

**BS degree in Molecular Biology and
Biotechnology
4-year plan**

FALL			SPRING		
Freshman					
Chem 111	Principles of Chemistry I	4	Biol 115	Cells & the Evolution of Life (F, Sp)	4
Eng 102	College Writing & Rhetoric	3	Chem 112	Principles of Chemistry II	5
Core 103-149	Core Discovery (part 1 Fall)	4	Core 153-199	Core Discovery (part 2 Spring)	3
Math 160 or Math 170	Survey of Calculus Calculus I	4	Elective	Elective	3
			Elective	Elective	3
Total		15			18
Sophomore					
MABB250	General Microbiology	3	Core	University Core Class (1 st in cluster)	3
MABB255	General Microbiology Lab	2	Phys 112/L or	General Physics II (with lab)	4
Chem 277	Organic Chemistry I	3	Phys 212/L	Engineering Physics (with lab)	
Chem 278	Organic Chemistry Lab I	1	Chem 372	Organic Chemistry II	3
Phys 111/L or	General Physics I (with lab)	4	Eng 207 or	Persuasive Writing	3
Phys 211/L	Engineering Physics (with lab)		Eng 208 or	Personal and Exploratory Writing	
Stat 251	Principles of Statistics	3	Eng 209 or	Inquiry-Based Writing	
			Eng 317	Technical Writing	
			Elective	Elective	3
Total		16			16
Junior					
MABB 380	Introductory Biochemistry (F,Su)	4	MABB442	Biochemistry II (Sp only)	3
MABB 382	Introductory Biochemistry Lab (F only)	2	MABB	MolBioBiotech elective ¹	3
Chem 253	Quantitative Analysis	5	Core	University Core Class (3rd in cluster)	3
Core	University Core Class (2 nd in cluster)	3	Bio 210 or	Genetics (4 cr) (F) or General	3
Elective	Elective	3	Gene 314	Genetics (3 cr) (Sp)	
			Elective	Elective	3
Total		17			15
Senior					
MABB 400	Seminar	1	MABB440	Advanced Lab Techniques	4
MABB488	Genetic Engineering	3	MABB	MolBioBiotech elective ¹	3
MABB	MolBioBiotech elective ¹	3	Elective	General International course	3
Elective	Elective	3	Elective	Elective	3
Elective	Elective	3	Elective	Elective	3
Elective	Elective	3			
Total		16			16

F = Fall, Sp = Spring, Su =summer; Total number of credits for degree= 128

¹Mol Biol & Biotech electives: One of the following (4 cr): MABB 401 Undergraduate Research (4 cr), MABB 440 Advanced Laboratory Techniques (4 cr), MABB 499 Directed Study (4 cr); Select either MABB 485 Prokaryotic Molecular Biology (3 cr) or MABB 487 Eukaryotic Molecular Genetics (3 cr) plus one of the following: Biol 444 Genomics (3 cr), MABB 409 Immunology (3 cr), MABB 412 Pathogenic Microbiology (3 cr), MABB 432 Virology (3 cr), MABB 475 Molecular Biology of Cells (3 cr), MABB 520 Instrumental Analysis (2 cr)

Eng 102 is required of all students. English placement is based on SAT/ACT scores. Depending on scores, students may be required to take English 101 as a prerequisite.

Math 160 or 170 is required of all students. Math placement is determined by SAT/ACT scores. Depending on scores, students may be required to take Math 108 and/or Math 143 as a prerequisite.

Chem 111 is required of all students. Chemistry placement is based on SAT/ACT scores or a Chemistry placement test. Depending on scores, students may be required to take Chem 050 as a prerequisite.

*Social Science/Humanities credits must have a minimum of 6 credits in each area. (This includes Core 101/102 and Clusters/International courses)