

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 an undergraduate major in 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

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 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 065. Foundations Ex & Hlth Act Pop. 3 Credits.

Provides a foundation of knowledge in the field of exercise science with a primary focus on maintaining health and performance in a physically active population. Surveys the basics of physical performance development, and injury prevention and care common to physically active populations. Prerequisites: Exercise Science major, Physical Education major, or Instructor permission.

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. EBP in Exercise Science. 3 Credits.

Develops students' basic evidence-based practice knowledge and skills, and applies findings to their practice as health and wellness professionals. Topics addressed include evidence-based practice research methods, research study design, basic statistics, and evaluation of research evidence as they apply to clinical practice and decision making. Prerequisites: 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 245. Evaluation & Prescription. 3 Credits.

Delivers 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, EXSC 252, 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.

Teaches how to measure and evaluate physiological function and structure. Prerequisites: ANPS 019, ANPS 020. Co-requisites: EXSC 250.

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.

An exploration of ergogenic and pharmacological supplements germane to the sport and exercise arena. Topics will include legal, banned, and over the counter pharmacological supplementation for performance enhancement and physiological improvement, drug testing procedures of major groups, and current position statements and/or research in this area. Prerequisites: Exercise Science major; EXSC 245 or EXSC 250.

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 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.**

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 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 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.

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 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.

RMS 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. 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.

RMS 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.

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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.

RMS 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. Prerequisite: RMS 220.