

BACHELOR OF SCIENCE IN APPLIED SCIENCE EXERCISE SCIENCE - MAT TRACK

Program Director:

Tyler Singer, Ph.D.

tjsinger@ysu.edu

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.

Standard Curriculum:

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	
MATH 1511	Trigonometry (Only to be taken if PHYS 1501 is taken)	3-4
or MATH 1511C	Trigonometry with Co-requisite Support	
Natural Sciences		
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 (2 courses)		
Social Sciences		
PSYC 1560	General Psychology	3
FNUT 1551	Normal Nutrition	3
General Education Electives (9 s.h.)		
CMST 1545	Communication Foundations	3
General Education Elective <small>Met with PHYS in major</small>		
General Education Elective <small>Met with BIOL in major</small>		
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 (13 s.h.)		
PHYS 1501 & 1501L	Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1 (PHYS sequence determines MATH course needed)	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
Select three courses that count as Dual-Credit (9 s.h.)		
MAT 6901	Emergency and Acute Care	9
MAT 6902	Foundations of Therapeutic Interventions	
MAT 6903	Foundations of Athletic Training Clinical Practice	
MAT 6908	Functional Human Gross Anatomy	
MAT 6915	Evaluation of Lower Extremity Pathologies	
MAT 6916	Therapeutic Interventions 1	
MAT 6910	Clinical Practice 1	
MAT 6925	Evaluation of Upper Extremity Pathologies	
MAT 6946	General Medical Conditions Evaluation and Management	
MAT 6926	Therapeutic Interventions 2	20
MAT 6930	Clinical Practice 2	
MAT 6950	Evidence-Based Practice/Research	
Minor or Electives to reach 120 credits		20
Students Graduate with their BSAS degree in Exercise Science		
Total Semester Hours		120-130

Curriculum

Year 1		S.H.
Fall		
YSU 1500	Success Seminar	1-2
or YSU 1500S	or Youngstown State University Success Seminar	
or HONR 1500	or Intro to Honors	
ENGL 1550	Writing 1	3-4
or ENGL 1549	or Writing 1 with Support	
MATH 1510	College Algebra	4-6
or MATH 1510C	or College Algebra with Co-requisite Support	
or MATH 1513	or Algebra and Transcendental Function	
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
CMST 1545	Communication Foundations	3
Arts and Humanities Elective		
KSS 1559	Aerobic Conditioning Activities	1

KSS 1560	Resistance Training	2
MATH 1511 or MATH 1511C	Trigonometry <small>Required if taking Phys 1501</small> or Trigonometry with Co-requisite Support	3-4
Semester Hours		19-20
Year 2		
Fall		
PHYS 1501 & 1501L or PHYS 1506	Fundamentals of Physics 1 or Physics for Health Care	3-5
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
Arts & Humanities Elective		3
Semester Hours		14
Year 4		
Fall		
Dual Credit Courses		6
Electives		9
Semester Hours		15
Spring		
Electives		11
Dual Credit Course		3
Semester Hours		14
Total Semester Hours		120-130

- 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.

DESIRED PERFORMANCE OUTCOME

- 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.

DESIRED PERFORMANCE OUTCOME

- 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

DESIRED PERFORMANCE OUTCOME

- 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

Learning Outcomes

Student Learning Outcome #1:

- Students will demonstrate knowledge and skills in health, fitness, and performance assessment.

DESIRED LEARNING OUTCOME