

DEPARTMENT OF REHABILITATION AND MOVEMENT SCIENCE

<http://www.uvm.edu/cnhs/rms/> (<http://www.uvm.edu/~cnhs/rms/>)

Exercise is a key to the maintenance of health and the prevention of heart disease, osteoporosis, diabetes, obesity and associated degenerative diseases and chronic conditions.

The Department of Rehabilitation and Movement Science offers undergraduate majors in Athletic Training (no longer accepting students) and Exercise Science, a Master of Science in Physical Activity and Wellness Science, an entry-level doctorate in Occupational Therapy, and a doctoral degree in Physical Therapy. A minor in Emergency Medical Services is also available. Graduates of these programs influence individuals across the life span by fostering wellness, preventing injuries and disease, facilitating high levels of skill, maintaining or restoring fitness, and rehabilitating individuals with injuries, diseases, chronic conditions and disabilities.

Requirements for admission are the same as the general university requirements, with the addition that applicants must have taken high school biology, mathematics through trigonometry or precalculus, and chemistry; physics is highly recommended.

MAJORS

REHABILITATION AND MOVEMENT SCIENCE MAJORS

Athletic Training B.S. (<http://catalogue.uvm.edu/undergraduate/nursingandhealthsciences/rehabilitationandmovementscience/athletictrainingedbs/>) (This program is no longer accepting students.)

Exercise Science B.S. (<http://catalogue.uvm.edu/undergraduate/nursingandhealthsciences/rehabilitationandmovementscience/exercisemovementbs/>)

MINORS AND CERTIFICATES

REHABILITATION AND MOVEMENT SCIENCE MINORS AND UNDERGRADUATE CERTIFICATES

Emergency Medical Services (<http://catalogue.uvm.edu/undergraduate/nursingandhealthsciences/rehabilitationandmovementscience/emergencymedicalservicesminor/>)

Integrative Health and Wellness Coaching (<http://catalogue.uvm.edu/undergraduate/nursingandhealthsciences/rehabilitationandmovementscience/integrativehealthwellnesscoachingcertificate/>) - Undergraduate Certificate

Integrative Health Care (<http://catalogue.uvm.edu/undergraduate/nursingandhealthsciences/rehabilitationandmovementscience/integrativehealthcarecertificate/>) - Undergraduate Certificate

GRADUATE

Entry-Level Occupational Therapy O.T.D.

Interprofessional Health Sciences Ph.D.

Physical Activity and Wellness Science M.S.

Physical Therapy D.P.T.

See the online Graduate Catalogue (<http://catalogue.uvm.edu/graduate/>) for more information

Athletic Training Courses

AT 168. Directed Obsv. in Athl Trng. 1 Credit.

Students will be expected to complete 60 hours of directed observation experience in the athletic training setting, or as assigned by the Instructor.

AT 173. Clinical Experience in AT V. 6-12 Credits.

The senior clinical experience shall consist of supervised fieldwork designed to give students a culminating experience for their professional development. These traditionally consist of both on and off-campus experiences in various settings including high-school, college, orthopedic clinics, and research. Prerequisites: Senior standing in Athletic Training Education Program.

AT 174. Clinical Experience in AT VI. 6-12 Credits.

The senior clinical experience shall consist of supervised fieldwork designed to give students a culminating experience for their professional development. These traditionally consist of both on and off-campus experiences in various settings including high-school, college, orthopedic clinics, and research. Prerequisites: Senior standing in Athletic Training Education Program.

AT 191. 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.

AT 193. 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.

AT 196. Special Topics. 1-6 Credits.

AT 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.

AT 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.

AT 291. 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.

AT 293. 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.

AT 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.

AT 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.

Exercise Science 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 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.

Rehabilitation Movement Sci Courses**RMS 090. Internship. 1-3 Credits.**

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RMS 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.

RMS 157. Prevention & Care Athletic Inj. 3 Credits.

Course focuses on prevention, recognition, and care of injuries incurred by the physically active. Includes topics of anatomy, biomechanics, nutrition, environmental concerns, and emergency procedures.

RMS 188. Org&Ldrship in AthTrn&Ex Sc. 3 Credits.

Concepts of diversity, equity, and active citizenship in health care management, professional development, leadership, and professional ethics for athletic training and exercise-related professions. Pre/co-requisites: Junior standing; AT and EMS majors only.

RMS 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.

RMS 191. Iceland Ther Thermal Springs. 3 Credits.

Travel study course to Southern Iceland; explores the therapeutic effects of thermal water as part of an integrative approach to healthcare and wellness; an elective for students interested in integrative healthcare, wellness, human physiology. Prerequisites: Minimum Junior standing; Instructor permission.

RMS 192. Independent Study. 1-18 Credits.

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RMS 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.

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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. Prerequisite: RMS 220.

RMS 213. Biomechanics of Human Movement. 3 Credits.

Students learn to apply 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; or enrollment in the Athletic Training MS program.

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