

EXERCISE SCIENCE

Exercise Science

College of Allied Health & Nursing

Department of Human Performance

1400 Highland Center • 507-389-6313

Website: www.mnsu.edu/dept/colahn/hp.html

Chair: Robert Pettitt

The Exercise Science major is recognized by the National Strength and Conditioning Association for successfully meeting established educational criteria in strength and conditioning. It is a broad-based, science-oriented major that prepares students to create effective exercise prescriptions and to oversee exercise programs for normally healthy individuals. An Exercise Science major also prepares students for admission to graduate programs in Exercise Physiology, Cardiac Rehabilitation, Sports Psychology, and related areas. Students who have also completed the pre-physical or pre-occupational therapy concentrations in addition to this major have successfully gained admission to graduate programs in those areas.

Exercise science students are not required to complete a minor but may choose to obtain one to gain additional training or expertise.

POLICIES/INFORMATION

Admission to Program. Admission to the Exercise Science major is selective and not all students who apply will be accepted. Minimum requirements for application are as follows:

1. Minimum overall grade point average to 2.75
2. Completion of BIOL 330 with a grade of "C" or better
3. Successful completion of at least 32 semester credits

EXERCISE SCIENCE, BS

Degree completion = 120 credits

Required General Education

ENG	101	Composition (4)
IT	100	Introduction to Computing and Applications (4)

Major Common Core

Students may take HP 466W instead of HP 466.

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	414	Physiology of Exercise (3)
HP	439	Nutrition for Physical Activity and Sport (3)
HP	456	Athletic Testing and Conditioning (2)
HP	465	Legal Aspects of Physical Education and Sport (3)
HP	466	Graded Exercise Testing and Exercise Prescription (3)

Major Restricted Electives

(Please select 2 credits from these activity classes)

HP	103	Fitness for Living (1)
HP	104	Adult Fitness (1)
HP	105	Beginner and Advanced Beginner Swimming (1)
HP	107	Orienteering (1)
HP	114	Billiards and Bowling (1)
HP	117	Aerobic Conditioning (1)
HP	130	Self-Defense for Women (1)
HP	138	Beginning Horsemanship (1)
HP	139	Winter Survival (1)
HP	143	Aqua Exercise (1)
HP	145	Aquatic Conditioning and Water Polo (1)
HP	146	Intercollegiate Bowling (1)
HP	147	Intercollegiate Cross Country (1)
HP	148	Intercollegiate Softball (1)
HP	149	Intercollegiate Volleyball (1)
HP	150	Intercollegiate Wrestling (1)
HP	152	Intercollegiate Track and Field (1)

HP	153	Intercollegiate Swimming (1)
HP	154	Intercollegiate Football (1)
HP	155	Intercollegiate Basketball (1)
HP	156	Intercollegiate Baseball (1)
HP	157	Intercollegiate Golf (1)
HP	158	Intercollegiate Tennis (1)
HP	159	Intercollegiate Hockey (1)
HP	160	Introduction to Human Performance Studies (2)
HP	161	Intercollegiate Soccer (1)
HP	166	Team Game Skills (1)
HP	174	Individual-Dual Activities (1)
HP	175	Fitness Activities (1)
HP	176	Lifetime Activities I (1)
HP	177	Lifetime Activities II (1)
HP	178	Social, Folk and Square Dance Techniques (1)
HP	179	Winter Activities (1)
HP	180	Introduction to Handball (1)
HP	181	Advanced Handball (1)
HP	182	Aquatic Skills (1)
HP	190	Sport Activities (1)

Major Unrestricted Electives

Elective courses (choose 3-6 credits)

Pre-Physical Therapy emphasis requires 3 credits. The General Exercise Science emphasis requires 6 credits. Electives may not be double counted for courses required in the emphases.

BIOL	320	Cell Biology (4)
BIOL	324	Neurobiology (3)
BIOL	380	Blood Banking/Urinalysis (3)
BIOL	417	Biology of Aging and Chronic Diseases (3)
BIOL	433	Cardiovascular Physiology (3)
BIOL	466	Principles of Pharmacology (3)
BIOL	474	Immunology (4)
CHEM	360	Principles of Biochemistry (4)
FCS	440	Nutrition II (3)
FCS	446	Lifespan Nutrition (3)
HLTH	210	First Aid & CPR (3)
HLTH	321	Medical Terminology (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	455	Health and Aging (3)
HP	340	Prevention and Care (2)
HP	341	Athletic Training Techniques (3)
HP	413	Lifespan Motor Development (1-2)
HP	415	Advanced Sports Medicine (2)
HP	418	Intercultural Competence for Allied Health Professionals (3)
HP	421	Teaching Sport to Individuals with Disabilities (2)
HP	440	Medical Aspects of Athletic Training (3)
HP	441	Organize & Administer (2)
HP	451	Principles of Coaching (3)
HP	467	Worksite Wellness Program Development (3)
HP	470	Psychology of Coaching (3)
HP	472	Psychology of Sport and Athletic Injury (3)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	460	Psychology of Women (3)
PSYC	466	Psychology of Aging (3)

Required Minor: None.

Major Emphasis: General Exercise Science

The General Exercise Science emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

EXERCISE SCIENCE CONTINUED

Required General Education

CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
FCS	140	Introduction to Nutrition (3)
HLTH	210	First Aid & CPR (3)
MATH	112	College Algebra (4)

General Exercise Science Core

HP	160	Introduction to Human Performance Studies (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	291	Concepts of Fitness (2)
HP	392	Group Exercise Instruction (3)
HP	403	Research Methods & Statistics in Exercise Science (3)
HP	477	Behavior Change Strategies and Foundations (3)
HP	486	Small Group Personal Training (3)
HP	487	Applied Exercise Science (3)

General Exercise Science Capstone (choose 3-10 credits)

The General Exercise Science emphasis requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours.

HP	496	Internship (1-10)
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Major Emphasis: Pre-Physical Therapy

The Pre-Physical Therapy emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
MATH	115	Precalculus Mathematics (4)
PHYS	211	Principles of Physics I (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (3)

Pre-PT Core

BIOL	106	General Biology II (4)
CHEM	202	General Chemistry II (5)
HLTH	321	Medical Terminology (3)
HP	265	Orientation to Occupational and Physical Therapy (2)
PHYS	212	Principles of Physics II (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	466	Psychology of Aging (4)

Pre-PT Capstone (choose 3-10 credits)

The Pre-Physical Therapy emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

HP	496	Internship (1-10)
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