EXERCISE SCIENCE

EXERCISE SCIENCE BS

Exercise Science
College of Allied Health & Nursing
Department of Human Performance
1400 Highland Center • 507-389-6313
Website: ahn.mnsu.edu/hp/
Chair: Lynnette M. Engeswick
Program Coordinator: Jessica Albers
Faculty: Jessica Albers, Mary Visser

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.

Academic Map/Degree Plan at www.mnsu.edu/programs/#All

POLICIES/INFORMATION
Admission to Program. Admission to the Exercise Science major is selective. Applications will be evaluated in October, March, and August. Minimum requirement for application are as follows:

1. Completion of at least 32 credits.
2. A minimum cumulative GPA of 2.75.
3. A minimum grade of C- in CHEM 111 or CHEM 201.
4. A minimum grade of C- in MATH 112 or MATH 115.
5. A minimum grade of C- in BIO 220.
6. Completed or currently enrolled in HP 291 and HP 160 or HP 265.

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)
BIOL 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 Aquatic Exercise (1)
HP 145 Aquatic Conditioning and Water Polo (1)
HP 146 Collegiate Bowling (1)
HP 147 Collegiate Cross Country (1)
HP 148 Collegiate Softball (1)
HP 149 Collegiate Volleyball (1)
HP 150 Collegiate Wrestling (1)
HP 152 Collegiate Track and Field (1)
HP 153 Collegiate Swimming (1)
HP 154 Collegiate Football (1)
HP 155 Collegiate Basketball (1)
HP 156 Collegiate Baseball (1)
HP 157 Collegiate Golf (1)
HP 158 Collegiate Tennis (1)
HP 159 Collegiate Hockey (1)
HP 160 Introduction to Human Performance Studies (2)
HP 161 Collegiate Soccer (1)
HP 162 Team Game Skills (1)
HP 174 Individual/Dual Activities (1)
HP 175 Fitness Activities (1)
HP 176 Lifetime Activities (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 (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)
- HITH 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 403W 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 (4)

Pre-PT Core (choose 34 credits)
- BIOL 106 General Biology II (4)
- CHEM 202 General Chemistry II (5)
- HITH 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) AND
- PSYC 455 Abnormal Psychology (4) AND
- 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)

COURSE DESCRIPTIONS
LOCATED UNDER HUMAN PERFORMANCE (HP) COURSE DESCRIPTIONS