

BACHELOR OF SCIENCE IN APPLIED SCIENCE EXERCISE SCIENCE - MAT TRACK

Overview

YSU offers an accelerated-track opportunity for students to complete a Bachelor's degree in Exercise Science and the Master of Athletic Training program in five years. Accelerated track students will complete one year of MAT courses at the undergraduate level and one year at the graduate level.

Program Director

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COURSE	TITLE	S.H.
FIRST YEAR REQUIREMENT -STUDENT SUCCESS		
YSU 1500	Success Seminar	1-2
or YSU 1500S	Youngstown State University Success Seminar	
or HONR 1500	Intro to Honors	
General Education Requirements		
ENGL 1550	Writing 1	3-4
or ENGL 1549	Writing 1 with Support	
ENGL 1551	Writing 2	3
MATH 1510	College Algebra	4-6
or MATH 1510C	College Algebra with Co-requisite Support	
or MATH 1513	Algebra and Transcendental Function	
Natural Science (2 courses; one with lab)		
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
BIOL 2601 & 2601L	General Biology 1: Molecules and Cells and General Biology I: Molecules and Cells Laboratory	4
Arts and Humanities (6 s.h.)		
HIST 2650	CL History of American Democracy	3
Arts and Humanities Elective		
		3
Social and Behavioral Science (6 s.h.)		
PSYC 1560	General Psychology	3
FNUT 1551	Normal Nutrition	3
General Education Electives (9 s.h.)		
CMST 1545	Communication Foundations	3
General Education Elective Met with STATS in major		
General Education Elective Met with BIOL in major		
Major Required Courses		
KSS 1595	Introduction to Kinesiology and Sport Science	2
KSS 1559	Aerobic Conditioning Activities	1
KSS 1560	Resistance Training	2
KSS 15XX Activity Elective		1
KSS 2605	Sports First Aid and Injury Prevention	3
KSS 2625	Pedagogical Aspects of Exercise Science	3
STAT 2625	Statistical Literacy and Critical Reasoning	3-6
or STAT 2601	Introductory Statistics	
or STAT 2625C	Statistical Literacy and Critical Reasoning with Co-Requisite Support	
KSS 3700	Exercise Evaluation and Testing	4
KSS 3710 & 3710L	Physiology of Exercise and Physiology of Exercise Laboratory	5

KSS 3720	Kinesiology and Applied Anatomy	4
KSS 3730	Exercise Prescription	4
KSS 3760	Strength Training and Conditioning	3
KSS 4810	Clinical Exercise Testing and Prescription	4
KSS 4875	Exercise Counseling and Behavioral Strategies	4

Required additional courses. Credit hours do not count as part of the major. Hrs do count toward degree. (MATH & PHYS Pathway determines total required semester hours)

MATH 1511	Trigonometry Only required if taking PHYS 1501	3-4
or MATH 1511C	Trigonometry with Co-requisite Support	
PHYS 1501 & 1501L	Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1 Pre-Requisite - Math 1511 or 1511C	3-5
or PHYS 1506	Physics for Health Care	
BIOL 1551 & 1551L	Anatomy and Physiology 1 and Anatomy and Physiology 1 Laboratory	4
BIOL 1552 & 1552L	Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory	4
MAT 6901	Emergency and Acute Care	3
MAT 6902	Foundations of Therapeutic Interventions	3
MAT 6908	Gross Anatomy	6
MAT 6915	Evaluation of Lower Extremity Pathologies	4
MAT 6916	Therapeutic Interventions 1	3
MAT 6910	Clinical Practice 1	2
MAT 6925	Evaluation of Upper Extremity Pathologies	4
MAT 6946	General Medical Conditions Evaluation and Management	4
MAT 6926	Therapeutic Interventions 2	3
MAT 6930	Clinical Practice 2	2
MAT 6950	Evidence-Based Practice/Research	3

Students Graduate with their BSAS degree in Exercise Science

Total Semester Hours 128-138

Year 1

Fall		S.H.
YSU 1500 or YSU 1500S or HONR 1500	Success Seminar or Youngstown State University Success Seminar or Intro to Honors	1-2
ENGL 1550 or ENGL 1549	Writing 1 or Writing 1 with Support	3-4
MATH 1510 or MATH 1510C or MATH 1513	College Algebra or College Algebra with Co-requisite Support or Algebra and Transcendental Function	4-6
BIOL 1551 & 1551L	Anatomy and Physiology 1 and Anatomy and Physiology 1 Laboratory	4
KSS 1595	Introduction to Kinesiology and Sport Science	2

Semester Hours 14-18

Spring

ENGL 1551	Writing 2	3
BIOL 1552 & 1552L	Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory	4
MATH 1511	Trigonometry Required only if taking Phys 1501 with Lab	3-4
or MATH 1511C	or Trigonometry with Co-requisite Support	
Not required if MATH 1513 completed with a grade of C or higher		
HIST 2650	CL History of American Democracy	3
KSS 1559	Aerobic Conditioning Activities	1

KSS 1560	Resistance Training	2
Semester Hours		16-17
Year 2		
Fall		
PHYS 1501 & 1501L	Fundamentals of Physics 1 1511 or 1511C	3-5
or PHYS 1506	or Physics for Health Care	
PSYC 1560	General Psychology	3
KSS 2625	Pedagogical Aspects of Exercise Science	3
KSS 15XX Activity Elective		1
KSS 3710 & 3710L	Physiology of Exercise and Physiology of Exercise Laboratory	5
Semester Hours		15-17
Spring		
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
STAT 2625 or STAT 2601 or STAT 2625C	Statistical Literacy and Critical Reasoning or Introductory Statistics or Statistical Literacy and Critical Reasoning with Co-Requisite Support	3-6
FNUT 1551	Normal Nutrition	3
KSS 3700	Exercise Evaluation and Testing	4
Semester Hours		14-17
Year 3		
Fall		
BIOL 2601 & 2601L	General Biology 1: Molecules and Cells and General Biology I: Molecules and Cells Laboratory	4
KSS 2605	Sports First Aid and Injury Prevention	3
KSS 3720	Kinesiology and Applied Anatomy	4
KSS 3730	Exercise Prescription	4
Semester Hours		15
Spring		
KSS 3760	Strength Training and Conditioning	3
KSS 4810	Clinical Exercise Testing and Prescription	4
KSS 4875	Exercise Counseling and Behavioral Strategies	4
Any Gen Ed Arts and Humanities		3
CMST 1545	Communication Foundations	3
Semester Hours		17
Summer		
MAT 6901	Emergency and Acute Care	3
MAT 6902	Foundations of Therapeutic Interventions	3
MAT 6908	Gross Anatomy	6
Semester Hours		12
Year 4		
Fall		
MAT 6910	Clinical Practice 1	2
MAT 6915	Evaluation of Lower Extremity Pathologies	4
MAT 6916	Therapeutic Interventions 1	3
MAT 6946	General Medical Conditions Evaluation and Management	4
Semester Hours		13
Spring		
MAT 6925	Evaluation of Upper Extremity Pathologies	4
MAT 6926	Therapeutic Interventions 2	3
MAT 6930	Clinical Practice 2	2

MAT 6950	Evidence-Based Practice/Research	3
Semester Hours		12
Total Semester Hours		128-138

Student Learning Outcomes

Student Learning Outcome #1:

- Students will demonstrate knowledge and skills in health, fitness, and performance assessment.
- Students will conduct physical fitness assessments for healthy participants and those with controlled disease.
- Students will interpret cardiorespiratory fitness assessments.

Student Learning Outcome #2

- Students will demonstrate skills in risk factor and health risk identification and the ability to prescribe and implement exercise safely in healthy individuals, special populations (i.e. older adults, youth, and pregnant women), individuals with controlled cardiovascular, pulmonary, and metabolic diseases, and other clinical populations.
- Students will prescribe and implement Exercise Rx, using FITT-VP principles, for healthy participants, special populations (i.e. older adults, youth, and pregnant women), participants with controlled cardiovascular, pulmonary, and metabolic diseases, and other clinical populations based on health status and goals.
- Students will establish progression guidelines for resistance, aerobic and flexibility exercises to achieve the goals of the participant.
- Students will determine safe and effective exercise programs to achieve desired outcomes and goals.
- Students will demonstrate knowledge regarding the implementation of a weight management program as indicated by personal goals that are supported by pre-participation health screening, health history, and body composition/anthropometric
- The student will demonstrate skill in modifying exercise prescriptions based on environmental conditions.

Student Learning Outcome #3

- Students will demonstrate competency in effectively educating, exercise counseling and using behavioral strategies regarding lifestyle modification for individuals.
- Optimize adoption and adherence to exercise programs and other healthy behaviors by applying effective communication techniques, behavioral and motivational strategies.
- Students will demonstrate their knowledge by providing educational resources to support clients in the adoption and maintenance of healthy lifestyle behaviors.
- Students will demonstrate their knowledge by providing support within the scope of practice of an ACSM Certified Exercise Physiologist and refer to other health professionals as indicated.

Student Learning Outcome #4:

- Students will demonstrate competency in the legal and professional tasks related to the discipline
- Students will create and disseminate risk management guidelines for a health/fitness facility, department or organization to reduce member, employee and business risk
- Students will create an effective injury prevention program and ensure that emergency policies and procedures are in place.
- Students will demonstrate knowledge in establishing policies and procedures for the management of health fitness facilities based on accepted safety and legal guidelines, standards and regulations

Student Learning Outcome #5

- Students will demonstrate knowledge of implementing management policies related to the discipline.
- Students will demonstrate knowledge in developing and executing a marketing plan to promote programs, services and facilities
- Students will demonstrate knowledge in managing human resources in accordance with leadership, organization, and management techniques.
- Students will demonstrate knowledge in managing fiscal resources in accordance with leadership, organization, and management techniques.