## EXERCISE SCIENCE AND PRE-HEALTH PROFESSIONS

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Exercise Science is the study of the human body's metabolic and physiological response and adaptation to acute and chronic exercise. The coursework encompasses several disciplines including human anatomy, human physiology, exercise physiology, biochemistry, biomechanics, and nutrition that provide a framework for the development of exercise and nutrition-based intervention programs for disease prevention, enhanced human performance, and therapeutic rehabilitation. The Exercise Science & Pre-Health Professions major prepares students for admission into several health-related professional programs including physical therapy, occupational therapy, medicine, physician assistant, dentistry, accelerated nursing, and cardiopulmonary rehabilitation. The curriculum also prepares students to become nationally certified by the American College of Sports Medicine and the National Strength and Conditioning Association for employment as Certified Exercise Physiologists, Certified Personal Trainers, and Certified Strength and Conditioning Specialists.

## Specific Requirements for Admission to Exercise Science and Pre-Health Professions

Enrollment is based upon the following requirements: A minimum of 30 credits in Creighton University coursework; a grade of "C" or better in the requisite courses, BIO 201, BIO 202, BIO 205, BIO 206, CHM 203, CHM 204, CHM 205, and CHM 206; and in good standing before declaring the major. Students apply for admission to the major through the College of Arts and Sciences website.

## **Prerequisite Courses:**

| Code              | Title  | Credits |  |  |
|-------------------|--|---------|--|--|
| Requisite Courses |  |         |  |  |
| BIO 201           | General Biology: Organismal and Population               | 3       |  |  |
| BIO 202           | General Biology: Cellular and Molecular                  | 3       |  |  |
| BIO 205           | General Biology: Organismal and Population<br>Laboratory | 1       |  |  |
| BIO 206           | General Biology: Cellular and Molecular Laborato         | ory 1   |  |  |
| CHM 203           | General Chemistry I                                      | 3       |  |  |
| CHM 204           | General Chemistry I Laboratory                           | 1       |  |  |
| CHM 205           | General Chemistry II                                     | 3       |  |  |
| CHM 206           | General Chemistry II Laboratory                          | 1       |  |  |

## **B.S., Exercise Science and Pre-Health Professions requirements (41-42 credits)**

| Code              | Title                                  | Credits |  |  |
|-------------------|--|---------|--|--|
| Required courses: |  |         |  |  |
| EXS 125           | First Aid                              | 2       |  |  |
| EXS 240           | Foundations of Fitness and Wellness    | 3       |  |  |
| EXS 320           | Human Physiology                       | 4       |  |  |
| EXS 331           | Human Anatomy                          | 4       |  |  |
| EXS 335           | Exercise Physiology                    | 4       |  |  |
| EXS 391           | Career Preparation and Professionalism | 3       |  |  |
| EXS 401           | Exercise Prescription                  | 3       |  |  |
| EXS 407           | Basic Statistics and Research Design   | 3       |  |  |

| EXS 450  | Nutrition for Health and Sports Performance | 3     |
|--|---|-------|
| EXS 489  | Laboratory Methods and Procedures           | 4     |
| EXS 334  | Biomechanics                                | 3-4   |
| or EXS 534                                       | Neuromechanics of Human Movement            |       |
| EXS 492  | Exercise Science Internship                 | 2     |
| or EXS 497                                       | Directed Independent Research               |       |
| Elective - choose one course from the following: |   | 3     |
| EXS 395  | Lower Body Evaluation                       |       |
| EXS 420  | Essentials of Strength and Conditioning     |       |
| EXS 535  | Applied Immunology                          |       |
| Total Credits                                    |   | 41-42 |