BACHELOR OF SCIENCE IN APPLIED SCIENCE IN EXERCISE SCIENCE

Program Director
Garrett Kellar
gkellar@ysu.edu

Overview
The Department of Kinesiology and Sport Science offers a Bachelor of Science in Applied Science degree with a major in exercise science. This program prepares students for certification through the American College of Sports Medicine (ACSM) as a Certified Exercise Physiologist (EP) and the National Strength & Conditioning Association (NSCA) as a Certified Strength and Conditioning Specialist (CSCS).

As such, graduates will be able to design safe and effective exercise prescriptions and conduct individual exercise programs, fitness testing, and health education for low- to moderate-risk individuals, individuals with controlled diseases, and individuals in special populations (e.g. pregnancy, hypertension, and osteoporosis).

Graduates are employed in a wide variety of settings that include:

- medically based wellness programs
- corporate wellness programs
- strength and conditioning
- clinical rehabilitation programs such as cardiac rehabilitation
- public and private fitness clubs

In addition, the program serves as a strong foundation for students wishing to pursue advanced degrees in the field of exercise science or enter professional schools such as:

- Athletic Training
- Physical Therapy
- Occupational Therapy
- Physician Assistant
- Medical school
- Graduate degree in Exercise Science/Physiology

Admission
Application forms and other information for formal admittance to the Department of Kinesiology and Sport Science may be obtained in the department office, Room 307, Beeghly Center. This program can be completed in eight semesters if students average 16 hours per semester.

For individual semester advisement, including general education, minor, and additional requirements, see assigned departmental advisor.

For more information, visit Exercise Science - B.S. in Applied Science (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/exercise-science-major/).

The following are KSS courses required in the major for this degree:

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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Mathematics Requirement

<table>
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<tr>
<td>MATH 1513</td>
<td>Algebra and Transcendental Function (5 s.h.)</td>
<td>5-7</td>
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<tr>
<td>or MATH 1511</td>
<td>College Algebra</td>
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<tr>
<td>&amp; MATH 1511</td>
<td>and Trigonometry</td>
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<tr>
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<tbody>
<tr>
<td>BIOL 1551</td>
<td>Anatomy and Physiology 1 &amp; Anatomy and Physiology 1 Laboratory</td>
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<tr>
<td>&amp; 1551L</td>
<td>and Anatomy and Physiology 1 Laboratory</td>
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<tr>
<td>BIOL 1552</td>
<td>Anatomy and Physiology 2 &amp; 1552L</td>
<td>4</td>
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<tr>
<td>&amp; 1552L</td>
<td>and Anatomy and Physiology 2 Laboratory</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>Social Science (1 Course)</td>
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<tr>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
<td>3</td>
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<td>Social and Personal Awareness (1 Course)</td>
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<tr>
<td>Arts and Humanities (2 Courses)</td>
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Major Requirements

<table>
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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>KSS 1595</td>
<td>Introduction to Kinesiology and Sport Science (FYE course)</td>
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<tr>
<td>KSS 1559</td>
<td>Aerobic Conditioning Activities</td>
<td>2</td>
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<tr>
<td>KSS 1560</td>
<td>Resistance Training</td>
<td>2</td>
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<tr>
<td>KSS 1550</td>
<td>Activity Elective</td>
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<tr>
<td>KSS 2605</td>
<td>Sports First Aid and Injury Prevention</td>
<td>3</td>
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<td>KSS 2625</td>
<td>Pedagogical Aspects of Exercise Science</td>
<td>3</td>
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<td>KSS 3700</td>
<td>Exercise Evaluation and Testing</td>
<td>4</td>
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<td>KSS 3705</td>
<td>Statistics Research in Exercise Science</td>
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<tr>
<td>KSS 3710</td>
<td>Physiology of Exercise</td>
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<tr>
<td>KSS 3710L</td>
<td>Physiology of Exercise Laboratory</td>
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<td>KSS 3720</td>
<td>Kinesiology and Applied Anatomy</td>
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<td>KSS 3730</td>
<td>Exercise Prescription</td>
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<tr>
<td>KSS 3760</td>
<td>Strength Training and Conditioning</td>
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<tr>
<td>KSS 4805</td>
<td>Administration of Exercise Programs</td>
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<tr>
<td>KSS 4810</td>
<td>Clinical Exercise Testing and Prescription</td>
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<td>KSS 4875</td>
<td>Exercise Counseling and Behavioral Strategies</td>
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<td>KSS 4880</td>
<td>Internship</td>
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Additional Courses Needed

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<tr>
<td>PHYS 1506</td>
<td>Physics for Health Care</td>
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<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
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<tr>
<td>CHEM 1515L</td>
<td>General Chemistry 1 Laboratory</td>
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Electives 10-14

Total Semester Hours 120-128

Year 1

Fall

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Semester Hours 15-16

Spring

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Learning Outcomes
The student learning outcomes for the BSAS in exercise science are as follows:

1) Students will demonstrate knowledge and skills in health, fitness and performance assessment.

2) Students will demonstrate skills in risk factor and health risk identification and the ability to prescribe and implement exercise safely in healthy individuals, special populations (i.e. older adults) and individuals with controlled cardiovascular, pulmonary, and metabolic diseases and other clinical populations.

3) Students will demonstrate competency in effectively educating, exercise counseling and using behavioral strategies in individuals regarding lifestyle modification.

4) Students will demonstrate competency in the legal and professional tasks related to the field.

5) Students will demonstrate knowledge of implementing management policies related to the field.