

CURRICULUM FOR ASSOCIATE OF SCIENCE
DEGREE IN BIOLOGYCOURSES ACCEPTED FOR BACHELOR OF SCIENCE DEGREE
IN BIOLOGY

Stark State College			The University of Mount Union		
Course		Credits	Course		Credits
Freshman Experience & Written and Oral Communication (7 cr minimum)					
SSC101	Student Success Seminar	1	FYS100	First Year Seminar	4
ENG124	College Composition (required)	3			
ENG221	Technical Report Writing	3	WRT199	Technical Report Writing	3
ENG231	College Composition II	3	WRT299	College Composition II	3
COM121	Effective Speaking	3	COM101	Effective Speaking	3
COM122	Interpersonal Communication	3	COM220	Interpersonal Communication	3
Social and Behavioral Sciences (6 cr minimum)					
PSY121	General Psychology	3	PSY110	The Psychological Sciences	3
SOC121	Sociology	3	SOC100	Sociology	3
BUS122	Basic Economics	3	ECN105	Introduction to Economics	3
Arts and Humanities (6 cr minimum)					
SOC225	Cultural Diversity (required)	3	SOC299	Cultural Diversity	3
ENG233	British Literature: Med to 1785	3	ENG299	British Literature: Med to 1785	3
ENG234	British Literature: 1785 to present	3	ENG299	British Literature: 1785 to present	3
ENG236	American Literature: Colonial to 1865	3	ENG299	American Literature: Colonial to 1865	3
ENG237	American Literature: 1865 to Present	3	ENG299	American Literature: 1865 to Present	3
HIS121	U.S. History I to 1877	3	HST199	U.S. History I to 1877	3
HIS122	U.S. History from 1877	3	HST199	U.S. History from 1877	3
PHL122	Ethics (recommended)	3	PHL199	Ethics	3
Mathematics (4 cr minimum)					
MTH125	College Algebra	4	MTH105	College Algebra	4
MTH135	Precalculus (recommended)	5	MTH140	Precalculus	5
MTH124	Statistics	3	MTH123	Elementary Statistics	3
Biology (*required)					
BIO141	*General Biology I w/lab (4 cr)	4	BIO140	The Unity of Life w/lab	4
BIO142	*General Biology II w/lab (4 cr)	4	BIO141	The Diversity of Life w/lab	4
BIO121	Anatomy & Physiology I w/lab	4	BIO210	Anatomy & Physiology I w/lab	4
BIO122	Anatomy & Physiology II w/lab	4	BIO211	Anatomy & Physiology II w/lab	4
BIO126	Science, Energy & the Env. w/lab (not in degree)	5	ENV190	Introduction to Env. Science w/lab	5
BIO241	General Genetics w/lab	4	BIO240	Genetics w/lab	4
BIO221	Principles of Microbiology w/lab	4	BIO299	Special Topics in Biology	4
ECO241	Ecology w/lab	4	BIO220	Ecology w/lab (4 cr)	4
BIO242	Cell & Molecular Biology w/lab	4	BIO270	Cell Biology w/lab (4 cr)	4
Chemistry (*required)					
CHM141	*General Chemistry I w/lab	5	CHE110	Foundations in Chemistry w/lab	5
CHM142	*General Chemistry II w/lab	5	CHE120	Concepts in Chemistry w/lab	5
CHM241	Organic Chemistry I w/lab	5	CHE231	Organic Chemistry I w/lab	5
CHM242	Organic Chemistry II w/lab	5	CHE232	Organic Chemistry II w/lab	5
CHM243	Biochemistry I	3	CHE299	Biochemistry I	3
CHM244	Biochemistry II	3	CHE299	Biochemistry II	3
Physics					
PHY121	College Physics I w/lab	4	PHY199	College Physics I w/lab	4
PHY122	College Physics II w/lab	4	PHY199	College Physics II w/lab	4
Capstone					
SCI273	Special Topics in Science	3	BIO299	Special Topics in Science	3

Revised 1/22/16

UNIVERSITY OF MOUNT UNION
COURSES TO BE COMPLETED AT UNIVERSITY OF MOUNT UNION
BACHELOR OF SCIENCE - BIOLOGY

Course	Title	Credits	Course	Title	Credits
CHE231	Organic Chemistry I	4	Three of the following courses with at least 8 hours at 300-level and above		
	OR				
CHE220	Analytical Chemistry	4	ENV190	Intro to Environmental Science	4
MTH123	Elementary Statistics	4	BIO201	Anatomy & Physiology I	4
	OR		BIO211	Anatomy & Physiology II	4
MTH141	Calculus I	4	BIO299	Special Topics in Biology	1-4
One of the following:			BIO300	Molecular Biology	4
BIO240	Genetics	4	BIO305	Microbiology	4
BIO270	Cell Biology	4	BIO315	Physiological Ecology	4
One of the following Organismal Courses			BIO321	Aquatic Ecology	4
BIO260	Plant Structure and Function	4	BIO322	Ecotoxicology	4
BIO280	Biology of Marine Organisms	4	BIO340	Immunology	4
BIO285	Vertebrate Zoology	4	BIO360	Independent Study	1-4
BIO295	Developmental Biology	4	BIO380	Vertebrate Physiology	4
One from the following Ecology and Evolutionary Biology			At least 4 hours of Senior Culminating Experience		
BIO215	Evolutionary Biology	4	BIO405	Research	1-4
BIO220	Ecology	4	BIO410	Senior Seminar I	2
BIO230	Conservation Biology	4	BIO411	Senior Seminar II	2
BIO280	Biology of Marine Organisms	4	BIO499	Internship in Biology	1-4

Summary	
Biology Major	36
Math Proficiency	0-4
Foreign Language Proficiency	0-8
Second Year WOC Portfolio	0
XXX XXX Foundation	4
XXX XXX Foundation	4
XXX XXX Theme 1	4
XXX XXX Theme 2	4
XXX XXX Capstone	4
University of Mount Union Coursework (minimum)	56
AS STARK STATE (minimum)	60
Additional hours at STARK STATE or UMU	12
Degree Total	128

University of Mount Union Transfer Notes:

Total number of hours needed to graduate is 128.

Math Proficiency would be met with MTH 124

Student must complete a minimum of 48 hours at UMU, of which a minimum of 16 in the major and 8 in the minor are required.

Each student must contact the WOC Director to develop a plan and schedule for the Second Year WOC Portfolio

A minor is required at UMU.

Foreign language proficiency can be met with a proficiency exam OR by taking the a 200 level courses in SPN or CHN at Stark State. If students tested proficient, or successfully passed these courses, no courses would be needed at UMU. If not, the student would need to take one or two foreign language courses.

Only two transfer courses may be used to meet the Foundational Knowledge requirement. The others must be taken at UMU. For Biology majors, a Fine Art (A) and a Humanities (H) course are required, as a minimum.

Students interested in a health profession are better served by taking certain specific electives, which should be discussed with an advisor