

## EXERCISE, SCI., WELLNESS

### ESW 100 ESW INTRODUCTORY SEMINAR

1 Lecture 0 Lab 1 Credit Hours(s)

This course introduces students to the field of Exercise Science and Wellness and assists them in making decisions leading to a successful career in the field of Exercise Science and Wellness. It provides an overview of the education and training needed, preparation for certification examinations, career opportunities and possible transfer options.

### ESW 101 INTRO TO EXERCISE PHYSIOLOGY

2 Lecture 0 Lab 2 Credit Hours(s)

This course is part of the A.S. degree in Exercise Science and Wellness. It will examine how the body functions under conditions of exercise stress. Students will study the practical implications of muscle function, cardio-respiratory function, training techniques and the effects of the environment.

### ESW 201 EXERCISE TESTING

2 Lecture 3 Lab 3 Credit Hours(s)

This course is designed for the A.S. degree in Exercise Science and Wellness. The student will learn to assess cardiorespiratory endurance, body fat, muscular strength, muscular endurance, flexibility, pulmonary function, and blood pressure, and to evaluate the results of such tests. Students will be instructed on how to perform a complete health history on a client, the legal issues they would be presented with, and how to interpret these results to the client.

Prerequisite: ESW 101

### ESW 202 EXERCISE PRESCRIPTION

2 Lecture 3 Lab 3 Credit Hours(s)

This course is designed for the A.S. degree in Exercise Science and Wellness. The student will learn the effects of exercise on special populations and to modify exercise based on age and medical conditions. It will also focus on training the student to utilize many pieces of equipment and how to keep the client motivated. The special populations and conditions to be discussed will include clients with coronary heart disease, diabetes, hypertension, asthma, obesity, pregnancy, arthritis, and low back pain. Special populations to be studied will include seniors and children. An additional lab hour will be spent on hands-on experience in our fitness center. Students will apply all clinical experiences to the clients in the center. The course may include placement in a local fitness center.

Prerequisite: ESW201

### ESW 203 PERSONAL TRAINING CERTIFICATN

2 Lecture 2 Lab 3 Credit Hours(s)

This course teaches concepts of personal training as laid out by the National Council on Strength and Fitness. The course will have a close examination of functional anatomy, biomechanics, muscle physiology, nutrition, body composition and overall physical fitness and health. The final written examination at the end of this course will be the certification exam for personal training offered by the National Council on Strength and Fitness.

### ESW 204 SPORTS NUTRITION SPEC CERTIF

3 Lecture 0 Lab 3 Credit Hours(s)

The NCSF Sports Nutrition Specialist Course builds upon foundational knowledge related to nutrition by exploring the intricacies of improving sports performance through adjustments to dietary practices. The course will provide the scientific basis for sports nutrition and covers the principles, background and rationale for current sports nutrition guidelines.

Pre-requisite: BIO 122 or permission of the HPEAD department.

### ESW 205 STRENGTH COACH CERTIFICATION

3 Lecture 0 Lab 3 Credit Hours(s)

This course teaches concepts of strength and conditioning as laid out by the National Council on Strength and Fitness. The course will examine functional anatomy, biomechanics, muscle physiology, nutrition, body composition and overall physical fitness and health. The final written examination at the end of this course will be the certification exam for strength coach offered by the National Council on Strength and Fitness.

### ESW 206 HEALTH-RELATED FITNESS DESIGN

3 Lecture 0 Lab 3 Credit Hours(s)

The course will introduce students to the concepts of health-related fitness. Students will assess their fitness, participate in and learn to execute activities to develop or maintain fitness, and design a personalized exercise program.

### ESW 207 CARDIO-RESP FTNS ASSES & DESGN

2 Lecture 2 Lab 3 Credit Hours(s)

This course will focus on cardiorespiratory physiological concepts related to aerobic capacity. Focus will be on the assessment of an individual's aerobic capacity and the application of this data in designing an effective aerobic exercise program. Guidelines from the American College of Sports Medicine will be implemented.

Prerequisite: ESW 201

### ESW 271 SPECIAL STUDY PROJECT I

1 Lecture 0 Lab 1 Credit Hours(s)

A special learning experience designed by one or more students with the cooperation and approval of a faculty member. Proposed study plans require departmental

approval. Projects may be based on reading, research, community service, work experience, or other activities that advance the student's knowledge and competence in the field of exercise science and wellness and related areas. The student's time commitment to the project will be approximately 35-50 hours.

#### ESW 272 SPECIAL STUDY PROJECT II

2 Lecture 0 Lab 2 Credit Hours(s)

Similar to ESW 271 except that the student's time commitment to the project will be approximately 70-90 hours.

#### ESW 273 SPECIAL STUDY PROJECT III

3 Lecture 0 Lab 3 Credit Hours(s)

Similar to ESW 271 except the student's time commitment to the project will be approximately 105-135 hours.