LINDENWOOD

School of Health Sciences

Bachelor of Science in Exercise Science 2019-2020

Program Chair

For questions, comments, or additional information about the Exercise Science degree, please contact:

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Program Learning Outcomes

The purpose of the BS in Exercise Science program is developing professional, entry-level *Exercise Scientists* who are:

- 1. Prepared and workplace proficient for their first position in the field.
- 2. Experienced in the use of technology and equipment for assessment and exercise.
- 3. Able to develop and implement exercise prescriptions for apparently healthy, increased risk, athletic, and special populations.
- 4. Able to apply a strong natural sciences foundation to concepts in biomechanics, nutrition, research, exercise assessment and prescription, and programming.
- 5. Able to effectively read, comprehend, and critique published research.

Potential Career Paths

Adapted sports and recreation, cardiac rehabilitation, coaching, community wellness, corporate wellness, exercise administration, research, personal training, sport performance enhancement, strength and conditioning, and wellness

Preparation to pursue further education in the following fields:

Chiropractic, exercise physiology, dietetics, occupational therapy, physical therapy, physician assistant

	Courses	Credit Hours
Major	HFS21500 Introduction to Health and Fitness Sciences	3
	HFS33000 Recreation, Sport, and Fitness Administration	3
	EXS27500 Research Methods and Data Interpretation	3
	EXS31500 Exercise Physiology	3
	EXS31600 Exercise Physiology Lab	1
	EXS31700 Advanced Exercise Physiology	3
	EXS32500 Biomechanics	3
	EXS36000 Exercise Principles for Optimum Performance	4
	EXS38700 Exercise Testing	3
	EXS38800 Exercise Testing Lab	1
	EXS41000 Exercise Prescription and Implementation	3
	EXS43000 Physical Activity for Specific Populations	3
	HFS35000 Practicum	6
	HFS45000 Internship EXS33500 Independent Research	
	EXS44100 Research Internship	
	6 credits required, 3 of which must be an internship BSC22800 Human Anatomy and Physiology II	4
	School of Health Sciences Elective 200 level+	3
05.0	School of Health Sciences Elective 200 level+	3
GE Core GE Natural & Social Science/ Math	Composition I ENG/L 15000 or EPP 15000	3
	Composition II ENG/L 17000	3
	US History or Government	3
	GE-Human Culture: US History/Government Math	3
	MTH 14100 Basic Statistics (also a major requirement) PSY10000 (also a major requirement)	3
	GE-Social Science	
	BSC10000 or BSC24400 (also a major requirement) GE-Natural Science Lab	4
	CHM10000 or CHM 23000 (also a major requirement) GE-Social Science or GE-Natural Science	3 or 4
	EXS24000 (also a major requirement)	3
	GE-Social Science, GE-Natural Science, or GE-Math BSC22700 Anatomy and Physiology I (also a major	4
	requirement)	
	GE-Elective MTH15100 or MTH15200 (also a major requirement)	3
GE Human	GE-Elective Arts	3
Culture	GE-Fine Arts	
(two from this category should	Literature GE-Human Culture: Literature	3
also be classified	Non-Literature, Non-Arts Human Culture Elective GE-Human Culture	3
as Human Diversity)	Human Culture Elective	3
Free Electives or M	GE-Human Culture	26-27
May require LNO (1 credit) 12 credits of electives should be at 300 or 400 level		20 21
Total		120

Completion & Assessment Map

Year 1: Fall Year 1: Spring

BSC 10000 Concepts in Biology CHM 10000 Concepts in Chemistry

HFS 21500 Introduction to Health and Fitness Sciences EXS 24000 Nutrition through the Lifecycle

MTH 14100 Basic Statistics EXS 27500 Research Methods and Data Interpretation

GE. Elective. or Minor Course GE. Elective. or Minor Course GE. Elective. or Minor Course GE. Elective. or Minor Course

Overview of Cornerstone Assessment 1

Students will be assessed on their ability evaluate nutritional life cycle scenarios and will utilize a self-evaluation to explore their ability to read, comprehend, and critique research

> Year 2: Fall Year 2: Spring

BSC 22700 Anatomy and Physiology I BSC 22800 Anatomy and Physiology II

HFS 330 Recreation, Sport, and Fitness Administration **EXS 36000 Exercise Principles for Optimal**

Performance

MTH 15100 or MTH 15200 College Algebra or Pre-PSY 10000 Psychology calculus

GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course

Overview of Cornerstone Assessment 2

Students will be assessed on their communication skills and their exercise programming skills

Year 3: Fall Year 3: Spring EXS 38700/38800 Exercise Testing and Lab

EXS 31500/31600 Exercise Physiology and Lab EXS 32500 Biomechanics EXS 31700 Advanced Exercise Physiology

GE, Elective, or Minor Course GE, Elective, or Minor Course

Overview of Cornerstone Assessment 3

Students will be assessed on their proficiency in lab testing skills and in their research comprehension

Year 4: Fall Year 4: Spring

EXS 41000 Exercise Prescription and Implementation HFS 450 Internship

EXS 43000 Physical Activity for Specific Populations GE, Elective, or Minor Course

GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course GE, Elective, or Minor Course

Overview of Cornerstone Assessment 4

Students will be assessed on their client programming skills, internship site supervisor evaluations, and self-efficacy in programming