Kinesiology (KINS)

The program in kinesiology is designed to prepare candidates for a variety of career options in the vast field of movement science. Depending upon the choice of concentrations, career opportunities may include teaching physical education, coaching, analyzing and prescribing fitness programs, pre-athletic training, or preparation for professional programs in allied health. Graduates of this program should be well prepared to enter graduate programs of study in such areas as pedagogy or adapted physical education, exercise physiology, biomechanics, athletic training, sport management, medical school, physical therapy school, occupational school and other allied health professional schools.

The candidate for the Bachelor of Science degree with a major in kinesiology must select one of two concentrations:

- Exercise Science
- K-12 Teaching Physical Education, Wellness and Leisure

Undergraduate students in the Kinesiology (Exercise Science) program area are required to complete a minimum of 120 hours of coursework to graduate. Included within this requirement are courses in kinesiology, exercise science, and health science and a strong variety of interdisciplinary courses to include areas of nutrition, biological sciences, physics, chemistry, mathematics, English, communications, psychology, social sciences, fine arts, humanities, and statistics. Students are also provided with opportunities to connect classroom learning with actual research or hands-on experiences through courses such as Independent Study, Laboratory Practicums, and Internships. In addition to the required coursework, Exercise Science students have the opportunity to select related electives that will give the student the ability to create the best opportunity for their post-baccalaureate plans. Kinesiology has a high rate of students who qualify and are involved in the Honors College/COEHP College Honors curriculum.

Undergraduate students in the Kinesiology (K-12 Teaching Physical Education/Wellness & Leisure) program are also required to complete a minimum of 120 hours of coursework to graduate. The program of study works through the College of Education and Health Professions to ensure that these students are ready for application to Arkansas Teacher licensure if they are accepted and able to complete all of the steps of admissions and completion.

Kinesiology K-12 Teaching Physical Education, Wellness and Leisure Concentration

A student preparing to teach in the public schools must select the K-12 teaching concentration in Kinesiology. Admission to the Kinesiology K-12 Teaching Physical Education, Wellness and Leisure Concentration requires the following:

- must be admitted to the teacher education program in kinesiology K-12 (see the Teacher Education Application Fee (http://catalog.uark.edu/undergraduatecatalog/feesandcosts/othergeneralfees)) after their sophomore year (45 hours of coursework).
- pass all three parts of Core Academic Skills for Educator: Math, Reading, and Writing according to current Arkansas State Department of Education requirements
- successfully complete an Arkansas State Police and Arkansas Child Maltreatment Registry background check (Background checks must be current, there is a fee for this process.)
- prior to taking the following pedagogical courses PHED 3003, PHED 3033, PHED 3043, students are required to have a cumulative grade point average of 2.5 or above
- prior to taking the following pedagogical courses PHED 4703, PHED 4743, PHED 432V, students are required to have a cumulative grade point average of 2.7 or above.

To be eligible to enroll in the Senior Block Internship semester (PHED 4023, PHED 407V, PHED 4733), students are required to:

- have a cumulative grade point average of 2.7 and maintain through degree completion
- successfully complete an Arkansas State Police and Arkansas Child Maltreatment Registry background check if not completed at Stage II (Background checks must be current, there is a fee for this process.)
- complete or present proof of registration for the Praxis II exams required by the Arkansas Department of Education licensure area of K-12 Physical Education, Wellness and Leisure

In order to complete the Kinesiology K-12 Teaching Physical Education, Wellness and Leisure students must maintain a 2.7 cumulative grade point average and complete all university requirements for graduation.

Students interested in obtaining an endorsement in coaching should contact the Coordinator of Teacher Education.

University Core (State Minimum Core)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 2003</td>
<td>General Psychology (ACTS Equivalency = PSYC 1103)</td>
<td>35</td>
</tr>
<tr>
<td>B1OL 1543</td>
<td>Principles of Biology (ACTS Equivalency = B1OL 1014 Lecture)</td>
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</tr>
<tr>
<td>&amp; B1OL 1541L</td>
<td>and Principles of Biology Laboratory (ACTS Equivalency = B1OL 1014 Lab) (hours counted in the state minimum core)</td>
<td></td>
</tr>
<tr>
<td>B1OL 2443</td>
<td>Human Anatomy (ACTS Equivalency = B1OL 2404 Lecture)</td>
<td></td>
</tr>
<tr>
<td>&amp; B1OL 2441L</td>
<td>and Human Anatomy Laboratory (ACTS Equivalency = B1OL 2404 Lab) (hours counted in the state minimum core)</td>
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</tbody>
</table>

Additional Requirements for Kinesiology Concentration I: K-12 Teaching Physical Education, Wellness and Leisure

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PBHL 1103</td>
<td>Personal Health and Safety</td>
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<tr>
<td>COMM 1313</td>
<td>Public Speaking (ACTS Equivalency = SPCH 1003)</td>
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</tr>
<tr>
<td>KINS 3163</td>
<td>Exercise Physiology</td>
<td></td>
</tr>
<tr>
<td>or EXSC 311</td>
<td>Exercise Physiology</td>
<td></td>
</tr>
<tr>
<td>or EXSC 311</td>
<td>Exercise Physiology</td>
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<tr>
<td>KINS 3223</td>
<td>Mechanics of Human Movement</td>
<td></td>
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<tr>
<td>EXSC 3353</td>
<td>The Physical Education Profession: An Overview</td>
<td></td>
</tr>
<tr>
<td>or EXSC 335</td>
<td>The Physical Education Profession: An Overview</td>
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<tr>
<td>PHED 1003</td>
<td>Sport Skills</td>
<td></td>
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<tr>
<td>PHED 2023</td>
<td>Elementary Physical Education</td>
<td></td>
</tr>
<tr>
<td>PHED 2373</td>
<td>Principles and Problems of Coaching</td>
<td></td>
</tr>
<tr>
<td>PHED 3203</td>
<td>Administration in Physical Education</td>
<td></td>
</tr>
<tr>
<td>PHED 4313</td>
<td>The School Health Program</td>
<td></td>
</tr>
<tr>
<td>PHED 3573</td>
<td>The School Health Program</td>
<td></td>
</tr>
</tbody>
</table>
PHED 3623  Kinesiology (KINS)
PHED 3903  Physical Education for Special Populations
CIED 3033  Classroom Learning Theory
CNED 4003  Classroom Human Relations Skills
or CNED 303  The Helping Relationship

PHED Pedagogical Courses  16-17
Admission to the Pedagogical Courses - Meet Stage II Requirements
PHED 3003  Outdoor Education
PHED 3033  Educational Rhythms and Gymnastics
PHED 3043  Teaching Fitness

Senior PHED Courses
Admission to Senior PHED Courses - Meet Stage III Requirements
PHED 432V  Teaching Practicum ((1 or 2 hours))
PHED 4743  Secondary Physical Education
PHED 4703  Assessment in Physical Education

Internship Semester  12
PHED 4023  Class Management
PHED 407V  Physical Education Teaching Internship (6 hours)
PHED 4733  Senior Seminar

General Electives  11-12
As needed for total hours based on waivers, exemptions and transfer inequalities

Total Hours  120

1  Students may also count completion of the Anatomy and Physiology I course at another Arkansas institution for this requirement.

Note: All students seeking licensure in the state of Arkansas are subject to a criminal background check. Forms for this procedure may be obtained at the office of the Teacher Certification Officer, at the State Department, or any police station, including the campus police. These background checks take up to six months to process; therefore, students are advised to complete and submit the forms to the proper authorities six months in advance of actually applying for a license. Arkansas will not certify anyone who has been convicted of a felony. Although not required for the Kinesiology concentration in Physical Education, Wellness and Leisure, students seeking coaching endorsement will need to take PHED 4001, take the appropriate PRAXIS exams as designated by the Arkansas State Department of Education, and make a "C" or better in all courses required by the University of Arkansas for the Coaching Endorsement. Please see the College of Education and Health Professions PDF (http://coe.uark.edu/CoachingALP.pdf) for these specific course numbers.

Kinesiology B.S. K-12 Teaching Physical Education, Wellness & Leisure Concentration
Eight-Semester Degree Program (KINSBS-PEWL)
The teacher education program for Kinesiology K-12 Teaching Physical Education/Wellness & Leisure does not qualify for the eight semester degree plan due to Praxis and cumulative GPA requirements for progression. However, the following 8-semester sample plan shows how a first-year student could select their courses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
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<tr>
<td>ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013)</td>
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</table>

Social Science (except PSYC 2003)  3
BIOL 1543 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)
& BIOL 1541L Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)
PBHL 1103 Personal Health and Safety  3
PHED 1003 The Physical Education Profession: An Overview
ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023)  3
MATH 1203 College Algebra (ACTS Equivalency = MATH 1103)  3
COMM 1313 Public Speaking (ACTS Equivalency = SPCH 1003)  3
U.S. History or American National Government  3
PHED 2023 Sport Skills  3
Year Total: 16  15

Second Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
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<tbody>
<tr>
<td>KINS 3223</td>
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<tr>
<td>PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103)</td>
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<td>General Elective</td>
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<td></td>
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</tr>
<tr>
<td>Fine Arts or Humanities</td>
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</tr>
<tr>
<td>BIOL 2443 Human Anatomy (ACTS Equivalency = BIOL 2404 Lecture) &amp; BIOL 2441L Human Anatomy Laboratory (ACTS Equivalency = BIOL 2404 Lab)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Social Science (except PSYC 2003)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities or Fine Arts</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>6</td>
<td></td>
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</tr>
<tr>
<td>PHED 2373 Elementary Physical Education</td>
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<td>Year Total: 16</td>
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</table>

Third Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>PHED 3003 Outdoor Education</td>
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<td>PHED 3033 Educational Rhythms and Gymnastics</td>
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<tr>
<td>PHED 3203 Principles and Problems of Coaching</td>
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<tr>
<td>PHED 3903 Physical Education for Special Populations</td>
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<td>KINS 3163</td>
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<td>PHED 3043 Teaching Fitness</td>
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<td>PHED 3623 Sport Sociology</td>
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<td>EXSC 3353 Mechanics of Human Movement</td>
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<tr>
<td>CIED 3033 Classroom Learning Theory</td>
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<tr>
<td>CNED 4003 Classroom Human Relations Skills or CNED 3053 The Helping Relationship</td>
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<td>Year Total: 15</td>
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### Fourth Year

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PHED 3413 Administration in Physical Education</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>PHED 3573 The School Health Program</td>
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<tr>
<td>PHED 432V Teaching Practicum</td>
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<tr>
<td>General Elective</td>
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<tr>
<td>PHED 4703 Assessment in Physical Education</td>
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<td></td>
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<tr>
<td>PHED 4743 Secondary Physical Education</td>
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<tr>
<td>PHED 4023 Class Management</td>
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<tr>
<td>PHED 407V Physical Education Teaching Internship</td>
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<tr>
<td>PHED 4733 Senior Seminar</td>
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</tbody>
</table>

**Year Total:**

- **Fall:** 16
- **Spring:** 12

**Total Units in Sequence:** 120

1. Core areas must be completed as outlined in University Core.
2. EXSC 3153 has additional prerequisites not included in program of study.
3. Must have grade ‘C’ or better to award degree credit.
4. All three parts of the Praxis Core exam must be completed prior to enrollment.

### Requirements for the B.S. in Exercise Science

Students must have 40 hours of 3000/4000-level classes to graduate.

#### University Core (State Minimum Core)

- **MATH** – A prerequisite course, MATH 1203, may be required.
- MATH 1213 Plane Trigonometry (ACTS Equivalency = MATH 1203)
- or MATH 1284C Precalculus Mathematics (ACTS Equivalency = MATH 1305)
- or MATH 2533 Calculus I (ACTS Equivalency = MATH 2405)
- BIOL 1543 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)
- and Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)
- CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1141 Lecture)
- and University Chemistry I Laboratory (ACTS Equivalency = CHEM 1141 Lab)
- or CHEM 1203 Chemistry for Majors I
  & CHEM 1203H Chemistry for Majors I Laboratory
- PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103)

#### Additional Required Sciences

- BIOL 2443 & BIOL 2441L Human Anatomy (ACTS Equivalency = BIOL 2404 Lecture)
  and Human Anatomy Laboratory (ACTS Equivalency = BIOL 2404 Lab)
- BIOL 2213 & BIOL 2211L Human Physiology (ACTS Equivalency = BIOL 2414 Lecture)
  and Human Physiology Laboratory (ACTS Equivalency = BIOL 2414 Lab)
- CHEM 1123 University Chemistry II (ACTS Equivalency = CHEM 1121L CHEM 1424 Lecture)
  and University Chemistry II Laboratory (ACTS Equivalency = CHEM 1424 Lab)
- or CHEM 12: Chemistry for Majors II
  & CHEM 12: Chemistry for Majors II Laboratory
- CHEM 2613 Organic Physiological Chemistry (ACTS Equivalency = CHEM 1224 Lecture)
  and Organic Physiological Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab)
- or CHEM 36: Organic Chemistry I
  & CHEM 36: Organic Chemistry I Laboratory
- PHYS 2013 College Physics I (ACTS Equivalency = PHYS 2011L 2014 Lecture)
  and College Physics I Laboratory (ACTS Equivalency = PHYS 2014 Lab)

#### Additional Non-EXSC Requirements

- NUTR 1213 Fundamentals of Nutrition
- COMM 1313 Public Speaking (ACTS Equivalency = SPCH 1003)
- STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103)
- or PSYC 2013 Introduction to Statistics for Psychologists
- or SOCI 3303 Social Data and Analysis
- PBHL 2663 Terminology for the Health Professions
- PSYC 3023 Abnormal Psychology

### Exercise Science Core Required

- EXSC 2733 Introduction to Exercise Science
- EXSC 3153 Exercise Physiology
- EXSC 3353 Mechanics of Human Movement
- EXSC 3533 Laboratory Techniques
- EXSC 4323 Exercise Prescription
- EXSC 4773 Performance and Drugs
- EXSC 4833 Exercise Applications for Special Populations
- or EXSC 46: Honors Exercise Applications for Special Populations
- EXSC 4903 Internship in Exercise Science
- or KINS 405 Independent Study
- or KINS 498 Kinesiology Honors Thesis/Project

### Related Electives chosen from NUTR, PBHL, BIOL, ANSC, FDSC, POSC prefixes or the following:

- EXSC 3013 Functional Anatomy for Exercise Science
- EXSC 3393 Prevention and Care of Athletic Injuries
- EXSC 3423 Principles and Theories of Strength and Conditioning
- EXSC 3723 Research Methods in Exercise Science
- or EXSC 37: Honors Research Methods in Exercise Science
- EXSC 4013 Clinical Exercise Physiology
- EXSC 4353 Advanced Mechanics of Human Movement
- or EXSC 43: Honors Advanced Mechanics of Human Movement
- EXSC 4643 Psychology of Sports Injury and Rehabilitation
- EXSC 4783 Sport and Exercise Psychology
- KINS 3901H Kinesiology Honors Thesis Tutorial
- PBHL 4603 Health Behavior: Theories and Application
- PBHL 4613 Principles of Epidemiology
Exercise Science B.S.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Exercise Science should see the Eight-Semester Degree Policy (http://catalog.uark.edu/undergraduatemcatalog/academicregulations/eightsemesterdegreecompletionpolicy) for university requirements of the program. Students must have 40 hours of 3000/4000-level classes to graduate. Find out more about the University Core (http://catalog.uark.edu/undergraduatemcatalog/academicregulations/universitycore) requirements.

First Year

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
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<tr>
<td>ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013)</td>
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<td></td>
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<tr>
<td>CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture) &amp; CHEM 1101L University Chemistry I Laboratory (ACTS Equivalency = CHEM 1414 Lab) or CHEM 1203 and CHEM 1201L</td>
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<tr>
<td>Choose from: General Elective (recommend MATH 1203 if appropriate)</td>
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Second Year

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSC 2733 Introduction to Exercise Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NUTR 1213 Fundamentals of Nutrition</td>
<td>3</td>
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<tr>
<td>HIST 2033 History of the American People to 1877 (ACTS Equivalency = HIST 2113) or HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123) or PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003)</td>
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<tr>
<td>PBHL 2663 Terminology for the Health Professions</td>
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<tr>
<td>BIOL 2443 Human Anatomy (ACTS Equivalency = BIOL 2404 Lecture) &amp; BIOL 2441L Human Anatomy Laboratory (ACTS Equivalency = BIOL 2404 Lab)</td>
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</tr>
<tr>
<td>PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103)</td>
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<td></td>
</tr>
<tr>
<td>STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103) or PSYC 2013 Introduction to Statistics for Psychologists or SOCI 3303 Social Data and Analysis</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 2213 Human Physiology (ACTS Equivalency = BIOL 2414 Lecture) &amp; BIOL 2211L Human Physiology Laboratory (ACTS Equivalency = BIOL 2414 Lab)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
### Exercise Science Courses

**EXSC 2733. Introduction to Exercise Science. 3 Hours.**
This class will cover introductory topics for the Exercise Science students in preparation for entry into the profession. In addition to specific topics, students will prepare their resumes and make a formal presentation. Prerequisite: EXSC major or instructor consent. (Typically offered: Fall and Spring)

**EXSC 3013. Functional Anatomy for Exercise Science. 3 Hours.**
This course will include the study of functional human anatomy with emphasis on musculoskeletal and neurological systems. There will be an introduction to the clinical application and location of anatomical structures with some common injuries from a health professions perspective. Prerequisite: BIOL 2443 and BIOL 2441L. (Typically offered: Spring)

**EXSC 3153. Exercise Physiology. 3 Hours.**
Examination of effects of exercise on the physiology of the systems of the body. The exploration includes effects during, immediately after, and as long term results of work and exercise. Prerequisite: (BIOL 2213 and BIOL 2211L), (BIOL 2443 and BIOL 2441L). (Typically offered: Fall and Spring)

**EXSC 3353. Mechanics of Human Movement. 3 Hours.**
An introduction to basic analysis of motor skills. No credit given toward major in Zoology. Prerequisite: BIOL 2213 and BIOL 2211L, (BIOL 2443 and BIOL 2441L), and KINSBS major or by instructor consent. (Typically offered: Fall and Spring)

**EXSC 3393. Prevention and Care of Athletic Injuries. 3 Hours.**
Introduction to the prevention and care of athletic related injuries. Includes athletic injury recognition and management. Prerequisite: BIOL 2443 and BIOL 2441L. (Typically offered: Irregular)

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**General Elective**

<table>
<thead>
<tr>
<th>Units</th>
<th>Year Total:</th>
</tr>
</thead>
<tbody>
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**Social Science-University Core**

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**Third Year**

<table>
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<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>PHYS 2013 College Physics I (ACTS Equivalency = PHYS 2014 Lecture) &amp; PHYS 2011L College Physics I Laboratory (ACTS Equivalency = PHYS 2014 Lab)</td>
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<tr>
<td>EXSC 3153 Exercise Physiology</td>
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<tr>
<td>EXSC 3353 Mechanics of Human Movement</td>
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<tr>
<td>General Elective</td>
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<tr>
<td>Related Elective</td>
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<tr>
<td>EXSC 3533 Laboratory Techniques</td>
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<tr>
<td>CHEM 2613 Organic Physiological Chemistry (ACTS Equivalency = CHEM 1224 Lecture) &amp; CHEM 2611L Organic Physiological Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab) or CHEM 3603 and CHEM 3601L</td>
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<tr>
<td>Related Elective</td>
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<tr>
<td>PSYC 3023 Abnormal Psychology</td>
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<td>Year Total:</td>
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**Fourth Year**

<table>
<thead>
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<tbody>
<tr>
<td>EXSC 4323 Exercise Prescription</td>
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<tr>
<td>EXSC 4833 Exercise Applications for Special Populations or EXSC 4833H Honors Exercise Applications for Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>Social Science-University Core</td>
<td>3</td>
</tr>
<tr>
<td>Related Electives</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 4903 Internship in Exercise Science or KINS 405V Independent Study or KINS 405VH Honors Independent Study or KINS 498VH Kinesiology Honors Thesis/Project</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 4773 Performance and Drugs</td>
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<tr>
<td>Related Elective</td>
<td>6</td>
</tr>
<tr>
<td>Year Total:</td>
<td>12 12</td>
</tr>
</tbody>
</table>

**Total Units in Sequence:** 120

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1. Use of KINS 498VH only for students completing the College of Education and Health Professions Honors Program.

**Bonacci, Jeff**, D.A. (Middle Tennessee State University), M.S. (West Virginia University), B.S. (University of Akron), Clinical Associate Professor, Department of Health, Human Performance and Recreation, 2000.

**Calleja, Paul C.**, Ph.D., M.S. (University of Arkansas), B.S. (San Jose State University), Clinical Professor, Department of Health, Human Performance and Recreation, 2003.

**DiBrezzo, Rosalie**, Ph.D. (Texas Woman’s University), M.S. (Indiana University), B.S. (Brooklyn College), University Professor, Department of Health, Human Performance and Recreation, 1983.

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**Elbin, R. J.**, Ph.D. (Michigan State University), M.A., B.A. (University of New Orleans), Associate Professor, Department of Health, Human Performance and Recreation, 2013.

**Forbess, Janet B.**, M.Ed. (University of Florida), B.S.E. (Georgia Southern College), Instructor, Department of Health, Human Performance and Recreation, 1978.

**Gallagher, Kaitlin**, Ph.D., B.Sc. (University of Waterloo, Canada), Assistant Professor, Department of Health, Human Performance and Recreation, 2015.

**Ganio, Matthew Stueck**, Ph.D. (University of Connecticut), M.S., B.S. (University of Georgia), Associate Professor, Department of Health, Human Performance and Recreation, 2011.


**Gray, Michelle**, Ph.D. (University of Arkansas), M.S. (Ball State University), B.S. (University of Tennessee, Chattanooga), Associate Professor, Department of Health, Human Performance and Recreation, 2010.

**Greene, Nicholas P.**, Ph.D. (Texas A&M University), M.S., B.S. (University of South Carolina), Associate Professor, Department of Health, Human Performance and Recreation, 2013.

**Howie, Erin**, Ph.D. (University of South Carolina), B.S. (University of Maryland), Assistant Professor, Department of Health, Human Performance and Recreation, 2016.
EXSC 3423. Principles and Theories of Strength and Conditioning. 3 Hours.
This course will provide the practical skills necessary to design strength and conditioning programs. Special emphasis is placed on the ability to evaluate exercise movements, prescribe appropriate exercise programs, administer tests, and support program prescription with a sound knowledge of anatomical and physiological adaptation to exercise. The course will include laboratory experiences integrated with didactic learning. The laboratory experiences will in teach students various skills such as how to set up and run speed, agility, and quickness drills, how to select and administer the appropriate tests for athletic performance, and how to evaluate Olympic lifting technique. Everyone must participate in the labs as subjects. Come to lab prepared to exercise. When students are finished with this course, they will be well prepared to take the CSCS exam given by the National Strength and Conditioning Association. Prerequisite: (BIOL 2443 and BIOL 2441L) and (BIOL 2213 and BIOL 2211L). (Typically offered: Spring)

EXSC 3533. Laboratory Techniques. 3 Hours.
Practical experience in testing physical fitness in both the laboratory and non-laboratory settings. Pre- or Corequisite: EXSC 3153. (Typically offered: Fall, Spring and Summer)

EXSC 3723. Research Methods in Exercise Science. 3 Hours.
This course will provide an overview of research methods for experimental research designs in an exercise science setting. The students will learn facets of research including: developing a research idea, getting funding for research, obtaining IRB/IACUC approval, data collection, data input, statistical analyses, and preparing manuscripts for publication. Designed for exercise science honor students in spring of their junior year or the summer prior to their senior year to prepare them for their honor's thesis. (Typically offered: Spring)

EXSC 3723H. Honors Research Methods in Exercise Science. 3 Hours.
This course will provide an overview of research methods for experimental research designs in an exercise science setting. The students will learn facets of research including: developing a research idea, getting funding for research, obtaining IRB/IACUC approval, data collection, data input, statistical analyses, and preparing manuscripts for publication. Designed for exercise science honor students in spring of their junior year of the summer prior to their senior year to prepare them for their honor's thesis. Prerequisite: Honors standing. (Typically offered: Spring)
This course is equivalent to EXSC 3723.

EXSC 4013. Clinical Exercise Physiology. 3 Hours.
The course is designed to build upon prior knowledge of Exercise Physiology and Exercise Testing. We will examine the physiological impacts of exercise and exercise training with specific emphasis on how they relate to clinical outcomes and clinical testing. At the end of the course students should have developed competencies congruent with the objectives of the American College of Sports Medicine’s (ACSM) certification for Clinical Exercise Physiologist. Prerequisite: EXSC 3153 and EXSC 3533. (Typically offered: Fall)

EXSC 405V. Independent Study. 1-3 Hour.
Provides students an opportunity to pursue special study of research problems. (Typically offered: Fall, Spring and Summer) May be repeated for up to 12 hours of degree credit.

EXSC 405VH. Honors Independent Study. 1-4 Hour.
Provides students an opportunity to pursue special study of research problems. Prerequisite: Instructor consent. (Typically offered: Fall, Spring and Summer) May be repeated for up to 4 hours of degree credit. This course is equivalent to EXSC 405V.

EXSC 4323. Exercise Prescription. 3 Hours.
This course is designed to provide knowledge and application of sound exercise prescription principles and design of exercise programs in cardiorespiratory fitness, muscular fitness, body composition, flexibility, and balance. Pre- or corequisite: EXSC 3533. Prerequisite: EXSC 3153 and EXSC 3353. (Typically offered: Fall and Spring)

EXSC 4323H. Honors Exercise Prescription. 3 Hours.
This course is designed to provide knowledge and application of sound exercise prescription principles and design of exercise programs in cardiorespiratory fitness, muscular fitness, body composition, flexibility, and balance. Pre- or corequisite: EXSC 3533. Prerequisite: EXSC 3153 and EXSC 3353. (Typically offered: Fall and Spring)
This course is equivalent to EXSC 4323.

EXSC 4353. Advanced Mechanics of Human Movement. 3 Hours.
Students will build upon their foundation in qualitative biomechanics to quantitatively analyze human movement. Biomechanics of the musculoskeletal system will be covered in the first half of the course, and fundamental laws and principles of mechanics will be covered in the second course half of the course. Examples will be provided throughout the course to demonstrate how biomechanics can be used to enhance and maintain human health, fitness, and performance. Prerequisite: EXSC 3353 and PHYS 2013. (Typically offered: Irregular)

EXSC 4353H. Honors Advanced Mechanics of Human Movement. 3 Hours.
Students will build upon their foundation in qualitative biomechanics to quantitatively analyze human movement. Biomechanics of the musculoskeletal system will be covered in the first half of the course, and fundamental laws and principles of mechanics will be covered in the second course half of the course. Examples will be provided throughout the course to demonstrate how biomechanics can be used to enhance and maintain human health, fitness, and performance. Prerequisite: EXSC 3353 and PHYS 2013. (Typically offered: Irregular)
This course is equivalent to EXSC 4353.

EXSC 4643. Psychology of Sports Injury and Rehabilitation. 3 Hours.
The purpose of this course is to explore and discuss factors related to the psychological aspects of athletic injuries. These factors include the sociocultural, mental, emotional, and physical dimensions of injury rehabilitation. (Typically offered: Irregular)

EXSC 4773. Performance and Drugs. 3 Hours.
The pharmacological and physiological effects of ergogenic aids upon the athlete and performance coupled with the ethical and moralistic viewpoints of drug taking. Practical laboratory experiences are provided with pertinent statistical surveys of athletes; their drug taking habits and relevant psychological impact on performance. Prerequisite: EXSC 3153. (Typically offered: Fall and Spring)

EXSC 4773H. Honors Performance and Drugs. 3 Hours.
The pharmacological and physiological effects of ergogenic aids upon the athlete and performance coupled with the ethical and moralistic viewpoints of drug taking. Practical laboratory experiences are provided with pertinent statistical surveys of athletes; their drug taking habits and relevant psychological impact on performance. Prerequisite: EXSC 3153 and honors standing. (Typically offered: Fall and Spring)
This course is equivalent to EXSC 4773.

EXSC 4783. Sport and Exercise Psychology. 3 Hours.
This course examines how individuals behave in physical activity, exercise, and sport settings. Psychological antecedents and consequences of primary and secondary involvement in exercise, sport, and related physical activities will be introduced. (Typically offered: Fall)

EXSC 4783H. Honors Sport and Exercise Psychology. 3 Hours.
This course examines how individuals behave in physical activity, exercise, and sport settings. Psychological antecedents and consequences of primary and secondary involvement in exercise, sport, and related physical activities will be introduced. (Typically offered: Fall)
This course is equivalent to EXSC 4783.
**EXSC 4833. Exercise Applications for Special Populations. 3 Hours.**
The study of the effects of exercise, exercise training, and other stressors in special groups. A detailed study of the biomechanical and physiological effects of exercise on the elderly, the diabetic, the post-coronary, and the individual with functional limitations. Prerequisite: EXSC 3353, EXSC 3153, and EXSC 3533. (Typically offered: Fall and Spring)

**EXSC 4833H. Honors Exercise Applications for Special Populations. 3 Hours.**
The study of the effects of exercise, exercise training, and other stressors in special groups. A detailed study of the biomechanical and physiological effects of exercise on the elderly, the diabetic, the post-coronary, and the individual with functional limitations. Prerequisite: EXSC 3353 or EXSC 3533H, EXSC 3153 or EXSC 3153H, and EXSC 3533 or EXSC 3533H. (Typically offered: Fall and Spring)

This course is equivalent to EXSC 4833.

**EXSC 4903. Internship in Exercise Science. 3 Hours.**
Provides opportunities for students in Exercise Science to gain experience in clinics, hospitals, fitness centers, athletic training facilities or related settings. Pre- or Corequisite: EXSC 3533. Prerequisite: EXSC 3353 and EXSC 3153. (Typically offered: Fall, Spring and Summer)

**Kinesiology Courses**

**KINS 3901H. Kinesiology Honors Thesis Tutorial. 1 Hour.**
Designed to provide the foundation for the Honors Thesis/Project. Students and faculty tutor work “one-on-one” exploring a specific topic which has been agreed upon by the student and the professor. Prerequisite: Honors candidacy and EXSCBS, KINSBS, or PHEDBS major. (Typically offered: Fall, Spring and Summer)

**KINS 405V. Independent Study. 1-3 Hour.**
Provides students an opportunity to pursue special study of research problems. (Typically offered: Fall, Spring and Summer) May be repeated for up to 12 hours of degree credit.

**KINS 405VH. Honors Independent Study. 1-3 Hour.**
Provides students an opportunity to pursue special study of research problems. Prerequisite: Honors candidacy. (Typically offered: Fall, Spring and Summer) May be repeated for up to 12 hours of degree credit.

This course is equivalent to KINS 405V.

**KINS 490VH. Kinesiology Honors Thesis/Project. 1-3 Hour.**
Designed to provide facilitation of the Honors Thesis/Project. Students and faculty work “one-on-one” to complete the honors thesis/project. Prerequisite: Honors candidacy, EXSCBS, KINSBS, or PHEDBS major, and KINS 3901H or EXSC 3723H. (Typically offered: Fall, Spring and Summer) May be repeated for up to 3 hours of degree credit.

**Physical Education Courses**

**PHED 1003. The Physical Education Profession: An Overview. 3 Hours.**
An introduction to the teaching of physical education. (Typically offered: Fall and Spring) May be repeated for degree credit.

**PHED 2023. Sport Skills. 3 Hours.**
This course is designed to prepare the student to teach sport skills, primarily those taught in grades 5-8. Prerequisite: PHED 1003. (Typically offered: Fall and Spring)

**PHED 2373. Elementary Physical Education. 3 Hours.**
Program planning and techniques of teaching physical education activities to children; for early childhood, elementary and physical education teachers, supervisors, and principals. Prerequisite: PHED 1003. (Typically offered: Fall and Spring)

**PHED 3003. Outdoor Education. 3 Hours.**
This course is designed to provide opportunities for the student to acquire the skills, teaching and leadership techniques associated with outdoor and adventure activities. Prerequisite: PHED 1003, junior standing, a cumulative grade point average of 2.5, and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education. (Typically offered: Fall)

**PHED 3033. Educational Rhythms and Gymnastics. 3 Hours.**
This course is designed to provide opportunities for the student to perform and teach a variety of rhythmical and gymnastic activities. Prerequisite: PHED 1003, junior standing, a cumulative grade point average of 2.5, and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education. (Typically offered: Spring)

**PHED 3043. Teaching Fitness. 3 Hours.**
Instructional strategies for teaching public school students about fitness concepts. Prerequisite: PHED 1003, junior standing, a cumulative grade point average of 2.5, and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education. (Typically offered: Spring)

**PHED 3163. Exercise Physiology: Theory and Application. 3 Hours.**
Examination of the changes during childhood and adolescence of physiological responses to exercise. The exploration includes the study of the maturation of the body's functional capacities as it relates to exercise. Designed for Physical Education Teacher Education majors. Prerequisite: BIOL 2443 and BIOL 2441L. (Typically offered: Fall and Spring)

**PHED 3163H. Honors Exercise Physiology: Theory and Application. 3 Hours.**
Examination of the changes during childhood and adolescence of physiological responses to exercise. The exploration includes the study of the maturation of the body's functional capacities as it relates to exercise. Designed for Physical Education Teacher Education majors. Prerequisite: BIOL 2443 and BIOL 2441L and P-12 or K-12 physical education major. Honors standing. (Typically offered: Fall and Summer)

This course is equivalent to PHED 3163.

**PHED 3203. Principles and Problems of Coaching. 3 Hours.**
A focus on the various aspects of coaching the athletes in contemporary society through an examination of research findings related to factors affecting performance. Attention to be given to principles, problems and understanding essential to the management of athletic contests. (Typically offered: Fall and Spring)

**PHED 3223. Motor Development. 3 Hours.**
An overview of contemporary motor development and movement theory, developmental hierarchies, and physiological aspects of development throughout the lifespan. (Typically offered: Fall and Spring)

**PHED 3413. Administration in Physical Education. 3 Hours.**
An examination of the administrative duties of the physical education teacher. (Typically offered: Spring)

**PHED 3573. The School Health Program. 3 Hours.**
Studies school health services, the health environment, and health education, as well as the teacher's potential role in each. Prerequisite: PBHL 1103. (Typically offered: Fall)

**PHED 3623. Sport Sociology. 3 Hours.**
An investigation of the impact of physical education and sport on society. (Typically offered: Spring)

**PHED 3903. Physical Education for Special Populations. 3 Hours.**
Provides fundamental concepts and skills essential to physical education programming for students with disabilities. Deals with definitions, disabling conditions, developmental and remedial activities, games, and sports. Prerequisite: Junior standing. (Typically offered: Fall)
PHED 3903H. Honors Physical Education for Special Populations. 3 Hours. Provides fundamental concepts and skills essential to physical education programming for students with disabilities. Deals with definitions, disabling conditions, developmental and remedial activities, games, and sports. Prerequisite: Junior standing. (Typically offered: Fall)

PHED 4001. Coaching Practicum. 1 Hour. Designed for students who want to add the Coaching Endorsement to the state teaching license. Student serves as a coaching assistant with a local school, university or recreational sports team. Students who serve as a coaching assistant with a local school must successfully complete a criminal background check prior to beginning coaching practicum. Prerequisite: PHED 3203 and proof of current First Aid/CPR/AED certification submitted to instructor of record. (Typically offered: Fall and Spring)

PHED 4023. Class Management. 3 Hours. This course is designed to provide opportunities for the student to acquire an understanding that emphasizes class management; and includes professional ethics, and school policies related to students, faculty, and programs. Corequisite: PHED 407V and PHED 4733. Prerequisite: (1) Senior status in PHEDBS, (2) have a grade of "C" or better in all KINS/PHED Teacher Education classes: PHED 1003, PHED 2023, PHED 3033, PHED 3043, PHED 3203, PHED 2373, PHED 4703, PHED 4743, PHED 3903, PHED 432V, PHED 3003, PHED 3623 and PHED 3413; (3) must have a cumulative grade point average of 2.7; passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education; and the completed Praxis II content knowledge for Health and Physical Education exam with scores presented to the university internship supervisor by December 1st. (Typically offered: Spring) May be repeated for degree credit.

PHED 407V. Physical Education Teaching Internship. 1-9 Hour. This internship involves supervised teaching experience in a P-12 setting. Students will be placed under the guidance of a mentor teacher at specific school sites within NW Arkansas. Internship will be done at both the elementary and secondary levels. Successful completion of a criminal background check is required before beginning internship. Corequisite: PHED 4023 and PHED 4733. Prerequisite: Senior status in PHEDBS, a grade of "C" or better in all KINS/PHED Teacher Education classes; PHED 1003, PHED 2023, PHED 3033, PHED 3043, PHED 3203, PHED 2373, PHED 4703, PHED 4743, PHED 3903, PHED 432V, PHED 3003, PHED 3623 and PHED 3413; a cumulative grade point average of 2.7 or greater; and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education; and the completed Praxis II content knowledge for Health and Physical Education exam with scores presented to the university internship supervisor by December 1st. In addition, current Certification in CPR/AED/First Aid should be provided to internship instructor of record. (Typically offered: Fall and Spring) May be repeated for degree credit.

PHED 432V. Teaching Practicum. 1-2 Hour. K-12 Kinesiology majors serve as a teaching assistant with a local school physical education teacher. This course should be taken the semester before PHED 407V Internship. Prerequisite: PHEDBS majors, 2.7 cumulative GPA, and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education. (Typically offered: Fall)

PHED 4703. Assessment in Physical Education. 3 Hours. This capstone class will cover special topics for the Kinesiology P-12 students in preparation for entry into the profession. Resumes, cover letters, teaching philosophy, references, and interview preparation will be included. Students will also review contemporary issues relevant to the physical education teacher. Corequisite: PHED 4023 and PHED 4733. Prerequisite: Senior status in PHEDBS, a grade of "C" or better in all KINS/PHED Teacher Education classes: PHED 1003, PHED 2023, PHED 3033, PHED 3043, PHED 3203, PHED 2373, PHED 4703, PHED 3743, PHED 3903, PHED 432V, PHED 3003, PHED 3623 and PHED 3413; a cumulative grade point average of 2.7 or greater; and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education; and the completed Praxis II content knowledge for Health and Physical Education exam with scores presented to the university internship supervisor by December 1st. (Typically offered: Spring)

PHED 4743. Secondary Physical Education. 3 Hours. Strategies and curriculum for physical education, grades 7-12. Prerequisite: PHED 1003, a cumulative grade point average of 2.7, and passing scores on approved standardized assessments as listed by the COEHP Office of Teacher Education. (Typically offered: Fall)

PHED 480V. Workshop. 3-6 Hour. Physical education workshop. Prerequisite: Instructor consent. (Typically offered: Summer)