

# EXSC - EXERCISE SCIENCE

## EXSC 5899U Independent Study (3-0-3)

Prerequisite: Departmental approval. Individual research approved by instructor and department chair. May be taken twice for credit.

### Restriction(s):

Enrollment limited to students in the Department Prerequisite college.

## EXSC 6000 Comprehensive Exam/Thesis Defense (0-0-0)

Comprehensive Exam/Thesis Defense. Satisfactory grade indicates successful completion of exit exam or defense of thesis. Please consult with advisor to determine preparation for and dates of exams/defense. Departmental/Advisor approval required.

### Restriction(s):

Enrollment limited to students in the BSER06 or MSER06 programs.

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof or Department Prerequisite colleges.

## EXSC 6115 Advanced Strength and Conditioning (2-2-3)

Design and implementation of strength and conditioning programs. This course will cover testing, evaluation, effective exercise techniques, and programming to improve performance in athletic populations. The course will assist students seeking NSCA CSCS certification.

### Restriction(s):

Enrollment limited to students major in Exercise Science.

Enrollment limited to students in the BSER06 or MSER06 programs.

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6118 Advanced Exercise Physiology (3-0-3)

Advanced study of acute responses and chronic adaptations to physical activity, exercise, and sport participation. Emphasis on bioenergetics, neuromuscular, and cardiorespiratory function. Limitations to human performance also examined.

### Restriction(s):

Enrollment limited to students in the BSER06 or MSER06 programs.

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in a Master of Science degree.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6119 Research Methods in Human Performance (3-0-3)

Course will examine methods of conducting scientific research in fields relating to human performance. Emphasis on review of literature, research design, methods of data collection, and presentation of a research proposal.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6125 Readings in Exercise Science (3-0-3)

This course is designed to provide an in-depth analysis of selected topics in Exercise Science through the systematic evaluation of current and classic research.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

## EXSC 6135 Data Analysis (3-0-3)

This course is designed to introduce students to data analysis utilizing modern, commercially-available computer software

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6138 Pharmacological Considerations for Exercise Testing and Training (3-0-3)

This course examines autonomic nervous system (ANS) control of physiological function, drugs that impact ANS function, and the effect of ANS drugs on exercise testing, training, and risk. Similarly, commonly used drugs with different mechanisms of action and over-the-counter drugs will be examined. Students will also be introduced to Advanced Cardiac Life Support drugs, algorithms, and support materials.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6139 Exercise Epidemiology (0-0-3)

This course examines health-related aspects of physical activity, exercise, and fitness from the perspective of epidemiology. Physiological mechanisms underlying the positive effects of physical activity and exercise on risk reduction for disease identified and explored. Behavioral and environmental determinants of physical activity and regular participation in exercise reviewed.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6145 Advanced Nutrition for Exercise and Sport (3-0-3)

This course will examine nutrition as it relates to optimal training and sports performance. Nutritional recommendations for exercise training, specific supplementation, ergogenic aids, and sport-specific nutritional requirements explored.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6225 Fitness for Individuals with Disabilities (2-2-3)

This course is designed to provide students with information on working with individuals with disabilities in an exercise and physical activity setting. Disability information, safety concerns, exercise/physical activity modifications, and review of current research regarding individuals with disabilities fitness levels.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

## EXSC 6237 Advanced Exercise Testing and Prescription (2-2-3)

This course will provide theoretical and laboratory experiences in health risk appraisal, exercise testing, interpretation of results, and exercise prescription for healthy and clinical populations. ASCM guidelines emphasized.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

## EXSC 6238 Kinesmetrics (3-0-3)

Application of measurement theory and statistical analysis in kinesiology. Methods for determining validity, reliability, and objectivity of tests explored. Use of data for evidence-based decisions applicable to exercise science, kinesiology, and other allied health fields.

### Restriction(s):

Enrollment is limited to Graduate Level level students.

Enrollment limited to students in the College of Educ Health Prof college.

**EXSC 6436 Practicum in Exercise Science (0-0-3)**

Prerequisite: Departmental/Advisor approval. A practicum designed to provide hands-on experience/training in an Exercise Science-related field.

**Restriction(s):**

Enrollment is limited to Graduate Level level students.  
Enrollment limited to students in the College of Educ Health Prof or Department Prerequisite colleges.

**EXSC 6775 Seminar in Current Trends and Issues in Kinesiology (0-0-3)**

Course will explore various current trends and issues in Kinesiology.

**Restriction(s):**

Enrollment is limited to Graduate Level level students.

**EXSC 6898 Directed Research in Exercise Science (0-0-3)**

Directed research project in exercise science.

**Prerequisite(s):** (EXSC 6119 and EXSC 6135)

**Restriction(s):**

Enrollment limited to Degree - Graduate, Non-Degree - Graduate, Transient - Graduate, Audit - Graduate or Teacher Cert - Graduate students.

**EXSC 6899 Independent Study (3-0-3)**

Prerequisite: Departmental approval. Individual research approved in advance by instructor and department chair. May be taken twice for credit.

**Restriction(s):**

Enrollment is limited to Graduate Level level students.

**EXSC 6981 Thesis Research (0-0-(1-9))**

Completion of research project in Exercise Science. Formal proposal, collection and analysis of data, final composition of thesis, and formal presentation of research study. Project should result in manuscript submitted to an approved journal.

**Restriction(s):**

Enrollment is limited to Graduate Level level students.  
Enrollment limited to students in the College of Educ Health Prof or Department Prerequisite colleges.