EXERCISE SCIENCE (EXSC)

Courses

EXSC 090. Internship. 1-3 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

EXSC 092. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

EXSC 096. Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

EXSC 150. Intro to Exercise Science. 1 Credit.
Introduces students to the discipline of exercise science, the responsibilities of the exercise science professional, and varied career paths in the field.

EXSC 175. Applied Kinesiology. 3 Credits.
Foundational course examining applied kinesiology of human movement with focus on musculoskeletal anatomy. Prerequisite: Minimum Sophomore Exercise Science major.

EXSC 190. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

EXSC 192. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

EXSC 196. Intermediate Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

EXSC 197. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

EXSC 198. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

EXSC 213. Biomechanics of Human Movement. 3 Credits.
The application of kinesiology and biomechanical principles and concepts to the analysis of human movement, posture, joint structure and function, and gait. Prerequisites: ANPS 019, ANPS 020, EXSC 175.

EXSC 220. Research Methods. 3 Credits.
Focuses on understanding the process of systematic inquiry. Emphasis on critical analysis and interpretation of published research related to exercise, physical activity, and health. Prerequisites: Minimum Sophomore standing; Exercise Science major; STAT 111 or STAT 141.

EXSC 240. Motor Skill Learning & Control. 3 Credits.
Examines theoretical perspectives and current principles associated with the control and learning of movement skills. Practical application of concepts to instructional and clinical settings emphasized. Prerequisites: Minimum Junior standing; Exercise Science or Teacher Education Physical Education majors only.

EXSC 242. Exercise and Sport Psychology. 3 Credits.
Emphasis on personality and behavioral dynamics of sport, psychological changes associated with exercise, assessment, performance enhancement, motivation, anxiety, group processes, and exercise adoption and maintenance. Prerequisite: PSYS 001.

EXSC 244. Nutrition for Health & Fitness. 3 Credits.
Explores how nutrition can influence overall health, disease, fitness and performance. Prerequisite: NFS 043.

EXSC 245. Evaluation & Prescription. 3 Credits.
This course will deliver in-depth applied and clinical functional measurement and evaluation techniques with subsequent exercise prescription for a variety of populations and conditions. Prerequisite: Senior standing in Exercise Science. Pre/Co-requisites: EXSC 250; Senior standing in Exercise Science.

EXSC 250. Exercise Physiology. 3 Credits.
Explores the acute and long-term responses to exercise on the metabolic, skeletal, cardiovascular, and respiratory systems. Prerequisites: ANPS 019, ANPS 020.

EXSC 252. Exercise Physiology Lab. 1 Credit.
The main objective of this laboratory course is to learn how to measure and evaluate physiological function and structure.

EXSC 260. Adapted Physical Activity. 3 Credits.
Examines current issues surrounding physical activity programming for individuals with disabilities. Emphasizes instructional strategies and modifications for effectively including individuals with diverse abilities into physical activity. Prerequisite: Minimum Junior standing, Exercise Science or Teacher Education Physical Education majors only.

EXSC 262. Human Perf & Ergogenic Aids. 3 Credits.
Evaluates the role and effectiveness of performance enhancing substances in sports: including supplements, diets, banned substances, prescription and social drugs, and others. Prerequisites: Exercise Science major; Senior standing.

EXSC 263. Exercise in Chronic Conditions. 3 Credits.
Advanced course in exercise prescription for a variety of unique populations. Recommended modifications and techniques that support fitness testing and and programming for individuals with specific exercise needs will be reviewed. Prerequisites: EXSC 260; Senior standing in Exercise Science.
EXSC 264. Certified Exerc Physiologist. 3 Credits.
Designed to prepare students for the ACSM Certified Exercise Physiologist exam and includes a high level review of exercise physiology, risk stratification, and fitness assessments. Prerequisites: EXSC 250, EXSC 245; Senior standing.

EXSC 268. Exercise Program Design. 3 Credits.
Students will gain competency prescribing, designing, monitoring, and adapting exercise based on scientific evidence to a wide range of individuals—from healthy to those with co-morbidities. Prerequisites: RMS 250, EXSC 245, Senior standing.

EXSC 270. Exer Sci Professional Seminar. 1 Credit.
Junior seminar that bridges the foundational curricular experience with professional practice and/or post-graduate education. Professional seminar topics include but are not limited to: resume development, interviewing techniques, collaborative communication, etc.

EXSC 272. Senior Capstone Experience. 1-6 Credits.
Supervised capstone experience in Exercise Science. Prerequisite: Senior standing in Exercise Science.

EXSC 273. EXSC WE Leadership. 3 Credits.
Seminar serves as a leadership experience for Exercise Science students; offers applied experience in the UVM Wellness Environment. Prerequisite: Minimum Junior standing.

EXSC 290. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

EXSC 292. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

EXSC 296. Advanced Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

EXSC 297. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

EXSC 298. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.