Exercise Science

The vision of the Department of Human Performance, Sport, and Health is "preparing and empowering future professionals to promote physical activity, health, and sport."

The mission of the Department of Human Performance, Sport, and Health is "to provide students with opportunities to excel through purposeful experiences resulting in skills, including leadership, communication, use of technology, and appreciation of individual differences. Through our programs, students develop an appreciation of the contributions of physical activity, wellness, and sport to society."

The Exercise Science program prepares students for graduate work in exercise science–related areas, as well as in areas such as physical therapy, occupational therapy, medicine, chiropractic, and other allied health fields. Students entering the job market with an undergraduate degree in exercise science generally work with corporate and community fitness programs, health clubs, and similar fitness-related industries. The program may also be chosen by students who are interested in coaching but do not wish to teach in public elementary or secondary schools.

The Department of Human Performance, Sport, and Health offers minors and a coaching specialist program that provide students with the skills and expertise to work in health clubs, coach teams, or teach special needs students. Also, in addition to offering a variety of activities classes that enhance students' liberal education, the department works with Campus Recreation and Athletics to offer a broad range of learning experiences.

Programs

- Exercise Science, B.S. (Fitness Leadership and Promotion Emphasis) major
- Exercise Science, B.S. (Medical Fitness Emphasis) major
- Human Performance Minor minor

Exercise Science, B.S. major
Fitness Leadership and Promotion Emphasis

Required Credits: 67
Required GPA: 2.25

I REQUIRED COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3250 Human Anatomy (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3190 Athletic Training (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)

II REQUIRED EMPHASIS

B. Fitness Leadership and Promotion Emphasis

- BUAD 3361 Marketing (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4920 Directed Group Study (1 credit)

Select 1 course:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Select 1 course:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (4 credits)

Career Directions

- Aquatic Specialist
- Athletic Coaching
- Industrial Fitness
- Personal Trainer
- Strength and Conditioning Specialist

Also: Graduate Study and Professional Programs

Preparation

Recommended High School Courses

- Biology
- Chemistry
- Coaching
- Exercise Science
- Health
- Life Sciences
- Physical Education
- Sports
- Wellness
III EMPHASIS ELECTIVES
Select 2 courses (4-10 credits) from the following with consultation with your advisor.

- BIOL 1300 Medical Terminology (2 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 3260 Human Physiology (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
- HLTU 3500 Community Health (3 credits)
- HLTU 3710 Disease Prevention and Epidemiology (3 credits)
- PHYS 1102 General Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK 3830 Gerontology: Social Work Perspectives (2 credits)
- NRSG 3000 or higher (2-6 credits):

IV REQUIRED PRACTICAL EXPERIENCE
Complete 2-6 credits of the following course:

- PHED 4972 Internship: Exercise Science (2-6 credits)

SUGGESTED SEMESTER SCHEDULE FOR EXERCISE SCIENCE MAJOR, B.S.

Students are encouraged to take the required Exercise Science, B.S. courses in approximate numerical order. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions. Students are encouraged to consult the course descriptions for prerequisites.

The following Liberal Education courses are recommended for students majoring in Exercise Science: PSY 1100 Introductory Psychology, SOC 1104 Introduction to Sociology, and COMM 1090 Interpersonal Communication (or COMM 1100 Public Speaking).

Freshman
- BIOL 1400 Cellular Principles (4 credits)
- CHEM 1111 General Chemistry I (4 credits)
- or CHEM 2211 Principles of Chemistry I (4 credits)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PSY 1100 Introductory Psychology (4 credits)
- SOC 1104 Society and Social Issues (3 credits)
- COMM 1090 Interpersonal Communication (3 credits)
- or COMM 1100 Public Speaking (3 credits)
- Liberal Education requirements

Sophomore
- BIOL 3250 Human Anatomy (4 credits)
- HLTU 2100 First Aid and CPR/AED (1 credit)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)

PHED 4409 Sport Business Management (3 credits)
- PHED 3509 Sport Event Management (2 credits)
- PHED 3519 Sport Facility Management (2 credits)

PHED 4160 Directed Group Study (4 credits)
- HLTU 3500 Community Health (3 credits)
- HLTU 3710 Disease Prevention and Epidemiology (3 credits)
- PHYS 1102 General Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK 3830 Gerontology: Social Work Perspectives (2 credits)
- NRSG 3000 or higher (2-6 credits):

PHED 3110 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- HLTU 3500 Community Health (3 credits)
- HLTU 3710 Disease Prevention and Epidemiology (3 credits)
- PHYS 1102 General Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK 3830 Gerontology: Social Work Perspectives (2 credits)
- NRSG 3000 or higher (2-6 credits):

PHED 4309 Sport Event Management (2 credits)
- PHED 3120 Motor Learning (1 credit)
- PHED 3190 Athletic Training (2 credits)
- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Suggested Semester Schedule for Exercise Science, B.S. Major

Exercise Science, B.S. major

Medical Fitness Emphasis

Required Credits: 67
Required GPA: 2.25

I REQUIRED COURSES
Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 3250 Human Anatomy (4 credits)
- HLTU 2100 First Aid and CPR/AED (1 credit)
- HLTU 3500 Community Health (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- HLTU 3200 Introduction to Sport Biomechanics (3 credits)
- HLTU 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- Exercise Science Courses in Emphasis
- Exercise Science Electives

Junior
- HLTU 3300 Nutrition (3 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)
- Exercise Science Courses in Emphasis
- Exercise Science Electives

Senior
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- PHED 4920 Directed Group Study (1 credit)
- PHED 4972 Internship: Exercise Science (2-6 credits)
- Exercise Science Courses in Emphasis
- Exercise Science Electives

Select 1 course:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

Select 1 course:
II REQUIRED EMPHASIS

A. Medical Fitness Emphasis

- BIOL 3260 Human Physiology (4 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
  or STAT 3660 Statistics for the Health Sciences (3 credits)

III EMPHASIS ELECTIVES

Select 3 courses (7-15 credits) from the following with consultation with your advisor:

Note: BIOL 3260 and HLTH 3710 may not be used as an elective with the Medical Fitness emphasis.

- BIOL 1300 Medical Terminology (2 credits)
- BIOL 1500 Diversity of Life (4 credits)
- CHEM 1112 General Chemistry II (4 credits)
  or CHEM 2212 Principles of Chemistry II (4 credits)
- HLTH 3500 Community Health (3 credits)
- PHYS 1102 General Physics II (4 credits)
  or PHYS 2102 Physics II (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 2217 Abnormal Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)
- SOWK 3830 Gerontology: Social Work Perspectives (2 credits)
- Nursing 3000 or higher (2-6 credits):

IV REQUIRED PRACTICAL EXPERIENCE

Complete 2-6 credits of the following course:

- PHED 4972 Internship: Exercise Science (2-6 credits)

Human Performance Minor minor

Required Credits: 21
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

- BIOL 1110 Human Biology (4 credits)
  or BIOL 1400 Cellular Principles (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

Complete 1-3 credits of the following course:

- PHED 4975 Internship: Human Performance (1-3 credits)

REQUIRED OPTION

Select one of the following options (Physical Education and Exercise Science majors may not double count courses in either option.)

II REQUIRED OPTION

Option A. Pedagogy

Select 3 of the following courses:

- PHED 2640 Water Safety Instructor (3 credits)
- PHED 3100 Motor Development (2 credits)
  or PHED 3110 Motor Learning (2 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)

Option B. Fitness and Training

Select 1 of the following:

- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Select an additional 2 of the following courses:

Note: PHED 4160 and PHED 4170 cannot be double counted under Option B.

- HLTH 3300 Nutrition (3 credits)
- PHED 1240 Skills for Life: Techniques of Neuromuscular Relaxation (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 4160 Advanced Fitness Assessment & Prescription-Aerobic (3 credits)
- PHED 4170 Advanced Principles for Strength and Speed Training Exercise (3 credits)

Courses

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS