# Exercise Science and Outdoor Recreation -Exercise Science Emphasis, B.S.

The Exercise Science curriculum has been designed to address student needs and current market demands. Through practical experiences in laboratory settings using state of the art equipment such as the Biodex S4, students are exposed to real life rehabilitation experiences as well as researching functional abilities and performance aspects of collegiate athletes. Additional classroom and lab experiences allow students to conduct 3-D motion analysis, measure muscle activity using wireless EMG technology, and analyze gait patterns using the GaitRite System, as well as conducting assessments to determine maximum oxygen uptake (VO2 Max), body composition, and anaerobic power.

#### **Program Requirements**

Code	Title	Credit Hours
Total Credit Hours		120
Exercise Science and Outdoor Recreation Requirements		66 Credits
Complete the requirements		66
Emphasis Requirements		54
		Credits
BIOL 1615	College Biology I Laboratory	1
CHEM 1110	Elementary Chemistry for the Health Sciences PP	4
or CHEM 1210	Principles of Chemistry I PP	
ZOOL 2320	Human Anatomy	3
ZOOL 2325	Human Anatomy Laboratory	1
ZOOL 2420 & ZOOL 2425	Human Physiology and Human Physiology Laboratory	4
EXSC 270G	Foundations of Exercise Science GI	3
EXSC 3500	Kinesiology	3
EXSC 3700 & EXSC 3705	Exercise Physiology	4
EXSC 3730	and Exercise Physiology Laboratory Biomechanics	3
		3
Complete one of the followi	-	3
STAT 2040 PSY 3110	Principles of Statistics QL (4)	
	Statistics for the Behavioral Sciences (4)	
EXSC 3400	Statistical Analysis in Exercise Science (3)	00
EXSC 4000	ne following (make sure selections will satisfy the requirements for upper-division course work):	22
EXSC 4000	Clinical Exercise Physiology (3)	
	Obesity Physiology and Physical Activity (undefined)	
EXSC 4100	Physiology of Aging (3)	
EXSC 4200	Exercise Metabolism (3)	
EXSC 4400	Physical Activity Promotion in the Community (3)	
EXSC 4500	Advanced Sports Nutrition (3)	
EXSC 4550	Principles of Strength and Conditioning (3)	
EXSC 4600	Advanced Biomechanics (3)	
EXSC 4700	Advanced Gross Motor Assessment (3)	
CHEM 1220	Principles of Chemistry II PP (4)	
PHYS 2020	College Physics II PP (4)	
ZOOL 4400	Pathophysiology (4)	
ZOOL 4700	Advanced Anatomy (4)	
PSY 2300	Abnormal Psychology (3)	
Emphasis Elective Require		
Any course(s) 1000-level or	r higher	3

Any course(s) 1000-level or higher

3

1

## **Core Requirements**

Code	Title	Credit Hours
Total Credit Hours		66
General Education Requirements		36 Credits
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
ENGL 2010	Intermediate Academic Writing CC	3
MATH 1050	College Algebra QL	4
or MATH 1055	College Algebra with Preliminaries QL	
Complete one of the following:		3
HIST 2700	US History to 1877 AS (3)	
or HIST 2710	US History since 1877 AS	
HIST 1700	American Civilization AS (3)	
HIST 1740	US Economic History AS (3)	
POLS 1000	American Heritage AS (3)	
POLS 1100	American National Government AS (3)	
Complete the following:		
PHIL 2050	Ethics and Values IH	3
HLTH 1100	Personal Health and Wellness TE	2
or EXSC 1097	Fitness for Life TE	
Distribution Courses:		
BIOL 1010	General Biology BB <sup>1</sup> Exercise Science students must take BIOL 1610 and BIOL 1615; Outdoor Recreation students must take BIOL 1010	<sup>e</sup> 3
or BIOL 1610	College Biology I BB	
Physical Science		3
Third Science Distribution		3
Humanities		3
Fine Arts		3
Social/Behavioral Science		3
Discipline Core Requirements		17 Credits
EXSC 2500	Sports Medicine	3
EXSC 3550	Motor Learning and Control WE	3
EXSC 3750	Psychosocial Aspects of Human Performance	3
EXSC 3270	Exercise Testing and Prescription <sup>2</sup> Exercise Science students must take EXSC 3270; Outdoor Recreation students must take REC 385G	3
or REC 385G	Ethical Concerns in Recreation GI	
EXSC 4300	Research Methods in Exercise Science and Outdoor Recreation WE	3
EXSC 4950	Senior Seminar <sup>3</sup> Exercise Science students must take EXSC 4950; Outdoor Recreation students must take REC 4950	2
or REC 4950	Senior Seminar	
Elective Requirements		13 Credits
Any 1000-level course(s) or higher		13
		-
1		

EXSC students must take BIOL 1610 and BIOL 1615, and REC students must take BIOL 1010

EXSC students must take EXSC 3270 and REC students must take REC 385G

3

EXSC students must take EXSC 4950 and REC students must take REC 4950

<sup>2</sup> 

#### **Graduation Requirements**

- 1. Completion of a minimum of 120 semester credits, 40 credits must be upper-division.
- 2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
- 3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
- 4. Completion of GE and specified departmental requirements.
- 5. No grades below C- in Discipline Core or Emphasis Courses.
- 6. Successful completion of at least one Global/Intercultural course.
- 7. Successful completion of at least two Writing Enriched (WE) courses.

Note: Students must obtain the departmental advisor's signature on an approved program plan prior to enrollment in their second semester of study.

# **Graduation Plan**

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/ or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http:// www.uvu.edu/wolverinetrack/).

	Credit Hours	1
CHEM 1215	Principles of Chemistry I Laboratory	
CHEM 1210	Principles of Chemistry I PP	
EXSC 2500	Sports Medicine	
EXSC 3270	Exercise Testing and Prescription	
ZOOL 2425	Human Physiology Laboratory	
ZOOL 2420	Human Physiology	
Semester 5		
Third Year	Credit Hours	1
General Elective	Creatit Haura	1
American Institutions Dist.		
EXSC 3750	Psychosocial Aspects of Human Performance Foundations of Exercise Science GI	
EXSC 3750	Psychosocial Aspects of Human Performance	
ZOOL 2320 ZOOL 2325	Human Anatomy Human Anatomy Laboratory	
Semester 4 ZOOL 2320	Human Apptomy	
	Credit Hours	1
BIOL 1615	College Biology I Laboratory	
Humanities Dist.		
PHIL 2050	Ethics and Values IH	
CHEM 1110	Elementary Chemistry for the Health Sciences PP	
BIOL 1610	College Biology I BB	
Semester 3		
Second Year		
	Credit Hours	1
General Elective		
MATH 1050 or MATH 1055	College Algebra QL or College Algebra with Preliminaries QL	
ENGL 2010	Intermediate Academic Writing CC	
Fine Arts Dist.		
BIOL 1010	General Biology BB	
Semester 2		
	Credit Hours	1
General Elective		
or ENGH 1005	or Literacies and Composition Across Contexts CC	
ENGL 1010	Introduction to Academic Writing CC	
MAT 1010	Intermediate Algebra	
EXSC 1097	Fitness for Life TE	
PSY 1010	General Psychology SS	
Semester 1		Credit Hour

#### Semester 6

Statistics Requirement

	Total Credit Hours	120
	Credit Hours	15
EXSC Elective		2
EXSC Elective		3
EXSC Elective		4
EXSC Elective		3
EXSC Elective		3
Semester 8		
	Credit Hours	15
EXSC Elective		3
General Elective		3
EXSC 4300	Research Methods in Exercise Science and Outdoor Recreation WE	3
EXSC 3550	Motor Learning and Control WE	3
EXSC 3730	Biomechanics	3
Semester 7		
Fourth Year		
	Credit Hours	15
EXSC 4950	Senior Seminar	2
General Elective		3
EXSC 3705	Exercise Physiology Laboratory	1
EXSC 3700	Exercise Physiology	3
EXSC 3500	Kinesiology	3

### **Program Learning Outcomes**

- 1. To interact and communicate effectively by presenting information in oral, written, and technologyformats; collaborating with professionals and peers; expressing ideas clearly; and giving and receiving feedback.
- 2. To utilize knowledge, skills, and abilities to evaluate health behavior risk factors; develop, implement, and evaluate exercise and wellness programs, and emplay behavioral strategies to motivate individuals to adopt and maintain positive lifestyle behaviors.
- 3. To demonstrate behavior that preserves the integrity of a profession, prevents misrepresentation, and protects the consumer.
- 4. To continuously improve knowledge, skills, and abilities and to uphold a professional image through actions and appearance.
- 5. To demonstrate critical thinking by making decisions based on multiple perspectives and evidence-based practice.