36

# EXERCISE SCIENCE, PRE-PROFESSIONAL CONCENTRATION, BS

# Bachelor of Science in Exercise Science, Pre-Professional Concentration (555232BS)

More on the Pre-Professional Concentration major (https://www.uakron.edu/sswe/programs/exercise-science/)

#### **Contact Information**

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### **Program Description**

The exercise science major is designed to prepare students for employment in commercial, corporate, clinical, community and government agencies with interest in the areas of physical activity and health promotion. The program prepares students to sit for certification examinations such as American College of Sports Medicine Exercise Physiologist Certified and the National Strength and Conditioning Association Certified Strength and Conditioning Specialist. Students choosing this pre-professional concentration can obtain the necessary pre-requisite courses for graduate programs including Physical Therapy, Occupational Therapy, Physician Assistant, Athletic Training, Doctor of Chiropractic, medical school and many other health profession advanced degrees.

All coursework within the major used for graduation requires a grade of C or better.

The following information has official approval of The School of Exercise and Nutrition Sciences and The College of Health and Human Sciences, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress Report (Stellic) which is definitive for graduation requirements. Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others. The transfer process is completed through an appointment with your academic advisor.

Three year accelerated option: for first time students who have earned credits for at least the first year of courses. Credits can be earned through qualifying scores on appropriate Advanced Placement (AP) exams or through College Credit Plus Program (CCP) courses.

Credits for qualifying AP scores or <u>CCP</u> courses are determined by the appropriate academic department. Departments may assign varied course credit, depending on the student's score on an AP exam or <u>grade</u> in a <u>CCP</u> course. Students may also receive credit by examination or via placement tests, where appropriate.

## Requirements Summary

Code	Title	Hours
	ucation Requirements (https://bulletin.uakron.edu/ ate/general-education/) *	17
Pre-admiss	ion Courses	27
Required Courses		38
Pre-Professional Concentration Electives		38
Total Hours		120

\* Several courses required for the major also satisfy General Education requirements. The University minimum of 36 credits are required for General Education and credit for these courses will apply to multiple requirements.

#### **General Education Courses**

Code	Title	Hours

Students pursuing a bachelor's degree must complete the following General Education coursework. Diversity courses may also fulfill major or Breadth of Knowledge requirements. Integrated and Applied Learning courses may also fulfill requirements in the major.

Learning courses may also runni requirements in the major.	
Academic Foundations	12
Mathematics, Statistics and Logic: 3 credit hours	
Speaking: 3 credit hours	
Writing: 6 credit hours	
Breadth of Knowledge	22
Arts/Humanities: 9 credit hours	
Natural Sciences: 7 credit hours	
Social Sciences: 6 credit hours	
Diversity	
Domestic Diversity	
Global Diversity	
Integrated and Applied Learning	2
Select one class from one of the following subcategories:	
Complex Issues Facing Society	
Capstone	
Review the General Education Requirements page for detailed course listings.	

#### **Pre-admission Courses**

**Total Hours** 

Code	Title	Hours
EXER 125	Introduction to Exercise Science	1
BIOL 200	Human Anatomy & Physiology I	3
BIOL 201	Human Anatomy & Physiology Laboratory I	1
BIOL 202	Human Anatomy & Physiology II	3
BIOL 203	Human Anatomy & Physiology Laboratory II	1

Total Hours		27
	Math Requirement	3
	Social Science Requirement	3
or COMM 106	Effective Oral Communication	
COMM 105	Introduction to Public Speaking	3
PSYC 100	Introduction to Psychology	3
ENGL 112	English Composition II	3
ENGL 111	English Composition I	3

# **Required Courses**

Code	Title	Hours
EXER 150	Concepts in Health & Fitness	3
EXER 201	Kinesiology	3
EXER 220	Health Promotion and Behavior Change	3
EXER 302	Physiology of Exercise	3
EXER 327	Exercise Leadership	3
EXER 330	Exercise and Weight Control	3
EXER 352	Strength & Conditioning Fundamentals	3
EXER 403	Exercise Testing	3
EXER 404	Exercise Prescription	3
EXER 410	Exercise in Special Populations	3
EXER 449	Organization & Administration for Health Care Professionals	3
EXER 460	Practicum in Exercise Science	3
EXER 485	Exercise Science Capstone	2
Total Hours		38

## **Pre-Professional Concentration Electives**

Code	Title	Hours	
Complete 38 credits 38			
BAHA 120	Medical Terminology		
BAHA 230	Basic Pharmacology		
BIOL 111	Principles of Biology I		
BIOL 112	Principles of Biology II		
BIOL 130	Principles of Microbiology		
BIOL 211	General Genetics		
CHEM 114	Introduction to General, Organic & Biochemistry (Lecture)		
CHEM 115	Introduction to General, Organic & Biochemistry (Laboratory)		
CHEM 151	Principles of Chemistry I		
CHEM 152	Principles of Chemistry I Laboratory		
CHEM 153	Principles of Chemistry II		
CHEM 154	Qualitative Analysis		
CHEM 263	Organic Chemistry Lecture I		
CHEM 264	Organic Chemistry Lecture II		
CHEM 265	Organic Chemistry Laboratory I		
CHEM 266	Organic Chemistry Laboratory II		
CHEM 401	Biochemistry Lecture I		
CHEM 402	Biochemistry Lecture II		
EXER 240	Principles of Sports Medicine		
EXER 275	Clinical Assessment & Evaluation Lower Extrem	ity	

Total Hours		38
PSYC 420	Abnormal Psychology	
PSYC 230	Developmental Psychology	
PHYS 262	College Physics II	
PHYS 261	College Physics I	
PHIL 361	Biomedical Ethics	
NUTR 316	Science of Nutrition	
NUTR 133	Nutrition Fundamentals	
HEDU 202	Stress Management	
EXER 480	Special Topics: Exercise Science	
EXER 470	Injury Pathology & Therapeutic Interventions	
EXER 465	Psychology of Injury Rehabilitation	
EXER 445	Therapeutic Exercise & Rehabilitation	
EXER 438	Cardiac Rehab Principles	
EXER 426	Nutrition for Sports	
EXER 418	Cardiorespiratory Function	
EXER 412	General Medical Aspects	
EXER 401	Musculoskeletal Anatomy II: Lower Extremity	
EXER 400	Musculoskeletal Anatomy I: Upper Extremity	
EXER 342	Clinical Assessment & Evaluation Upper Extremity	

# **Recommended Sequence**

1st Year		
Fall Semester		Hours
BIOL 200	Human Anatomy & Physiology I <sup>1</sup>	3
BIOL 201	Human Anatomy & Physiology Laboratory	1
ENGL 111	English Composition I 1,2	3
PSYC 100	Introduction to Psychology <sup>1</sup>	3
STAT 250 or STAT 260	Statistics for Everyday Life <sup>3</sup> or Basic Statistics	3-4
EXER 125	Introduction to Exercise Science	1
	Hours	14-15
Spring Semester		
BIOL 202	Human Anatomy & Physiology II	3
BIOL 203	Human Anatomy & Physiology Laboratory II	1
ENGL 112	English Composition II 1,2	3
EXER 150	Concepts in Health & Fitness	3
	Social Science Requirement	3
COMM 106	Effective Oral Communication <sup>1</sup>	3
or COMM 105	or Introduction to Public Speaking	
	Hours	16
2nd Year		
Fall Semester		
EXER 201	Kinesiology	3
	Humanities Requirement	3
	Elective course 4	4
	Elective course 4	3
	Elective course <sup>4</sup>	1
	Hours	14
Spring Semester		
EXER 220	Health Promotion and Behavior Change	3

	Art Requirement	3
	Elective course <sup>4</sup>	3
	Elective course 4	3
	Elective course <sup>4</sup>	4
	Hours	16
3rd Year		
Fall Semester		
EXER 302	Physiology of Exercise	3
EXER 352	Strength & Conditioning Fundamentals	3
	Arts/Humanities Requirement	3
	Elective course <sup>4</sup>	4
	Elective course <sup>4</sup>	4
	Hours	17
Spring Semester		
EXER 460	Practicum in Exercise Science	3
EXER 327	Exercise Leadership	3
	Elective course 4	4
	Elective course <sup>4</sup>	3
	Hours	13
4th Year		
Fall Semester		
EXER 330	Exercise and Weight Control	3
EXER 403	Exercise Testing	3
EXER 449	Organization & Administration for Health Care Professionals	3
	Complex Issues Requirement	3-4
	Elective course <sup>4</sup>	4
	Hours	16-17
Spring Semester		
EXER 410	Exercise in Special Populations	3
EXER 404	Exercise Prescription	3
EXER 485	Exercise Science Capstone	2
	Global Diversity Requirement	3
	Elective course <sup>4</sup>	3
	Hours	14
	Total Hours	120-122

Preadmission courses must average 2.5 GPA with an overall GPA of 2.75 or higher for admission to the program.

<sup>&</sup>lt;sup>2</sup> ENGL 111 and ENGL 112 must be completed with a grade of C or better.
<sup>3</sup> If a student is eligible for Precalculus, as needed for later science courses, the school recommends taking Basic Statistics instead of College Algebra. Many professional schools require a statistics class for admission. If a student places below Precalculus they may take both College Algebra and Basic Statistics.

Please see advisor for information on elective to take based on professional school that is chosen.