Catalog years 2022-present
Updated: 6/23/2022

WESTERN MICHIGAN UNIVERSITY

College of Education and Human Development

Exercise Science

Clinical/Pre-Professional Concentration 65-75 Hours
Human Performance Concentration 60-70 Hours
Strength and Conditioning Concentration 57-58 Hours

Monroe County Community College Transfer Guide

(No Minor Required; 122 Credit Hours Needed for Graduation)

WES	PRE-REQUISITES	COURSES	TRAN/SUB/GRADE	CR HR
I. EXERCISE SCIENCE CORE COURSES REQUIRED FOR ALL THREE CONCENTRATIONS (Must be completed with a "C" Grade or better)				
		HPHE 1520 Foundations of Exercise Science		3
	BIOS 1120 or 1600 or 1610	**BIOS 2110** Human Anatomy	BIOL 202	4
	BIOS 2110	**BIOS 2400** Human Physiology	BIOL 258	4
	BIOS 2110	**HPHE 2950** Kinesiology		3
	BIOS 2110; 2400	**HPHE 2980** Into to Exercise Physiology		3
	HPHE 2950 and 2980; or 1540	**HPHE 3960** Principles of Strength & Conditioning		3
	HPHE 2980 or 1540	**HPHE 3970** Exercise & Sports Nutrition		3
	HPHE 2950; 2980; 3150 or STAT 3660	****HPHE 4440** Prof Development in Exercise Science		3
	HPHE 2950; 2980; 3960; 3970; HPHE 3150 or STAT 3660	***HPHE 4450** Exercise Testing & Prescription		3
	HPHE 2950; 3960	**HPHE 4950** Biomechanics		3
Level II: Personal Wellness		**HPHE 1110 OR** **HPHE 1701** Health & Personal Wellness (2 cr) **AND PEGN** course (1 cr)	HPE 150	2 or 3
		***HPHE 1810** First Aid & CPR **OR** ***HPHE 3810** Healthcare Provider CPR	HPE 151	2
				Total Credits (36-37)
II. CHOOSE EITHER THE CLINICAL/PRE-PROFESSIONAL, THE HUMAN PERFORMANCE, OR THE STRENGTH AND CONDITIONING CONCENTRATION (All courses must be completed with a "C" or better)				
• The Clinical/Pre-Professional Concentration is ideal for students looking to go into healthcare fields such as medicine, physical therapy, physician assistant, occupational therapy, athletic training, chiropractic, and cardiac rehabilitation. • The Human Performance Concentration is ideal for students who wish to continue their education in exercise science areas such as exercise physiology, biomechanics, and motor control as well as conduct related research. • The Strength & Conditioning Concentration is ideal for students interested in becoming fitness professionals such as strength and conditioning specialists and personal trainers.				
CLINICAL/PRE-PROFESSIONAL CONCENTRATION SPECIFIC COURSES (PXCJ)				
		BIOS 1600 Biological Form & Function	BIOL 153	3
Level II: Scientific Lit. with lab	MATH 1110 w/ "C" *or* better placement	**CHEM 1100/1110** General Chemistry & Lab	CHEM 151	4
Level II: Scientific Lit. with lab	MATH 1110 w/ "C" *or* better placement	**PHYS 1130/1140** General Physics & Lab	PHY 151	5
Level II: Science and Technology		**PSY 1000** General Psychology	PSCYCH 151	3
Level II: Science and Technology (STAT 3660 only)	HPHE 1520 (for HPHE 3150) MATH 1100 w/ "C" *or* better *or* placement (for STAT 3660)	**HPHE 3150** Measurements/Evaluation/Stats **OR** **STAT 3660** Data Analysis for Biosciences	MAT 162	3 or 4
		HPHE 3500 Modification of Health Behavior		2

	HPHE 2980	**HPHE 5910** Clinical Exercise Physiology I		3
	HPHE 2980, 5910	**HPHE 5915** Clinical Exercise Physiology II		3
				Total Credits (26-27)
STRENGTH & CONDITIONING CONCENTRATION SPECIFIC COURSES (PXSJ)				
		BIOS 1120 Principles of Biology	BIOL 153	3
Level II: Scientific Lit. with lab	MATH 1100 w/ "C" *or* better or placement	**PHYS 1070/1080** Elem Physics & Lab	PHY 151	5
	HPHE 1520	**HPHE 3150** Measurements/Evaluation/Stats		3
	HPHE 3960; can be taken concurrently with HPHE 3970	**HPHE 4920** Athlete Testing and Evaluation		3
	HPHE 3960; 4920	**HPHE 4975** Tactical Training and Conditioning		3
				Total Credits (17)
HUMAN PERFORMANCE CONCENTRATION SPECIFIC COURSES (PXHJ)				
		BIOS 1600 Biological Form & Function	BIOL 153	3
Level II: Scientific Lit. with lab	MATH 1110 w/ "C" or better *or p*lacement	**CHEM 1100/1110** General Chemistry & Lab	CHEM 151	4
Level II: Scientific Lit. with lab	MATH 1110 w/ "C" or better *or* placement	**PHYS 1130/1140** General Physics & Lab	PHY 151	5
	HPHE 1520	**HPHE 3150** Measurements/Evaluation/Stats		3
Level II: Personal Wellness		**HPHE 3600** Sport and Performance Psychology		3
	HPHE 2980	**HPHE 4940** Advanced Exercise Physiology		3
				Total Credits (21)
III. COMPLETE EITHER THE CLINICAL/PRE-PROFESSIONAL CAPSTONE, THE HUMAN PERFORMANCE CASTONE, OR THE STRENGTH AND CONDITIONING CAPSTONE **(All courses must be completed with a "C" or better)**				
Clinical/Pre-Professional and Human Performance Capstone: Select One of the Three Options Below				
	All Required HPHE Courses	**Option 1. HPHE 4980** Internship in Exercise Science		3-6
	Junior or Senior Status	**Option 2. HPHE 5000** Studies in HPHE [Research in Exercise Science]		3-6
	Admittance to Exercise Science Accelerated Graduate Degree Program (AGDP)	**Option 3. Choose four AGDP courses from list below:** • **HPHE 6700** Exercise Metabolism • **HPHE 6710** Cardiovascular and Environmental Exercise Physiology • **HPHE 6730** Advanced Biomechanics • **HPHE 6740** Neuromuscular Control • **HPHE 6760** Exercise Science Seminar • **HPHE 6720** Laboratory in Exercise Physiology • **HPHE 6750** Laboratory Techniques in Biomechanics		12
				Total Credits (18-24)
Strength and Conditioning Capstone: Complete Both Courses Below				
	HPHE 3960; can be taken concurrently with HPHE 4920 & 3970	**HPHE 4982** Strength and Conditioning Internship I		2
	HPHE 4982	**HPHE 4983** Strength and Conditioning Internship II		2
				Total Credits (4)

*Take one semester before internship **Take two semesters before internship

Clinical/Pre-Professional Elective Suggestions

WES	PRE-REQUISITES	APPROVED COURSES	CR HR	Equivalent
	BIOS 1600	**BIOS 1610 (1500)** Molecular & Cellular Biology	4	BIOL 151
	BIOS 1600	**BIOS 1620 (1510)** Ecology & Evolution	4	
	CHEM 1120; BIOS 1610 (1500) and BIOS 1620 (1510)	**BIOS 2300** Cell Biology	3	
	CHEM 1120; BIOS 1610 (1500) and BIOS 1620 (1510)	**BIOS 2500** Genetics	3	BIOL 264
	BIOS 2500; CHEM 3750 and CHEM 3760	**BIOS 3120** Microbiology	5	
	56+ hrs; BIOS 2500, CHEM 3750/3760 or 3700/3710	**BIOS 3500** Human Physiology for Majors	5	
	CHEM 1100/1110	**CHEM 1120/1130** Gen Chem II	4	CHEM 152

	CHEM 3700/3710 or 3770/3780	**CHEM 3550/3560** Biochemistry	4	
	CHEM 1120/1130	**CHEM 3700/3710 *OR* 3750/3760** Organic Chemistry	4	CHEM 251
	CHEM 3750/3760	**CHEM 3770/3780** Organic Chemistry II	4	CHEM 252
Lev II: PW (PS)		**FCS 2660** Personal Nutrition (on-line and on campus)	3	HLTSC 151
		HOL 5360 Counseling Skills for Health Professions	3	
Level I: ODC		**HSV 2250** Growth, Development, and Aging	3	
Level II: ST	45+ hrs for NURS 3220 only	**PHIL 3340** Biomedical Ethics ***OR* NUR 3220** Health Care Ethics	4/3	
	PHYS 1130/1140	**PHYS 1150/1160** Gen Physics II	5	PHY 152
	PSY 1000	**PSY 2500** Abnormal Psychology	3	HPE 153
Level I: IE		**SOC 2000** Principles of Sociology	3	SOC 151
	SOC 2000	**SOC 3730** Sociology of Health & Illness	3	
Level II: ST	MATH 1100 w/"C" or better *or* placement	**STAT 3660** Data Analysis for Biosciences (If not taken as part of concentration)	4	MATH 162

CLINICAL/PRE-PROFESSIONAL ELECTIVE SUGGESTIONS - https://wmich.edu/sites/default/files/attachments/u1635/2022/Clinical_Pre-Professional%20Elective%20Suggestions.pdf

PROGRAM GUIDE—MEET WITH A CEHD ADVISOR TO DECLARE MAJOR
www.wmich.edu/education/advising