

ARTICULATION AGREEMENT

between

Washtenaw Community College

BIOLOGY

and

Concordia University

BIOLOGY

Transfer Guide

BIOLOGY MAJOR-All Programs					
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE		
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS
BIO201	General Biology	4	BIO101	Concepts of Biology	4
BIO211	Botany: Flowering Plants	3	BIO228	Biology of Plants	4
BIO221	Zoology: Vertebrates	3	BIO227	Biology of Animals	4
BIO321	Zoology: Invertebrates	3	BIO227	Biology of Animals	4
BIO332	Human Anatomy & Physiology I	4	BIO111	Anatomy & Physiology-Normal Structure & Function	5
BIO341	Microbiology	4	BIO237	Microbiology	4
BIO343	Genetics	3	BIO208 OR BIO220	Genetics Human Genetics	4 3
BIO353	Cell Biology (without "w")	3	BIO215	Cell & Molecular Biology	4

BIOLOGY MINOR-All Programs					
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE		
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS
BIO201	General Biology	4	BIO101	Concepts of Biology	4
BIO211	Botany: Flowering Plants	3	BIO228	Biology of Plants	4
BIO221 OR BIO332	Zoology: Vertebrates Human Anatomy & Physiology I	3 4	BIO227 OR BIO111	Biology of Animals Anatomy & Physiology-Normal Structure & Function	4 5
BIO321	Zoology: Invertebrates	3	BIO227	Biology of Animals	4
BIO343	Genetics	3	BIO208 OR BIO220	Genetics Human Genetics	4 3
BIO353	Cell Biology (without "w")	3	BIO215	Cell & Molecular Biology	4

Concordia University

Biology

Course offerings in biology provide the student with a comprehensive experience in the world of living organisms. Students explore the biological continuum from sub-cellular bio-molecular processes through the biology of organisms to populations and their environmental interactions. This study of life provides the knowledge and experience for many careers and vocations.

Biology Major**32*-36 credits***—Liberal Arts, Pre-Law, Pre-Seminary, Secondary Education Programs*

Required Courses		32*-36 credits
BIO201*	General Biology (or 2 years high school biology*)	4*
BIO211	Botany: Flowering Plants	3
BIO221	Zoology: Vertebrates	3
BIO321	Zoology: Invertebrates	3
BIO332	Human Anatomy & Physiology I	4
BIO341	Microbiology	4
BIO342	General Ecology	3
BIO343	Genetics	3
BIO344	Evolution (w)	3
BIO353	Cell Biology (w)	3
BIO355	Environmental Science	3

*Students with sufficient grades in two years of high school biology may be exempted from BIO201. A Science Placement Prerequisite Report must be completed.

Biology Minor**21*-23 credits***—Liberal Arts, Pre-Law, Pre-Seminary, Secondary Education Programs*

Required Courses		21*-23
BIO201*	General Biology (or 2 years high school biology*)	4*
BIO211	Botany: Flowering Plants	3
BIO321	Zoology: Invertebrates	3
BIO353	Cell Biology (w)	3
<i>Select at least one of the following courses.</i>		
BIO221	Zoology: Vertebrates	3
BIO332	Human Anatomy & Physiology I	4
<i>Select at least one of the following courses.</i>		
BIO342	General Ecology	3
BIO355	Environmental Science	3
<i>Select at least one of the following courses.</i>		
BIO343	Genetics	3
BIO344	Evolution (w)	3

*Students with sufficient grades in two years of high school biology may be exempted from BIO201. A Science Placement Prerequisite Report must be completed. Only 3 of the 4 credits must be made up with one of the above BIO courses. These students need only 21 credits to complete the minor.

ARTICULATION AGREEMENT

between

Washtenaw Community College

CHEMISTRY

and

Concordia University

CHEMISTRY (Minor)

Transfer Guide

CHEMISTRY MINOR-All Programs					
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE		
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS
CHE205	Chemistry of Living Systems	4	CEM140	Organic Biochemistry	4
CHE211	Chemistry I	4	CEM111	General Chemistry I	4
CHE212	Chemistry II	4	CEM122	General Chemistry II	4
CHE321	Organic Chemistry I	4	CEM211	Organic Chemistry I	4
CHE322	Organic Chemistry II	4	CEM222	Organic Chemistry II	4

Concordia University

Chemistry

Chemistry is the study of the nature of matter—its composition, structure and behavior. The understanding of chemical principles, concepts, and techniques included in this discipline plays a central role in a university level science education. Students who complete this minor will acquire specialized knowledge, skills and attitudes for a variety of diverse vocations such as laboratory technical positions, biology and general/physical science education, medicine, and academic research.

Chemistry Minor

20 credits

—Liberal Arts, Pre-Law, Pre-Seminary, Secondary Education Programs

Required Courses		20 credits
CHE205	Chemistry of Living Systems	4
CHE211	Chemistry I	4
CHE212	Chemistry II	4
CHE321	Organic Chemistry I	4
CHE322	Organic Chemistry II	4
Optional Electives		
CHE395	Independent Study in Biochemistry	3
PHY211	Physics I	4
PHY212	Physics II	4

ARTICULATION AGREEMENT

between

Washtenaw Community College

PHYSICS

and

Concordia University

PHYSICS (Minor)

Transfer Guide

PHYSICS MINOR-All Programs					
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE		
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS
MAT221	Calculus I & Analytic Geometry	4	MTH191	Calculus I	5
MAT222	Calculus II & Analytic Geometry	4	MTH192	Calculus II	4
MAT231	Linear Algebra	3	MTH197	Linear Algebra	4
MAT323	Calculus III & Analytic Geometry	4	MTH293	Calculus III	4
MAT341	Differential Equations	3	MTH295	Differential Equations	4
PHY223	Mechanics, Sound & Heat	5	PHY221	Analytical Physics I	5
PHY224	Electricity, Magnetism and Light	5	PHY222	Analytical Physics II	5

Concordia University

Physics

The following minor is a collaboration effort between Eastern Michigan University and Concordia. This minor may be combined with a Mathematics Major. For more information, contact faculty members of the Mathematics or Physics departments of the Division of Natural Sciences.

Physics Minor

39 credits

—Liberal Arts, Pre-Law, Pre-Seminary, Secondary Education Programs

Required Courses taken at Concordia		28 credits
MAT221	Calculus I & Analytical Geometry	4
MAT222	Calculus II & Analytical Geometry	4
MAT231	Linear Algebra	3
MAT323	Calculus III & Analytical Geometry	4
MAT341	Differential Equations	3
PHY223	Mechanics, Sound & Heat	5
PHY224	Electricity, Magnetism & Light	5
Required Courses taken at Eastern Michigan University		11 credits
—The grades and credits for these courses will be transferred to Concordia University.		
PHY330	Intermediate Mechanics I	3
PHY360	Heat & Thermodynamics	4
PHY370	Modern Physics	3
PHY372	Modern Physics Laboratory	1