**Exercise Science Graduate Courses**

**EXSC 5001 - Sport Sociology** - The social institution of sport in American society utilizing American baseball and its social impact as a means to that end. Lecture.

**EXSC 5003 - Governance and Ethics in Sport** - Ethical problems in the contemporary sport industry and the theoretical models available for analyzing these problems. Lecture.

**EXSC 5004 - Advanced Physiology of Exercise I** - Exercise physiology and its application to physical conditioning with emphasis on energy metabolism, nutrition, body composition and ergogenic aids. Prerequisites: Kinesiology 4037 or Approval of Department Head.

**EXSC 5005 - Advanced Physiology of Exercise II** - Exercise physiology and its application to physical conditioning and training with emphasis on the pulmonary system, cardiovascular system, endocrine system, muscular system, aging, and environmental stress. Prerequisites: Kinesiology 4037 or Approval of Department Head.

**EXSC 5006 - Psychology of Motor Learning** - Examination of neuropsychological principles involved in motor performance and the application of these principles in acquisition and regulation of motor skills. Lecture.

**EXSC 5007 - Research Methods in Exercise Science** - Study of principal research methods, significant existing research; and application of research principles to exercise science.

**EXSC 5008 - Nutrition and Wellness** - Nutrition as it relates to optimum performance and wellness. Nutrient needs with attention to diet that decreases risks of nutrition related diseases. Lecture.

**EXSC 5009 - Advanced Strength and Conditioning** - The scientific basis of conditioning athletes to include cardiovascular and resistance training and best practices for traditional equipment and methods. Lecture/Hybrid

**EXSC 5010 - Exercise Prescription and Leadership** - A concentrated study of various theories, procedures, and techniques of exercise testing and leadership. Prerequisites: Kinesiology 4037 or Approval of Department Head.

**EXSC 5012 - Exercise Electrocardiography** - This course is designed to examine the theory and practice of electrocardiography with emphasis placed on ECG’s administered during exercise tests.

**EXSC 5014 - Legal Issues in Sport** - Legal aspects of sports industries including the way in which contract, labor, tort and antitrust law influence the industries. Lecture/Online.

**EXSC 5015 - Safety and Risk Management in Sport** - This course explores risk management pertinent to managers. It provides practical knowledge of myriad safety concerns and risks associated with sport programming.

**EXSC 5016 - Sport Psychology** - The relationship of psychology to sport to include application of psychological principles for enhancement of coaching, recreation and wellness. Lecture/Online.

**EXSC 5017 - Leadership and Administration in Sports** - This course focuses on leadership of sport agencies with emphases on strategic planning, policy, human resources, programming, and organizational behavior.

**EXSC 5018 - Finance and Economics in Sport** - Financial theories and application that impact sport revenues and expenditures with current issues and trends in financing such organizations. Lecture/Online.

**EXSC 5020 - Facility and Event Development** - Examination of acquisition, planning, construction, safety and event management of sport facilities. Lecture/Online.

**EXSC 5022 - Marketing and Public Relations in Sport** - Marketing and public relations strategies for sport industries to include communication strategies for customer, employee, and media relations. Online.

**EXSC 5024 - Exercise Science Perspectives for Special Populations** - An examination of specialized exercise science considerations among various groups, with emphasis given to the elderly, females, children, and other unique populations.

**EXSC 5027 - Statistical Methods in Exercise Science** - Analysis of existing measurements and norms with emphasis on test construction and evaluation. The course will include the use of computer statistical analysis program (SPSS) on how to enter data, choose an appropriate statistical tool, and then interpret the results.

**EXSC 5030 – Biomechanics** - Detailed investigation of the anatomical and biomechanical systems responsible for human movement.

**EXSC 5038 - Cardiovascular Physiology** - A comprehensive study of the heart and circulatory systems with particular emphasis placed on both normal and abnormal physiological responses of the cardiovascular system to exercise. Prerequisites: Kinesiology 4037 or equivalent.

**EXSC 5039 - Cardiac Rehabilitation** - An examination of the concepts leading to design, implementation, and maintenance of cardiac rehabilitation programs. Emphasis is placed on the exercise component of cardiac rehabilitation programs, with attention also given to lifestyle and psychological interventions. Prerequisites: EXSC 5038 or equivalent.

**EXSC 5092 - Sports Medicine** - Study and research. Prerequisites: Approval of Department Head and Major Professor. (Formerly EXSC 591A)

**EXSC 5095 - Professional Internship (Exercise Science)** - On site clinical training for exercise science majors.

**EXSC 5096 - Selected Topics** - Study and research. Prerequisites: Approval of Department Head and Major Professor. (Formerly EXSC 591E)

**EXSC 5099 - Thesis** - Grades of CR (Credit) or NC (No Credit) will be awarded.