#### **ARTICULATION AGREEMENT**

between

#### **Washtenaw Community College**

and

## Concordia University PRE-MEDICAL/PRE-DENTAL

#### **Transfer Guide**

PRE-MEDICAL/PRE-DENTAL MAJOR-All Programs						
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE			
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS	
BIO201	General Biology	4	BIO101	Concepts of Biology	4	
BIO332	Human Anatomy & Physiology I	4	BIO111	Anatomy & Physiology-Normal Structure & Function	5	
BIO333	Human Anatomy & Physiology II	4	BIO212	Pathophysiology: Alterations in Structure & Function	4	
BIO341	Microbiology	4	BIO237	Microbiology	4	
BIO343	Genetics	3	BIO208	Genetics	4	
BIO353	Cell Biology (without "w")	3	BIO215	Cell and Molecular Biology	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	
MAT221	Calculus I & Analytical Geometry	4	MTH191	Calculus I	5	
MAT261	Elementary Statistics	3	MTH160	Basic Statistics	4	
PHY211	Physics I	4	PHY111	General Physics I	4	
PHY212	Physics II	4	PHY122	General Physics II	4	

## Concordia University

### Pre-Medical or Pre-Dental School Preparation

The faculty from the Division of Natural Sciences and Mathematics of Concordia University has summarized the prerequisites of the following four medical schools in the state of Michigan: University of Michigan-Ann Arbor, Wayne State University-Detroit, and the two schools at Michigan State University-East Lansing; plus the following two dental schools: University of Michigan-Ann Arbor, and the University of Detroit Mercy Dental College-Detroit. Professional schools of medicine and dentistry, in most cases, require a baccalaureate degree from an accredited four year college like Concordia. Some will allow transfer after 90 semester hours or three years. Students are strongly urged to contact their medical and/or dental schools of choice for the exact prerequisite coursework recommended by that institution.

The Pre-Medical/Pre-Dental Major is designed to be followed by healthcare students wishing to apply to professional medical or dental schools, or colleges of Podiatric Medicine, Osteopathic Medicine, Chiropractic Medicine, etc. The following courses serve as the required and expected coursework for both the Medical College Admission Test (MCAT) or Dental Admission Test (DAT) and admission to medical and dental schools. Concordia offers no guarantee that the mere completion of the following coursework will result in admission to these schools.

#### Pre-Medical/Pre-Dental Major

-Liberal Arts Program Only

55\*-59 credits

Required Courses		55*-59 credits
BIO201*	General Biology*	4*
BIO332	Human Anatomy & Physiology I	4
BIO333	Human Anatomy & Physiology II	4
BIO341	Microbiology	4

BIO343	Genetics	3
BIO351	Immunology (w)	3
BIO353	Cell Biology (w)	3
BIO/CHE395	Independent Study in Biochemistry	3
CHE211	Chemistry I	4
CHE212	Chemistry II	4
CHE321	Organic Chemistry I	4
CHE322	Organic Chemistry II	4
MAT221	Calculus I & Analytical Geometry	4
MAT261	Elementary Statistics	3
PHY211	Physics I	4
PHY212	Physics II	4

\*Students with sufficient grades in two years of high school biology may be exempted from BIO201.

**Possible Minors:** Various minors are appropriate for the pre-medical/pre-dental student (e.g. Psychology, Sociology), any minor of interest to the student is possible and encouraged (e.g. Music, English, Theatre), or additional coursework in the sciences and general electives. Individual professional schools have expectations of a well-rounded undergraduate education. Students are advised to contact professional schools of their choice to determine the additional coursework recommended by these institutions in the pursuit of their career goals.

#### ARTICULATION AGREEMENT

between

#### Washtenaw Community College PHYSICAL EDUCATION ACTIVITY

and

#### Concordia University PHYSICAL EDUCATION

#### **Transfer Guide**

PHYSICAL EDUCATION MAJOR-All Programs					
CONCORDIA UNIVERSITY		WASHTENAW COMMUNITY COLLEGE			
COURSE#	TITLE	CRS	CRS COURSE# TITLE CR		
BIO201	General Biology (Prerequisite to	(4)	BIO101	Concepts of Biology	4
	BIO332-Credits not counted in major)				
BIO332	Human Anatomy & Physiology I	(4)	BIO111	Anatomy & Physiology-Normal	5
	(Prerequisite for KIN334 & KIN335-			Structure & Function	
	Credits not counted in major)				
KIN201	Introduction to Physical Education	3	BIO110	Introduction to Exercise Science	3
KIN235	Motor Learning & Development	3	HSC147	Growth & Development	3
KIN335	Physiology of Exercise	3	BIO201	Physiology of Exercise	4
KIN400	Tests & Measurements in Physical	2	BIO225	Tests & Measurements in Exercise	3
	Education			Science	

	PHYSICAL EDUCATION MINOR-All Programs					
CONCORDIA UNIVERSITY			WASHTENAW COMMUNITY COLLEGE			
COURSE#	TITLE	CRS	COURSE#	TITLE	CRS	
BIO201	General Biology (Prerequisite to BIO332-Credits not counted in major)	(4)	BIO101	Concepts of Biology	4	
BIO332	Human Anatomy & Physiology I (Prerequisite for KIN334 & KIN335- Credits not counted in major)	(4)	BIO111	Anatomy & Physiology-Normal Structure & Function	5	
KIN201	Introduction to Physical Education	3	BIO110	Introduction to Exercise Science	3	
KIN235	Motor Learning & Development	3	HSC147	Growth & Development	3	
KIN335	Physiology of Exercise	3	BIO201	Physiology of Exercise	4	

# Concordia University Physical Education

The recognition of the importance of physical activity in the lives of all people underlies the curriculum of the Division of Kinesiology. Every student is encouraged to receive instruction and practice in a variety of lifetime sports and recreational activities. The Kinesiology curriculum is designed with an emphasis in the appreciation and study of human movement, with the goal to educate students for careers in teaching and coaching, athletics administration, recreation, and allied health and wellness programs.

#### **Physical Education Major**

31 credits

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

Required Courses		31 credits
KIN201	Introduction to Physical Education	3
KIN233	Sports Health	3

KIN235	Motor Learning & Development	3
KIN323	Adapted Physical Education	2
KIN334*	Biomechanics	3
KIN335*	Physiology of Exercise	3
KIN350	Coaching Methods	3
KIN400	Tests & Measurements in Physical Education	2
KIN401	Teaching Rhythms & Dance	2
KIN402	Theory & Practice of Individual Sports	2
KIN405	Theory & Practice of Team Sports/Games	2
KIN410	Health Education	3

<sup>\*</sup>Both KIN334 and KIN335 require BIO332-Human Anatomy & Physiology I as a prerequisite; and BIO332-Human Anatomy & Physiology I requires BIO201-General Biology as a prerequisite.

#### **Physical Education Minor**

21 credits

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

Required Courses		16 credits
KIN201	Introduction to Physical Education	3
KIN235	Motor Learning & Development	3
KIN334*	Biomechanics	3
KIN335*	Physiology of Exercise	3
Select two of the	e following courses.	
KIN401	Teaching Rhythms & Dance	2
KIN402	Theory & Practice of Individual Sports	2
KIN405	Theory & Practice of Team Sports/Games	2

<sup>\*</sup>Both KIN334 and KIN335 require BIO332-Human Anatomy & Physiology I as a prerequisite; and BIO332-Human Anatomy & Physiology I requires BIO201-General Biology as a prerequisite.

Electives—Select 5 credits from the following courses.		5 credits
KIN233	Sports Health	3
KIN323	Adapted Physical Education	2
KIN350	Coaching Methods	3