

BS in Exercise Science (663435) MAP Sheet

Life Sciences, Exercise Sciences (this is an unofficial MAP)

For students entering the degree program during the 2025-2026 curricular year.



University Core and Graduation Requirements

Suggested Sequence of Courses

University Core Requirements:

Requirements	# Classes	Hours	Classes
University 101	1	2.0	UNIV 101
Religion Cornerstones			
Teachings and Doctrine of the Book of Mormon	1	2.0	REL A 275
Jesus Christ and the Everlasting Gospel	1	2.0	REL A 250
Foundations of the Restoration	1	2.0	REL C 225
The Eternal Family	1	2.0	REL C 200
The Individual and Society			
American Heritage	1-2	3-6.0	from approved list
Global and Cultural Awareness	1	3.0	from approved list
Skills			
First Year Writing	1	3.0	from approved list
Advanced Written and Oral Communications	1	3.0	WRTG 316 recommended
Quantitative Reasoning	1	3-4.0	MATH110, 111, 112*, 118 or 119*
Languages of Learning (Math or Language)	1	3-4.0	MATH 112*, 118 or 119* or STAT 121*
Arts, Letters, and Sciences			
Civilization 1	1	3.0	from approved list
Civilization 2	1	3.0	from approved list
Arts	1	3.0	from approved list
Letters	1	3.0	from approved list
Biological Science	1	3.0	CELL 120* or NDFS 100*
Physical Science	1	3.0	CHEM 105* & PHSCS 105*
Social Science	1	3.0	PSYCH 111*, SOC 111*, or 112*
Core Enrichment: Electives			
Religion Electives	3-4	6.0	from approved list
Open Electives	varied	varied	personal choice

Graduation Requirements:

Minimum residence hours required:	30.0
Minimum hours needed to graduate:	120.0

FRESHMAN YEAR

1st Semester

UNIV 101	2.0
First-year Writing of American Heritage	3.0
CELL 120 (Biological Science)	3.0
Civilization 1 elective	3.0
CHEM 105	4.0
Quantitative Reasoning (if required)**	0-3.0
Total Hours	15-18.0

**If the student needs to complete this requirement, it is strongly suggested that they do so before the 1st semester of freshman year

2nd Semester

First-year Writing of American Heritage	3.0
Arts or Letters elective	3.0
CHEM 106 & 107	4.0
STAT 121	3.0
Religion Cornerstone course	2.0
Total Hours	15.0

SOPHOMORE YEAR

3rd Semester

Civilization 2 elective	3.0
PHSCS 105 & 107	4.0
NDFS 100	3.0
Social Science elective	3.0
Religion Cornerstone Course	2.0
Total Hours	15.0

4th Semester

Arts or Letters elective	3.0
Global & Cultural Awareness elective	3.0
MMBIO 240	3.0
CELL 220	4.0
Religion Cornerstone course	2.0
Total Hours	15.0

JUNIOR YEAR

5th Semester

CELL 305 or 363 and 363	4.0
EXSC 362	3.0
General Education courses and/or general electives	3.0
Adv. Written & Oral Communication	3.0
Religion Cornerstone course	2.0
Total Hours	15.0

6th Semester

EXSC 463	3.0
EXSC 464	0.5
Major elective (from Requirement 2)	3.0
EXSC 440	4.0
Religion elective	2.0
General Electives	4.0
Total Hours	16.5

SENIOR YEAR

7th Semester

Major Elective (from Requirement 2)	3.0
Major Elective (from Requirement 5)	3.0
General electives	7.0
Religion elective	2.0
Total Hours	15.0

8th Semester

Major Elective (from Requirement 2)	3.0
Major Elective (from Requirement 2)	3.0
Major Elective (from Requirement 5)	3.0
General electives and/or religion elective	6.0
Total Hours	15.0

Please check with departments for current availability of all courses.

Note: Students are encouraged to complete an average of 15–16 credit hours each semester or 30–32 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.

BS in Exercise Science (663435)

2025 - 2026 Program Requirements (60.5 Credit Hours)

REQUIREMENT 1 Complete These Major Required Courses (11.5 Credits)

EXSC 151 - Intro to Exercise Sciences	1.0
EXSC 362 - Kinesiology and Biomechanics	3.0
EXSC 440 - Advanced Musculoskeletal Human Anatomy (includes lab)	4.0
EXSC 463 - Exercise Physiology	3.0
EXSC 464 - Exercise Physiology Lab	0.5

REQUIREMENT 2 Complete at Least 2.0 Experiential Learning Credits

EXSC 399R - Exercise Science Internship	3.0v
EXSC 399R - Huntsman World Senior Games Internship	3.0v
EXSC 497R - Undergraduate Research and Study	3.0v

REQUIREMENT 3 Complete at Least 12 Major Elective Credits

EXSC 221 - Science of Wellness	3.0
EXSC 320 - Basic Athletic Training	3.0
EXSC 321 - Basic Athletic Training Lab	0.5
EXSC 360 - Exercise is Medicine	3.0
EXSC 387 - Lifestyle and Chronic Disease Prevention	3.0
EXSC 460 - Orthopaedic Impairments and Therapeutic Exercise	3.0
EXSC 462 - Clinical Biomechanics	3.0
EXSC 466 - Introduction to Electrocardiograms	2.0
EXSC 468 - Problems in Exercise Prescription	2.0
EXSC 470 - Functional Neuroanatomy	3.0
EXSC 488 - Motor Control	3.0
EXSC 501 - Pathophysiology for the Athletic Trainer	3.0
EXSC 516 - Orthopedic Evaluation 1: Lower Extremities	3.0
EXSC 517 - Orthopedic Evaluation 2: Upper Extremities and Trunk	3.0
EXSC 518 - Therapeutic Interventions 2, Rehabilitation	3.0

REQUIREMENT 4 Complete the Following Non-Major Required Courses (28.0 credits)

CELL 120 - Science of Biology	3.0
CELL 220 - Human Anatomy (with lab)	4.0
CHEM 105 - General College Chemistry 1 with Lab (Integrated)	4.0
CHEM 106 - General College Chemistry 2	3.0
CHEM 107 - General College Chemistry Laboratory	1.0
MMBIO 240 - Molecular Biology	3.0
NDFS 100 - Essentials of Human Nutrition	3.0
PHSCS 105 - General Physics 1	3.0
PHSCS 107 - General Physics Lab 1	1.0
STAT 121 - Principles of Statistics	3.0

REQUIREMENT 5 Complete 1 Physiology Option (4.0 Credits)

OPTION 5.1 Complete 1 course	
CELL 305 - Human Physiology	4.0
OPTION 5.2 Complete 2 courses	
CELL 362 - Advanced Physiology	3.0
CELL 363 - Advanced Physiology Laboratory	1.0

REQUIREMENT 6 Complete at Least 3 Non-Major Elective Credits

Note: SOME OF THESE ELECTIVES HAVE REQUIRED PREREQUISITES	
CELL 320 - Dissection Techniques in Human Anatomy 1.0	1.0
CELL 325 - Tissue Biology (with lab) 3.0	3.0
CELL 360 - Cell Biology 3.0	3.0
CELL 363 - Advanced Physiology Laboratory 1.0	1.0
CELL 365 - Pathophysiology 4.0	4.0
CELL 484 - Human Embryology 3.0	3.0
CELL 561 - Physiology of Drug Mechanisms 3.0	3.0
CELL 565 - Endocrinology 3.0	3.0
CHEM 285 - Introductory Bio-organic Chemistry 4.0	4.0
CHEM 351 - Organic Chemistry 1 3.0	3.0
CHEM 351M - Organic Chemistry 1 - Majors 3.0	3.0
CHEM 352 - Organic Chemistry 2 3.0	3.0
CHEM 352M - Organic Chemistry 2 - Majors 3.0	3.0
CHEM 353 - Organic Chemistry Laboratory - Nonmajors 2.0v	2.0v
CHEM 481 - Biochemistry 3.0	3.0
HLTH 320 - Advanced First Aid and Safety 3.0	3.0
HLTH 335 - Health Behavior Change 3.0	3.0
*MATH 112 - Calculus 1 4.0	4.0
MATH 119 - Introduction to Calculus 4.0	4.0
MMBIO 221 - General Microbiology 3.0	3.0
MMBIO 222 - General Microbiology Laboratory 1.0	1.0
MMBIO 241 - Molecular and Cellular Biology Laboratory 1.0	1.0
NDFS 200 - Nutrient Metabolism 3.0	3.0
NDFS 201 - Society, Nutrition, and Chronic Disease 3.0	3.0
NDFS 305 - Nutritional Implications of Disease 4.0	4.0
NDFS 310 - Nutrition and Metabolism in Sports and Exercise 3.0	3.0
PHSCS 106 - General Physics 2 3.0	3.0
PHSCS 108 - General Physics Lab 2 1.0	1.0
*PSYCH 111 - Introduction to Psychological Science 3.0	3.0
PSYCH 220 - Human Development: Life Span 3.0	3.0
PSYCH 342 - Abnormal Psychology 3.0	4.0
PWS 340 - Genetics 3.0	3.0
SOC 111 - Introductory Sociology 3.0	3.0
SOC 112 - Current Social Problems 3.0	3.0
STDEV 170 - Introduction to Health Professions 1.0	1.0
STDEV 317 - Career Strategies 2.0	2.0

Note to Students Desiring to Pursue Master of Athletic Training (MAT) degree: In order to prepare for acceptance into the MAT graduate degree program, you must take the following courses during your BS Exercise Science major: EXSC 320, 321, 387, 501, 516, 517, 518, 601, and PSYCH 111.

Contact Life Sciences Advisement (2060 LSB) for additional information (Isa.byu.edu; 801-422-3042; lifesciences@byu.edu). See MAT website for details. Some elective courses may be offered only in Spring term.

Note to Premed Students: Professional schools and graduate programs may require additional courses not required for this major. Contact the programs to which you may apply to determine specific courses that meet their entrance requirements. Students considering professional or graduate degrees should take at least two semesters of mathematical courses. The following required or elective courses are strongly recommended for students considering professional or graduate degrees in the exercise sciences: MMBio 241; CELL 360, 362, 363; Chem 351, 352, 353, 481; Math 119; Stat 121. For more information contact the Preprofessional Advisement Center, 3328 WSC, (801) 422-3044. Contact potential schools of choice for a complete list of entrance requirements.

THE DISCIPLINE

The exercise science program is designed to prepare students for entry into graduate school in one of the disciplines related to exercise science or one of the healthcare professional schools.

Students majoring in exercise science explore how the body functions during physical activity and exercise. Principles and concepts taught in human anatomy and physiology, exercise physiology, biomechanics, neurophysiology, chemistry, physics, and nutrition are mastered to help understand how the body responds to acute bouts of exercise and how it adapts to chronic physical activity and exercise. The impact that physical activity and exercise have on one's capacity to do work, physical performance, as well as its impact on health and disease makes study of this discipline rewarding.