

**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					
MMBB250	General Microbiology	3	Core	University Core Class (1 st in cluster)	3
MMBB255	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					
MMBB 380	Introductory Biochemistry (F,Su)	4	MMBB442	Biochemistry II (Sp only)	3
MMBB 382	Introductory Biochemistry Lab (F only)	2	MMBB	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					
MMBB 400	Seminar	1	MMBB440	Advanced Lab Techniques	4
MMBB488	Genetic Engineering	3	MMBB	MolBioBiotech elective ¹	3
MMBB	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 elective (three are required and must include either MMBB 485 or MMBB 487): MMBB 409 Immunology, MMBB412 Pathogenic Microbiology, MMBB 432 Virology, MMBB463 Molecular Parasitology, MMBB475 Cell Biology, MMBB 485 Prokaryotic Mol Biology, MMBB 487 Eukaryotic Mol Genetics; MMBB520 Instrumental analysis (w/permission), Biol 444 Genomics
MBB students also are encouraged to participate in undergraduate research (MMBB401).

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)