

Bachelor of Science in MICROBIOLOGY

Graduation MAP

This is a suggested plan. Meet with an academic advisor (Dr. Domek, Dr. Culumber, or Dr. Crook) to create a specific plan that best fits your academic needs. Remember, taking an average of 15 credit hours per semester facilitates timely graduation.



Catalog Year: 2020-2021

MATH 1050 PLACEMENT

NAME: _____

<input checked="" type="checkbox"/>	Course	Credit Hour	Semester Offered	Milestones & Notes
Freshman (Semester 1)				
	ENGL 1010 EN - Introductory College Writing	3	Fall/Spring/Summer	<ul style="list-style-type: none"> MATH QL 1050 grade of "C" or higher, prerequisite MATH 1010, ACT 23, or placement test. GE American Institutions requires a grade of "C" or higher. *May opt to complete LIBS 1704 course (1 credit hour) instead of exam. However, competency exam is recommended.
	MATH 1050 QL - College Algebra	4	Fall/Spring/Summer	
	CHEM 1200 - Preparation for College Chemistry	3	Fall/Spring/Summer	
	GE American Institutions (AI) Course	3	Fall/Spring/Summer	
	*LIBS 1504 - Information Literacy Competency Exam	1	Fall/Spring/Summer	
	Total Semester Credits	14		
Freshman (Semester 2)				
	MICR 2054 LS - Principles of Microbiology	4	Fall/Spring/Summer	<ul style="list-style-type: none"> MATH 1050 is a pre or co-requisite for CHEM 1210. ENGL 2010 requires a grade of "C" or higher. ZOOL 1110 recommended as Micro Life Science Elective and as prerequisite for ZOOL 3200 & 3300.
	CHEM 1210 PS - Principles of Chemistry I w/Lab	5	Fall/Spring/Summer	
	ENGL 2010 EN - Intermediate College Writing	3	Fall/Spring/Summer	
	ZOOL 1110 LS - Principles of Zoology	4	Fall/Spring	
	Total Semester Credits	16		
Freshman (Optional)				
	MATH 1060 - Trigonometry -or- MATH 1080 QL - Pre-Calculus	3-5	Fall/Spring/Summer	<ul style="list-style-type: none"> Courses can be taken in summer semester to decrease credit load in regular semesters. MATH above 1080 is recommended but not required.
	Total Semester Credits	3-5		
Sophomore (Semester 3)				
	MICR 3053 - Microbiological Procedures	3	Fall/Spring	<ul style="list-style-type: none"> MICR 3053 prerequisites: MICR 2054, CHEM 1210, and MATH 1050 or 1080 or 1210.
	CHEM 1220 - Principles of Chemistry II w/Lab	5	Fall/Spring/Summer	
	MICR Life Science Course Elective	3-4	Depends on course	
	MICR 2600 - Laboratory Safety	1	Fall/Spring	
	GE Social Science Course	3	Fall/Spring/Summer	
	Total Semester Credits	15-16		
Sophomore (Semester 4)				
	MICR 3154 - Microbial Ecology	4	Fall/Spring	<ul style="list-style-type: none"> MICR 3154 prerequisites: MICR 2054 and CHEM 1210. Fewer credits recommended while taking Organic Chemistry.
	CHEM 2310/2315 - Organic Chemistry I & Lab	5	Fall/Spring/Summer	
	GE Humanities/Creative Arts Course	3	Fall/Spring/Summer	
	Total Semester Credits	12		
Sophomore (Optional)				
	MATH 1040 QL - Introduction to Statistics -or- QUAN 2600 - Business Statistics I -or- PSY 3600 - Statistics in Psychology -or- *MATH 3450 - Advanced Statistical Methods	3-4	Fall/Spring/Summer Spring	<ul style="list-style-type: none"> Statistics recommended for graduate/pre-professional school. * MATH 3450 prerequisite: MATH 3410 or MATH 1040 and a 3 credit 3000 or 4000 level course with one of the following designations: MATH, BTNY, CHEM, PHYS, GEO, MICR and ZOOL. **Math through Calculus I highly recommended for graduate school. Directed Research requires instructor approval.
	**MATH 1210 - Calculus I	4	Fall/Spring/Summer	
	MICR 4800 - Directed Research	1-2	Fall/Spring/Summer	
	Total Semester Credits	8-10		

<input checked="" type="checkbox"/>	Course	Credit Hours	Semester Offered	Milestones & Notes
Junior (Semester 5)				
	MICR Major Elective Course	4	Depends on course	<ul style="list-style-type: none"> MATH 1060 prerequisite for PHYS 2010. **If PHYS 2010 is selected, must also take PHYS 2020 (recommended for graduate/pre-professional programs). 20 credits of MICR electives required, see catalog for listing of options.
	CHEM 3070/3075 - Biochemistry I & Lab	4	Fall/Spring	
	PHYS 1010 PS - Elementary Physics -or- **PHYS 2010 PS - College Physics I -or- PHYS 2210 PS - Physics for Scientists and Engineers I	3-5	Fall/Spring/Summer Fall/Spring	
	GE Social Science Course	3	Fall/Spring/Summer	
	Total Semester Credits	14-16		
Junior (Semester 6)				
	MICR Major Elective Course	6	Depends on course	<ul style="list-style-type: none"> CHEM and PHYS Support courses should be complete.
	PHYS 2020 - College Physics II (<i>if needed</i>)	5	Fall/Spring	
	GE Humanities Course	3	Fall/Spring/Summer	
	Total Semester Credits	14		
Junior (Optional)				
	MICR 4800 - Directed Research -or- MICR 4830 - Directed Readings	1-2	Fall/Spring/Summer	<ul style="list-style-type: none"> Directed Research/Readings requires instructor approval.
	Total Semester Credits	1-2		
Senior (Semester 7)				
	MICR 4054 - Microbial Physiology	4	Fall	<ul style="list-style-type: none"> MICR 4054 prerequisites: MICR 2054, CHEM 1220 and CHEM 2310/2315. Completion or concurrent in CHEM 3070/3075. Meet with advisor to evaluate progress toward graduation.
	MICR Major Elective Course	5	Depends on course	
	GE Creative Arts Course	3	Fall/Spring/Summer	
	Total Semester Credits	12		
Senior (Semester 8)				
	MICR 4154 - Microbial Genetics	4	Spring	<ul style="list-style-type: none"> MICR 4154 prerequisites: MICR 2054 and CHEM 2310/2315. Completion or concurrent in CHEM 3070/3075. 40 credit hours of Upper Division credits required for graduation, check CatTracks. Apply for graduation.
	MICR Major Elective Course	5	Depends on course	
	Other Upper Division Electives	4	Depends on course	
	Total Semester Credits	13		
Senior (Optional)				
	MICR 4800 - Directed Research -or- MICR 4830 - Directed Readings	1-2	Fall/Spring/Summer	<ul style="list-style-type: none"> Directed Research/Readings requires instructor approval.
	Total Semester Credits	1-2		
	TOTAL BACHELOR CREDITS	123-132		

Gen Ed Breadth Requirements (do not duplicate departments)

<input type="checkbox"/> HU	<input type="checkbox"/> CA	<input type="checkbox"/> HU or CA
<input type="checkbox"/> SS	<input type="checkbox"/> SS	
<input type="checkbox"/> PS	<input type="checkbox"/> LS	<input type="checkbox"/> PS or LS
<input type="checkbox"/> DV (Double dip with other Gen Ed courses)		

Avoid misadvisement! Consult your academic advisor (weber.edu/advisors), the WSU Catalog (weber.edu/catalog), and your CatTracks degree evaluation (log into your eWeber Student Portal).

NOTES:

- NEED 40 UPPER DIVISION CREDIT HOURS TO GRADUATE. Plan accordingly!**
- This plan outlines a general degree in Microbiology. Students interested in graduate or professional school should follow the Pre-Professional GradMap.
- Major GPA of 2.0 or higher required for graduation.
- Choose Microbiology Elective Courses per the guidelines as stated in the Microbiology (BS) catalog.
- A minor in Chemistry will meet the requirements within the Microbiology major. This GradMap includes the Chemistry minor.
- Please talk to a Microbiology advisor about declaring an emphasis in Microbiology. The emphases can be found in the WSU catalog.