BS Microbiology Planning Sheet - Catalog Year 2012/2013

This planning sheet shows one suggested sequence in which the required courses for the microbiology major may be taken. Many factors, including initial placement in math, chemistry and English composition, will affect your actual schedule for completion of these courses.

	Freshman Year	
Fall Semester	1100mman 10an	
Chem 111	Principles of Chemistry I (SAT/ACT/COMPASS scores; HS chem grade)	4 cr
Engl 102	College Writing & Rhetoric (prereg=Engl 101 or equiv)	3 cr
Gen Ed Core elective	Student's choice of Humanities, Social Science, Integrated Seminar	3 cr
Math 160 or Math 170	Survey of Calc or Calc I (prereq=SAT/ACT, COMPASS or Math 143;	4 cr
	Math 170 also requires Math 144 Trig if Math 143 was taken. COMPASS trig score	
	of 51 or higher will also satisfy the trigonometry prerequisite for Math 170.)	
Elective (Optional)		3 cr
,		14 - 17 cr
Spring Semester		
Chem 112	Principles of Chemistry II (prereq=Chem 111)	5 cr
Gen Ed Core elective	Student's choice of Humanities, Social Science, Integrated Seminar	3 cr
MMBB 154	Introductory Microbiology (Biol 115 is an acceptable substitute)	3 cr
Electives		6 cr
		17 cr
Fall Comparison	Sophomore Year	
Fall Semester Chem 277/278	Organic Chem I & Jah (prereg-Chem 112)	1 or
MMBB 250/255	Organic Chem I & lab (prereq=Chem 112)	4 cr
Phys 111 or Phys 211	General Microbiology/lab (prereq=Chem 101 or 111) General Physics I (with lab; prereq=Math 143) or Engineering Physics I (with lab; prereq=Math 170)	5 cr 4 cr
Gen Ed Core elective	General Physics I (with lab, prereq= Math 143) of Engineering Physics I (with lab, prereq=Math 170)	3 cr
Gen Ed Core elective		16 cr
		10 (1
Spring Semester		
Chem 372	Organic Chemistry II (prereq=Chem 277)	3 cr
Engl 207 or 208 or 209 or 317	Persuasive or Personal/Exploratory or Inquiry-Based or Technical Writing (prereq=Engl 102)	3 cr
Phys 112 or Phys 212	General Physics II (with lab; prereq= Phys 111) or Engineering Physics II (with lab; prereq=Phys 211)	4 cr
Gen Ed Core elective		3 cr
Elective		3 cr
		16 cr
Fall Compater	Junior Year	
Fall Semester	O	4
		4 cr
Biol 310 or Gene 314 (3 <i>14 taught in spring</i>)	Genetics (prereq=Biol 115) or General Genetics (prereq=Biol 115 or MMBB 154 or permission)	
Chem 253	Quantitative Analysis (prereq=Chem 112)	3 cr
Chem 253 Chem 254	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr
Chem 253 Chem 254 MMBB 380	Quantitative Analysis (prereq=Chem 112)	3 cr 2 cr 4 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr
Chem 253 Chem 254 MMBB 380	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251	Quantitative Analysis (<i>prereq=Chem 112</i>) Quantitative Analysis lab (pre or co req=Chem 253)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 15 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 15 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Molecular Biology Electives	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Molecular Biology Electives Spring Semester	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year Seminar (prereq=permission)	3 cr 2 cr 4 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Microbiology MMBB elective - Molecular Biology Electives Spring Semester MMBB 440 or MMBB 401	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 15 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Microbiology Electives Spring Semester MMBB 440 or MMBB 401 Elective - MMBB	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year Seminar (prereq=permission)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 15 cr 1 cr 3 cr 4 cr 3 cr 3 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Molecular Biology Electives Spring Semester MMBB 440 or MMBB 401 Elective - MMBB Elective - Science	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year Seminar (prereq=permission)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 15 cr 1 cr 3 cr 9 cr 16 cr
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Microbiology Electives Spring Semester MMBB 440 or MMBB 401 Elective - MMBB	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year Seminar (prereq=permission)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 15 cr 1 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3 cr 3
Chem 253 Chem 254 MMBB 380 Gen Ed Core elective Elective Spring Semester MMBB elective - Microbiology MMBB elective - Molecular Biology Stat 251 Gen Ed Core elective Elective - Science Fall Semester MMBB 400 MMBB elective - Microbiology MMBB elective - Molecular Biology Electives Spring Semester MMBB 440 or MMBB 401 Elective - MMBB Elective - Science	Quantitative Analysis (prereq=Chem 112) Quantitative Analysis lab (pre or co req=Chem 253) Intro Biochem (prereq=Chem 111 and 277) Statistical Methods Senior Year Seminar (prereq=permission)	3 cr 2 cr 4 cr 3 cr 3 cr 19 cr 3 cr 3 cr 3 cr 3 cr 15 cr 1 cr 3 cr 9 cr 16 cr

Total must equal a minimum of:

120 cr

You must complete an average of 15 credits per semester to meet the minimum credit total in 8 semesters.