantitative Modeling of Biochemical Signaling Systems II	1.5	
Computational Methods	1.5	
Structure/Function of Ion Channels	1.5	
Computational Approaches to Protein Science	1.5	
Quantitative Approaches in Genetics and Genomics	1.5	
Bioinformatics and DNA Microarray Data Analysis	1.5	
Other Electives Approved by Program	Variable	