APPLIED PHYSIOLOGY AND KINESIOLOGY

The Department of Applied Physiology and Kinesiology offers a flexible curriculum designed to prepare students to apply knowledge and skills in exercise physiology to careers in fitness, wellness, research, and various health professions such as Medicine, Physical Therapy, Occupational Therapy, Athletic Training, and Physician Assistant.

About this Program

- **College:** Health and Human Performance (http://catalog.ufl.edu/UGRD/colleges-schools/UGHHU/)
- **Degree:** Bachelor of Science in Applied Physiology and Kinesiology
- **Credits for Degree:** 120

To graduate with this major, students must complete all university, college, and major requirements.

Department Information

The Department of Applied Physiology & Kinesiology (APK) studies the immediate and lasting effects of exercise and its use in performance enhancement and disease prevention and rehabilitation. Website (http://hhp.ufl.edu/about/departments/apk/)

Curriculum

- Applied Physiology and Kinesiology

The University of Florida admits students as freshmen into the Department of Applied Physiology and Kinesiology. Our faculty are award-winning teachers, mentors, and researchers who are passionate about providing students with learning experiences in and out of the classroom that will prepare them for success in any number of professional areas. Our curriculum is designed to give students a foundation in traditional Exercise Physiology and allow for a bit of personal tailoring in the upper division. Students who graduate with a Bachelor of Science degree in APK will be forward-thinking leaders and top-notch problem solvers.

This curriculum provides a strong basic science background and requires additional coursework in the biological aspects of exercise. Students who wish to focus on fitness, wellness, and allied health professions can take classes that focus on exercise programming and techniques and anatomical aspects of movement. Students who are more interested in preparing for graduate school or other post-baccalaureate programs can opt for classes with more clinical and advanced physiological content. All students will complete a one-semester internship as a capstone experience. All required courses must be completed before the internship.

Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (https://dlss.flvc.org/admin-tools/common-prerequisites-manuals/2019-2020-manual/) may be used for transfer students.

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<th>Course 1</th>
<th>Title</th>
<th>Credits</th>
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<td>Semester One</td>
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<td>CHM 1025 Introduction to Chemistry (Critical Tracking)</td>
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Semester 1

- Complete 2 of 9 critical-tracking courses with a 2.8 GPA on tracking coursework: APK 2100C, APK 2105C, APK 3110C, BSC 2010 and BSC 2010L, BSC 2011 and BSC 2011L, CHM 1025 or CHM 2045 and CHM 2045L, MAC 1147 or MAC 2311, PSY 2012, HUN 2201
- 2.0 UF GPA required

Semester 2

- Complete 2 additional critical-tracking courses with a 2.8 GPA on tracking coursework
- 2.0 UF GPA required

Semester 3

- Complete 2 additional critical-tracking courses with a 2.8 GPA on tracking coursework
- 2.0 UF GPA required

Semester 4

- Complete 2 critical-tracking courses with a 2.8 GPA on all tracking coursework
- 2.0 UF GPA required

Semester 5

- Complete all 9 critical-tracking courses with a 2.8 GPA on all tracking coursework
- Complete 2 APK 3XXX or APK 4XXX courses
- 2.0 UF GPA required

Semester 6

- Complete 4 APK 3XXX or APK 4XXX courses
- 2.0 UF GPA required

Semester 7

- Complete all remaining APK 3XXX or APK 4XXX courses, excluding APK 4940C
- 2.0 UF GPA required

Semester 8

- Complete APK 4940C
- 2.0 UF GPA required

Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.
CHM 2045 & 2045L General Chemistry 1 and General Chemistry 1 Laboratory (Critical Tracking; State Core Gen Ed Physical Sciences) 3

MAC 1147 Precalculus Algebra and Trigonometry (Critical Tracking; State Core Gen Ed Mathematics) or Analytic Geometry and Calculus 1 4

State Core Gen Ed Composition (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing Requirement 3

State Core Gen Ed Humanities with International/Diversity 3

APK 4112 Advanced Exercise Physiology (Critical Tracking) 3

APK 4115 Neuromuscular Aspects of Exercise (Critical Tracking) 3

APK 4050 Research Methods (Critical Tracking) 3

Approved electives 5

Semester Seven

Credits 17

APK 4120 Clinical Exercise Physiology (Critical Tracking) 3

APK 4125C Physical Fitness Assessment and Exercise Prescription (Critical Tracking) 3

APK 4144 Movement Neuroscience (Critical Tracking) 3

Approved electives 6

Semester Eight

Credits 15

APK 4940C Internship (Critical Tracking) 12

Credits 12

Total Credits 120

Academic Learning Compact

The Bachelor of Science in Applied Physiology and Kinesiology offers specializations in exercise physiology and in fitness/wellness. Students will gain extensive understanding of the anatomical, physiological and psychological bases and consequences of human movement. Students will explore the relationship between physical activity and health and learn how to prevent and treat athletic injuries.

Before Graduating Students Must

• Pass a comprehensive critique performed by an approved professional in the field of applied physiology and kinesiology and as determined by the department’s grading rubric.

• Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to

Student Learning Outcomes (SLOs)

Content

1. Integrate principles and methods of math, social sciences and arts and humanities to applied physiology and kinesiology, wellness and/or fitness environments.

2. Identify and relate the nomenclature, structures and locations of components of human anatomy to health, disease and physical activity.

3. Identify, examine and explain physiological mechanisms of homeostasis at various levels of an organism (i.e., cells, tissues, organs, systems).

4. Investigate and explain the effects of physical activity on psychological health as well as the perspectives used to enhance adherence to healthier lifestyles.

5. Identify and explain the acute and chronic anatomical and physiological adaptations to exercise, training and physical activity.
**Critical Thinking**

6. Select and utilize the appropriate scientific principles when assessing the health and fitness of an individual and prescribing physical activity based on those assessments.

7. Solve applied physiology and kinesiology problems from personal, scholarly and professional perspectives using fundamental concepts of health and exercise, scientific inquiry, and analytical critical and creative thinking.

8. Collect, compare and interpret qualitative or quantitative data in an applied physiology and kinesiology context.

**Communication**

9. Effectively employ written, oral, visual and electronic communication techniques to foster inquiry, collaboration and engagement among applied physiology and kinesiology peers and professionals as well as with patients, clients and/or subjects.

**Curriculum Map**

*I = Introduced; R = Reinforced; A = Assessed*

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<tr>
<th>Course</th>
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**Assessment Types**

- Laboratory practical exam
- Internship evaluation