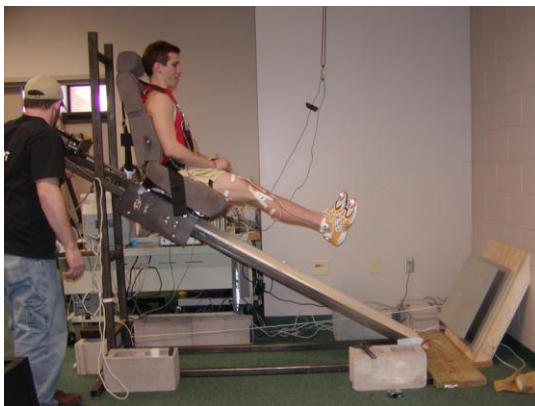
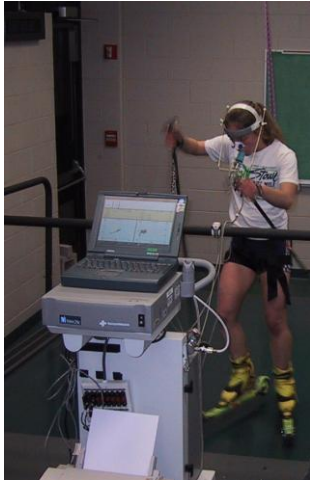


Exercise Science – M.S. Degree

Department of Health, Physical Education and Recreation
Northern Michigan University



The graduate program in Exercise Science is a two-year program of study for students with undergraduate backgrounds in athletic training, biological sciences, dietetics, health, nursing, physical education, physiology, and physical therapy. The primary objective of the program is to provide students with a working knowledge of the physiological and biomechanical aspects of human movement and exertion. A core of 17 required credits provides a strong foundation in the science of exercise. Students also complete a minimum of 15 elective credits that provide specialized study in a variety of applied areas.

NMU Exercise Science graduates have secured careers in corporate/adult fitness, cardiac rehabilitation, clinical graded exercise testing services, clinical exercise physiology, collegiate strength and conditioning coaching, specific sport coaching, physiology equipment sales, and personal training. Graduates have also pursued studies at the doctoral level in exercise physiology, biomechanics and physical therapy. Graduates have also progressed to Physician Assistant programs and medical schools.

Admission Requirements

To qualify for Regular admission into the degree program applicants must have a minimum overall undergraduate grade point average of 3.0 and a grade point average of 3.0 or higher in a relevant major or 9 semester hours of relevant course work (human anatomy and physiology, exercise physiology, kinesiology/biomechanics or physics). Applicants who do not meet the standards for regular admission but have a minimum grade point average of 2.50, may be admitted on a Conditional basis. Such applicants must also have completed the relevant course work listed above with a 3.0 grade point average in these courses. All applicants with less than a 2.75 are strongly encouraged to submit letters of recommendation from professionals familiar with their capability for advanced study in exercise science.

Application: <http://webb.nmu.edu/Colleges/GraduateStudies/>

Graduate Assistantships

The Exercise Science program normally supports several graduate assistant positions. Graduate assistants are assigned responsibilities that may include teaching laboratory sections for exercise physiology or anatomical/mechanical kinesiology, teaching in the health promotion activities program, working with the University adult fitness program (GETFIT), and/or assisting faculty with research. Graduate assistants are typically assigned a semester workload equivalent to 16-20 hours per week and receive a stipend plus tuition waiver for 16 credits per year. Applicants interested in being considered for a graduate assistant award must meet the standards listed under admission requirements for Regular admission. In addition, graduate assistant applicants must submit three letters of recommendation, provide a one-page personal statement, and provide an assessment of their ability to teach health promotion and physical activities, exercise science laboratory sections, and perform in an exercise leadership role and/or research assistant role.

An application form for the Graduate Assistantship award may be found under the link for Faculty and Students on the Graduate Studies web page:
<http://webb.nmu.edu/Colleges/GraduateStudies/>.

Graduate Assistant applicants in Exercise Science must also complete a Teaching Checklist (available as a PDF download from the Exercise Science web page). All Exercise Science GA application materials should be submitted by February 15th for the subsequent Fall Semester.

International Students

Additional information for international students is available from the International Affairs Office. Go to: http://www.nmu.edu/international_affairs/. International students must apply for admission one year prior to their expected start date to ensure sufficient time for application processing. A TOEFL score of 173 computer-based, iBT 60 or higher, or 500 paper-based is required for consideration.

Academic Advisors

Phillip (Phil) B. Watts, Ph.D. FACSM – program coordinator
Research interests: physiology, exercise metabolism, rock climbing performance, cross-country ski racing.
pwatts@nmu.edu - 906/227-1143

Randall (Randy) L. Jensen, Ph.D. FACSM CSCS
Research interests: biomechanics, cycling, aspects of muscular strength and power.
rajensen@nmu.edu - 906/227-1184

Additional information

WEB: <http://www.nmu.edu/hper/> click on the link for Graduate Program – Exercise Science.

Information about the campus is available via links from: www.nmu.edu/about/.

Information about the local area and region may be found at: www.marquette.org/.

Address postal inquiries to:

Exercise Science
HPER Department
Northern Michigan University
1401 Presque Isle Avenue
Marquette, MI 49855 USA

Requirements

Six specific courses (17 credits) are required and combined with a minimum of 15 elective credits for the degree. Students must also complete a formal Research Thesis (4 credits; Thesis Option) or submit two formal written File Papers (Non-Thesis Option). Thesis credits will count as part of the 15 elective credits for the degree.

Required Courses:

ES 500 - Introduction to research	(2 credits)
ES 511 - Statistics and measurements	(3)
ES 521 - Advanced exercise physiology	(3)
ES 540 - Advanced mechanical kinesiology	(3)
ES 531 - Advanced seminar in exercise science	(3)
HN 516 – Sport nutrition	(3)

Elective Course Selections:

A minimum of 15 elective credits are required for the degree. These credits may be taken in a variety of areas.

ES 501 Readings in exercise science	(1)
ES 571 Laboratory procedures (various topics)	(1)
ES 572 Internship in adult fitness/cardiac rehab.	(1-2)
ES 595 Special topics in exercise science	(var.)
ES 597/598 Directed study	(1-4)
ES 599 Thesis	(1-4)
HL 470 Electrocardiography	(1)
HL 485 Drug use and abuse	(3)
HN 415 Obesity and weight management	(4)
HN 452 Clinical nutrition	(4)
PE 421 Physiology of training for sport	(3)
PE 422 Sport biomechanics	(2)
PE 470 Psychology of athletic performance	(2)
PE 471 Exercise specialization	(2)
PE 472 Health & exercise leadership skills	(2)
PE 476 Exercise and fitness for special populations	(2)
PE 475 Theory of strength and conditioning	(2)
BI 425 Endocrinology	(3)
BI 510 Advanced human physiology	(4)
BI 511 Advanced animal physiology	(3)
CH 450 Intro. Biochemistry I	(4)
CH 452 Biochemistry II	(4)
CH 454 Biochemical techniques	(4)

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