

Biological Sciences (Microbiology) (BS)
Degree Plan (BSCMICBS) (BSCMICGCBS)
SUGGESTED COURSE SEQUENCE GUIDELINES

- These are suggested course sequence guidelines. Students must consult the USM Undergraduate Bulletin and their academic advisor.
- First and Second Year courses are listed as Junior/Community Colleges courses with equivalent USM courses in brackets.
- During the last semester of the Sophomore year, students should develop a more detailed plan for the Junior and Senior years because many upper level BSC courses are offered in specific semesters (Fall or Spring only) and/or on a rotating two year cycle.
- Some courses may require additional prerequisites.

COMMUNITY COLLEGE / JUNIOR COLLEGE (62 hours)			
FRESHMAN		SOPHOMORE	
1st Semester		1st Semester	
BIO 1134 - General Biology I [BSC 110/L]	4	CHE 2425 - Organic Chemistry I [CHE 255/L]	4
CHE 1214 - General Chemistry I [CHE 106/L]	4	PHY 2414 - General Physics [PHY 111/L]	4
MAT 1613* - Calculus I [MAT 167]	3	ENG 2423 - World Literature [ENG 203]	3
ENG 1113 - English Composition I [ENG 101]	3	SPT 1113 - Oral Communication [SCM 111]	3
HIS 1163 - World Civilization I [HIS 101] <i>or</i>	3	Select one <i>Aesthetic Values</i> course:	3
HIS 2213 - American History I [HIS 201]		ART 1113 [ART 130] <i>or</i> MUS 1113 [MUS 365] <i>or</i>	
2nd Semester		2nd Semester	
BIO 1144 - General Biology II [BSC 111/L]	4	CHE 2435 - Organic Chemistry II [CHE 256/L]	4
CHE 1224 - General Chemistry II [CHE 107/L]	4	PHY 2424 - General Physics [PHY 112/L]	4
ENG 1123 - English Composition II [ENG 102]	3	Select one <i>Social Sciences</i> course:	3
HIS 1173 - World Civilization II [HIS 102] <i>or</i>	3	SOC 2231 [ANT 101] <i>or</i> GEO 1113 [GHY 101] <i>or</i>	
HIS 2223 - American History II [HIS 202]		SOC 2113 [SOC 101]	
		Select one <i>Decision-Making and Responsibility</i> course:	3
		PSC 1113 [PS 101] <i>or</i> PSY 1513 [PSY 110] <i>or</i>	
		ECO 2113 [ECO 101]	
TOTAL	31	TOTAL	31
<p>*Calculus is required for this major. Students may enroll in Calculus if the ACT mathematics subtest score is ≥ 26; otherwise, they must take prerequisite courses, typically College Algebra and/or Trigonometry. Entering freshmen with an ACT mathematics subtest score of ≤ 16 must take Intermediate Algebra during the first semester. Students with an ACT mathematics subtest score of 17-19 are strongly encouraged to take Intermediate Algebra before taking College Algebra. Students may take Trigonometry if the ACT mathematics subtest score is ≥ 24 or if they have a grade of C or better in College Algebra.</p>			

UNIVERSITY OF SOUTHERN MISSISSIPPI (62 hours)			
JUNIOR YEAR		SENIOR YEAR	
BSC 380/L - Microbiology	4	BSC 477/L - Microbial Genetics	4
BSC 370 - Genetics	4	BSC 487/L - Microbial Physiology	4
BSC 484/L - Virology	4	Select 4 hours of <i>Applied Microbiology</i> :	4
BSC 486/L - Immunology and Serology	4	BSC 478L <i>or</i> BSC 481/L <i>or</i> BSC 488/L <i>or</i> BSC 489/L	
CHE 421/L - Biochemistry	5	Select at least 3 hours of <i>Advanced Microbiology</i> :	3
CHE 423 - Analytical Biochemistry	3	BSC 382 <i>or</i> BSC 476 <i>or</i> BSC 482/L <i>or</i> BSC 483 <i>or</i>	
Select one <i>Computer Competency</i> course:	3	BSC 485/L	
PSY 360 <i>or</i> CSS 211 <i>or</i> CSS 240 <i>or</i> CSS 330 <i>or</i> CSS 333		Select 6 hours of 300 or 400 level courses from BSC or CHE:6	
		Recommended courses include those listed above and	
		BSC 360 <i>or</i> BSC 403/L <i>or</i> BSC 410/L <i>or</i> BSC 412/L <i>or</i>	
		BSC 426/L <i>or</i> BSC 427/L <i>or</i> BSC 462/L <i>or</i> BSC 463/L <i>or</i>	
		BSC 467/L	
		BSC 497 - Senior Capstone	1
		Select one <i>Upper Level Writing Intensive</i> course:	3
		ENG 333 <i>or</i> other approved WI course	
Choose Electives, Minor courses, or other courses as needed to fulfill the hours to degree.		Choose Electives, Minor courses, or other courses as needed to fulfill the hours to degree.	
TOTAL	31	TOTAL	31