

Department of Biology

UNIVERSITY OF
WISCONSIN
OSHKOSH

College of Letters and Science

Microbiology Major

64 credit min

Effective for Fall 2021

Core Courses (12 Credits min)

BIO 105	Biological Concepts (NS)(XL)	B	(4) ____
OR			
BIO 108	Honors: Concepts in Bio (NS)(XL)	F	(5) ____
BIO 323	Intro Molecular & Cell Bio (Bio 105 and Chem 105 or Chem 101,102 w/B)	B	(3) ____
BIO 309	Microbiology	B	(5) ____
BIO 491	Senior Survey	B	(0) ____

Required Chemistry Courses (21 Credits)

CHEM 105	General Chemistry I (NS)(XL) (Math 104)	B	(5) ____
CHEM 106	General Chemistry II (NS)(XL) (Chem 105 w/C or better)	B	(5) ____
CHEM 234	Organic Chemistry Lab I (NS) (Co-req 235)	B	(1) ____
CHEM 235	Organic Chemistry I (NS) (Chem 106 w/C or better)(Co-req 234)	B	(3) ____
CHEM 303	Biochemistry: Clinical Emphases (Chem 335)	B	(3) ____
CHEM 334	Organic Chemistry Lab II (Chem 234,235 w/C or better)(Co-req 335)	B	(1) ____
CHEM 335	Organic Chemistry II (NS) (Chem 235 w/C or better)(Co-req 334)	B	(3) ____

Required Math Course (3 Credits)

MATH 201	Applied Statistics (or higher level)	B	(3) ____
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Required Physics Course (5 Credits)

PHY/AST 171	General Physics (NS)(XL) (Math 106 or 108)	F	(5) ____
OR			
PHY/AST 191	General Physics (NS)(XL) (Previous or C/Math 171)	F	(5) ____

Additional Required Courses (16 Credits min.)

Laboratory Courses (Must take 1 course or 2 credits)			
BIO 313	Medical Bacteriology Lab (Bio 309 and 341)	S	(2) ____
OR			
BIO 374	Cell/Immunology Lab (NS) (Previous or C/Bio 341 or 372)	F	(3) ____
OR			
CHEM 304	Biochemistry Laboratory (Pre Chem 303)	F	(1) ____
OR			
BIO 301	Internship in Microbiology	B	(up to 3)
OR			
BIO 339	Public Health and Food Microbiology	S	(3) ____
BIO 327	Microbial Ecology and Diversity	F	(3) ____

BIO 341	Immunology (Bio 323)	F	(3) ____
BIO 375	Microbial Genetics (Bio 309, 343)	S	(3) ____
BIO 450	Microbial Physiology (NS)(Bio 309 or Bio 233)	F	(5) ____
<u>Electives (min of 7 credits)</u>			
BIO 301	Internship in Microbiology	B	(1-6) ____
BIO 303	Introduction to Epidemiology (Bio 105)	F	(2) ____
BIO 312	Medical Bacteriology Lecture (Bio 309 and 341)	S	(2) ____
BIO 313	Medical Bacteriology Lab (NS)(Bio 309 and 341, C/Bio 312)	S	(2) ____
BIO 315	Virology (Bio 323)	S	(3) ____
BIO 321	Mycology (NS)(1 term general Bio)	F	(3) ____
BIO 338	Environmental Toxicology (Bio 105)	S	(2) ____
BIO 339	Public Health and Food Microbiology (NS)(Bio 309)	S	(3) ____
BIO 343	Genetics – Lecture and Lab (NS)(Bio 323)	B	(4) ____
BIO 349	Ecology and Evolution (1 term general Bio)	B	(3) ____
BIO 354	Parasitology (NS)(1 term general Bio and Bio 230)	S	(3) ____
BIO 372	Medical and Environmental Applications of Cell Biology and Genetics	S	(3) ____
BIO 374	Cell/Immunology Lab (NS)(C/Bio 341 or 372)	F	(3) ____
BIO 446	Independent Study	B	(1-3) ____
BIO 456	Related Readings	B	(1-3) ____
CHEM 315	Advanced Biochemistry	S	(3) ____
CHEM 311	Analytical Chemistry I	F	(4) ____

Pre-requisites in parentheses • S = Spring • F = Fall • B = Both Fall & Spring • C/ = Concurrent enrollment

Must meet General Education *and* Degree Requirements to earn BS Degree

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