



UNIVERSITY OF WISCONSIN
OSHKOSH

effective fall 24; version 8/5/2025

Microbiology

Major
credit min: 48

Biology Core Courses (4 credit minimum)

		term	credits	Tally
BIO 105	Biological Concepts (NS) (XL)	B	4	_____
OR				
BIO 108	Honors: Concepts in Biology (NS) (XL)	F	5	_____

Biology Core II Courses (13 credit minimum)

BIO 323	Molecular & Cell Biology <i>pre-req: 105 + Chem105 or Chem 101,102 >=B</i>	B	3	_____
BIO 309	Microbiology (NS) <i>pre-req: Bio 105 + 1 yr gen chem</i>	B	4	_____
BIO 450	Adv Microbiology: Modern Research Approaches (NS) <i>pre-req: Bio 309 or 233</i>	S	4	_____
BIO 491	Senior Survey <i>take last semester</i>	B	0	_____

Required Chemistry and Math Courses (24 credit minimum)

CHEM 105	General Chemistry I (NS) (XL) <i>pre/co-req: math 104</i>	B	5	_____
CHEM 106	General Chemistry II (NS) (XL) <i>pre-req chem 105 or Chem 101&102 w/ an A</i>	B	5	_____
CHEM 234	Organic Chem I lab <i>co-req chem 235</i>	B	1	_____
CHEM 235	Organic Chem I (NS) <i>pre-req; chem 106 >=C, co-req chem 234</i>	B	3	_____
CHEM 334	Organic Chem II lab <i>co-req chem 335</i>	B	1	_____
CHEM 335	Organic Chem II (NS) <i>pre-req: chem 235 >=C, co-req chem 334</i>	B	3	_____
CHEM 303	Biochemistry: Clinical Emphasis <i>pre-req: chem 335</i>	B	3	_____
MATH 201	Applied Statistics (XM) <i>pre-req: math 104; see TW for alternatives</i>	B	3	_____
OR				
MATH 171	Calculus I (XM) <i>pre-req: math 104/108 and 106 >=C or placement</i>	B	5	_____

Additional Required Courses (Must take two courses)

BIO 327	Microbial Ecology and Diversity <i>pre-req: Bio 323</i>	F	3	_____
BIO 341	Immunology <i>pre-req: Bio 323 or 309</i>	F	3	_____
BIO 375	Microbiomes and Human Health <i>pre-req: Bio 105</i>	F	3	_____
BIO 339	Public Health Microbiology <i>pre-req: Bio 309 + Chem 106</i>	F ev	3	_____
BIO 312	Medical Bacteriology Lecture <i>pre-req: Bio 105 + 1 yr gen chem, 309, 323, 341</i>	S	2	_____

Laboratory Courses (Must take 1 course, not used above)

BIO 313	Medical Bacteriology Laboratory <i>309 + 341 + 312 concurrent</i>	S	2	_____
BIO 374	Cell/Immunology Lab (NS) <i>323 or consent</i>	F	3	_____
CHEM 304	Biochemistry Laboratory <i>pre-req Chem 303</i>	F	1	_____
BIO 301	Internship in Microbiology <i>consent</i>	B	1-3	_____
BIO 339	Public Health Microbiology <i>233 or 309 or 323</i>	F ev	3	_____
BIO 390	Applied Molecular Biology Techniques <i>323 or 309 or consent</i>	S	2	_____

Elective Courses (Must take at least 5 credits)

course#	course name	term	credits	Tally
		()		_____
		()		_____
		()		_____
		()		_____
		()		_____

Elective Courses				
course#	course name	pre-requisites	term	credits
BIO 300	Bio internship	consent	F/S/Su	1-6
BIO 301	Micro Internship	consent	F/S/Su	1-6
BIO 302	EH internship	consent	F	1-6
BIO 303	Epidemiology	105. 108 or consent	F	3
BIO 312	Med Bact Lec	309 or 233	S	2
BIO 313	Med Bact Lab	309 + 341 + 312 concurrent	S	2
BIO 315	Virology		S	3
BIO 321	Brewing and Fermentation Science	105 or 108	F	3
BIO 338	Environmental Toxicology	105 or consent	S	3
BIO 339	Pub Health Microbiology	233 or 309 or 323	F even	3
BIO 341	Immunology	323 or consent	F	3
BIO 354	Parasitology	105 or 108	S	3
BIO 372	Cancer Biology	323 or consent	S odd	3
BIO 374	Cell/Immunology Lab	323 or consent	F	3
BIO 375	Microbiomes and Human Health	323 or 309 or 233 or consent	F odd	3
BIO 390	Applied Molecular techniques	323 or 309 or consent	S	2
BIO 450	Adv Microbiology: Modern Research	309 or 233 or consent	S	4
BIO 446	Independent Study	3.0 GPA + 60cr + consent	F/S/Su	1-3
BIO 456	Related Readings	3.0 GPA + 60cr + consent	F/S/Su	1-3
BIO 474	Honors Thesis	Honors Program, 60cr	F/S/Su	1-6

Other Electives

course #	Course Names	Pre-requisites	term	credits
BIO 327	Microbial Ecology	<i>on hiatus 106 or 233 or 309</i>	F	3

This advising sheet does not establish nor constitute a contract between the University of Wisconsin Oshkosh and students enrolled at this institution. This advising sheet provides descriptive and summary information that outlines University rules, regulations, course listings, degree programs and fee schedules which are in effect at the time of publication. The University retains the exclusive right to change, modify, or interpret, at any time, the descriptions contained in this advising sheet. The University administration and faculty, with the concurrence of the Board of Regents and the administration of the University of Wisconsin System, also retain the right to change fees and add, modify, or withdraw courses or degree programs at any time