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)

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 431 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.
### 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)

### Major Emphasis: Pre-Physical Therapy
The Pre-Physical Therapy emphasis 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 emphasis 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)