

Cell and Molecular Biology Degree Plan

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 year, and in subsequent years students are enrolled in dissertation research and a work-in-progress seminar (WIP) totaling full-time enrollment equivalency. Advancement of the student to Ph.D. candidacy is dependent upon successful completion of all coursework and the qualifying examination, which takes place in the second year.

Year	Term	Half/ Full	Title	Credit Hour	Total Credit Hrs/Term
First Year	Fall	1 st Half	Core Curriculum - Genes	2	
			Core Curriculum - Proteins	2	
		2 nd Half	Core Curriculum - Cells	2	
		Full	Professionalism, Responsible Conduct of Research, and Ethics I	1	
		Full	Laboratory Rotations	5	Semester Total: 12
	Spring	1 st Half	Cellular Signaling	1.5	
			Advanced Elective Coursework*	1.5	
			Advanced Elective Coursework*	1.5	
		2 nd Half	Current Topics in Cell Biology	1.5	
			Advanced Elective Coursework*	1.5	
		Full	Professionalism, Responsible Conduct of Research, and Ethics II	1	
		Full	Introduction to Biostatistics and Bioinformatics	2.0	
	Full	Laboratory Rotations	1.5	Semester Total: 12	
	Summer		Research	6	Semester Total: 6
Second Year	Fall	Full	Research	8	
			Work-In-Progress (WIP) Seminar and Grant-Writing	1	Semester Total: 9
	Spring	Full	Research	8	
			Work-In-Progress (WIP) Seminar and Journal Club	1	Semester Total: 9
Summer		Dissertation Research	6	Semester Total: 6	
Third Year	Fall	Full	Dissertation Research	8	
			Work-In-Progress (WIP) Seminar and Journal Club	1	Semester Total: 9
	Spring	Full	Dissertation Research	8	
			Work-In-Progress (WIP) Seminar and Journal Club	1	Semester Total: 9
	Summer		Dissertation Research	6	Semester Total: 6
Fourth Year & Beyond	Fall	Full	Dissertation Research	8	
			Work-In-Progress (WIP) Seminar and Journal Club	1	Semester Total: 9
	Spring	Full	Dissertation Research	8	
			Work-In-Progress (WIP) Seminar and Journal Club	1	Semester Total: 9
Summer		Dissertation Research	6	Semester Total: 6	
Minimum Credit Hours for PhD					102

*Students are required to complete a total of 4.5 credit hours of advanced elective coursework that can be chosen from any course within the Division of Basic Science. These may be taken as needed in either the first or second halves of the Spring semester. Students may also take an Elective course in the Fall instead of one of the Advanced Electives in the Spring. Rotation hours will be adjusted accordingly.

A frequent choice of elective is Mechanisms of Drug Action, offered as a full semester course (3 credit hours) in the spring. For additional listings of elective and advanced elective courses available, see each program's course descriptions webpage.