

BACHELOR OF SCIENCE IN APPLIED SCIENCE EXERCISE SCIENCE - MAT TRACK

Program Director: Garrett Kellar (ggkellar@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.

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Standard Curriculum:

COURSE	TITLE	S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS		
YSU 1500	Success Seminar	1-2
or SS 1500	Strong Start Success Seminar	
or HONR 1500	Intro to Honors	
General Education Requirements		9
ENGL 1550/1549	Writing 1	
ENGL 1551	Writing 2	
CMST 1545	Communication Foundations	
Mathematics Requirement		
MATH 1513	Algebra and Transcendental Function	5-7
or MATH 1510 & MATH 1511	College Algebra and Trigonometry	
Arts and Humanities (2 courses)		
PHYS 1501	Fundamentals of Physics 1	4
CHEM 1515	General Chemistry 1	3
CHEM 1515L	General Chemistry 1 Laboratory	1
Social Science (1 course)		
PSYC 1560	General Psychology	3
Social and Personal Awareness (1 course)		
FNUT 1551	Normal Nutrition	3
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	4
KSS 3700	Exercise Evaluation and Testing	4
KSS 3710	Physiology of Exercise	4
KSS 3710L	Physiology of Exercise Laboratory	1
KSS 3720	Kinesiology and Applied Anatomy	4
KSS 3730	Exercise Prescription	4
KSS 3760	Strength Training and Conditioning	3
KSS 4805	Administration of Exercise Programs	3
KSS 4810	Clinical Exercise Testing and Prescription	4
KSS 4875	Exercise Counseling and Behavioral Strategies	4
KSS 4880	Internship	8

Required additional courses. Credit hours do not count as part of the major. Hrs do count toward degree (13 s.h.)

BIOL 2601 & 2601L	General Biology 1: Molecules and Cells and General Biology I: Molecules and Cells Laboratory	4
BIOL 2602 & 2602L	General Biology 2: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory	4
BIOL 3705	Introduction to Human Gross Anatomy	4
BIOL 3705L	Introduction to Human Gross Anatomy Laboratory	0
BIOL 3730	Human Physiology	4
BIOL 3730L	Human Physiology Laboratory	1
Additional courses to meet 120 hours		7

Requires an additional 60 credit hours during the senior year upon acceptance to the MAT program

Total Semester Hours 120-123

3 + 2 Curriculum

Year 1		S.H.
Fall		
YSU 1500	Success Seminar	1
KSS 1500-Level Activity Elective		1
MATH 1513	Algebra and Transcendental Function	5
ENGL 1550	Writing 1	3
CMST 1545	Communication Foundations	3
KSS 1595	Introduction to Kinesiology and Sport Science	2
KSS 1559	Aerobic Conditioning Activities	1
Semester Hours		16
Spring		
KSS 1560	Resistance Training	2
ENGL 1551	Writing 2	3
CHEM 1515	General Chemistry 1	3
CHEM 1515L	General Chemistry 1 Laboratory	1
KSS 2625	Pedagogical Aspects of Exercise Science	3
BIOL 2601 & 2601L	General Biology 1: Molecules and Cells and General Biology I: Molecules and Cells Laboratory	4
Semester Hours		16
Year 2		
Fall		
BIOL 2602 & 2602L	General Biology 2: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory	4
PHYS 1501	Fundamentals of Physics 1	4
PHYS 1501L	Fundamentals of Physics Laboratory 1	1
KSS 3700	Exercise Evaluation and Testing	4
PSYC 1560	General Psychology	3
A&H Elective		3
Semester Hours		19
Spring		
BIOL 3730	Human Physiology	4
BIOL 3730L	Human Physiology Laboratory	1
KSS 3720	Kinesiology and Applied Anatomy	4
FNUT 1551	Normal Nutrition	3
KSS 2605	Sports First Aid and Injury Prevention	3
STAT 2625	Statistical Literacy and Critical Reasoning	4
Semester Hours		19
Year 3		
Fall		
KSS 3710	Physiology of Exercise	4
KSS 3710L	Physiology of Exercise Laboratory	1

A&H Elective		3
KSS 4875	Exercise Counseling and Behavioral Strategies	4
KSS 3730	Exercise Prescription	4
Semester Hours		16

Spring

KSS 4810	Clinical Exercise Testing and Prescription	4
KSS 3760	Strength Training and Conditioning	3
BIOL 3705 & 3705L	Introduction to Human Gross Anatomy and Introduction to Human Gross Anatomy Laboratory	4
SS Elective		3
SPA Elective		3
Semester Hours		17

Year 4**Fall****Graduate level courses will begin in year four.**

MAT 6900	Basic Athletic Training Laboratory	1
MAT 6910	Clinical Practice 1	1
MAT 6915	Evaluation of Lower Extremity Pathologies	4
MAT 5865	Functional Human Gross Anatomy	4
Semester Hours		10

Spring

MAT 6935	Athletic Training Organization and Administration	3
MAT 6920	Therapeutic Modalities	4
MAT 6925	Evaluation of Upper Extremity Pathologies	4
MAT 6930	Clinical Practice 2	2

Students receive BSAS at end of year four.

Semester Hours		13
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Year 5**Fall**

MAT 6940	Therapeutic Exercise	4
MAT 6945	General Medical Conditions	3
MAT 6960	Clinical Practicum 3	2
MAT 6985	Capstone Project 1	2
Semester Hours		11

Spring

MAT 6970	Pharmacology	3
MAT 6975	Advanced Seminar	3
MAT 6980	Clinical Practicum 4	1
MAT 6990	Capstone Project 2	2

Students receive MAT at end of year five.

Semester Hours		9
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Summer

MAT 6905	Psychosocial Aspects of Athletic Injuries	2
MAT 6950	Evidence-Based Practice/Research	3
MAT 6965		2
Semester Hours		7

Total Semester Hours		153
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- 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