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.
More Info (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. The 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. The department's 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 courses 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 in health sciences can opt for courses 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://cpm.flvc.org/advance-search/) may be used for transfer students.

Semester 1

- Complete 2 of 9 critical-tracking courses with a 2.8 GPA on tracking coursework: APK 2100C, APK 2105C, APK 3110C with a minimum grade of C, 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 4 APK 3XXX or APK 4XXX courses
- 2.0 UF GPA required

Semester 8

- Complete all remaining APK 3XXX or APK 4XXX courses
- 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.

Course	Title	Credits
Semester One		
Quest 1 (Gen Ed Humanities)		3
Select one:		2-4
CHM 1025	Introduction to Chemistry (**Critical Tracking**)	
CHM 2045 & 2045L	General Chemistry 1 and General Chemistry 1 Laboratory (**Critical Tracking**; State Core Gen Ed Physical Sciences)	
MAC 1147 or MAC 2311	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
	Credits	**15-17**
Semester Two		
Quest 2 (Gen Ed Social and Behavioral Sciences)		3
HUN 2201	Fundamentals of Human Nutrition (**Critical Tracking**)	3
PSY 2012	General Psychology (**Critical Tracking**; State Core Gen Ed Social and Behavioral Sciences)	3
STA 2023	Introduction to Statistics 1 (Gen Ed Mathematics)	3
Gen Ed Composition; Writing Requirement		3
	Credits	**15**
Semester Three		
AEC 3030C or SPC 2608	Effective Oral Communication (recommended; or elective) or Introduction to Public Speaking	3
APK 2100C	Applied Human Anatomy with Laboratory (**Critical Tracking**; Gen Ed Biological Sciences)	4
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (**Critical Tracking**; State Core Gen Ed Biological Sciences)	4
Elective (Writing Requirement with International/Diversity)		3
	Credits	**14**
Semester Four		
APK 2105C	Applied Human Physiology with Laboratory (**Critical Tracking**; Gen Ed Biological Sciences)	4
BSC 2011 & 2011L	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 (**Critical Tracking**; Gen Ed Biological Sciences)	4
Electives (Writing Requirement)		5-6

Elective		3
	Credits	**16-17**
Semester Five		
APK 3110C	Physiology of Exercise and Training (**Critical Tracking**; a minimum grade of C required)	3
APK 3200	Motor Learning (**Critical Tracking**)	3
APK 3400 or APK 3405	Introduction to Sport Psychology (**Critical Tracking**) or Exercise Psychology	3
ATR 2010C	Prevention and Care of Athletic Injuries	3
PHY 2053	Physics 1	4
	Credits	**16**
Semester Six		
APK 3220C	Biomechanical Basis of Movement (**Critical Tracking**)	3
APK 4112 or APK 3113C	Advanced Exercise Physiology (**Critical Tracking**) or Principles of Strength and Conditioning	3
APK 4115	Neuromuscular Aspects of Exercise (**Critical Tracking**)	3
APK 4050	Research Methods (**Critical Tracking**)	3
Approved electives		5
	Credits	**17**
Semester Seven		
APK 4120 or APK 4103C	Clinical Exercise Physiology (**Critical Tracking**) or Kinetic Anatomy	3
APK 4125C	Physical Fitness Assessment and Exercise Prescription (**Critical Tracking**)	3
APK 4144	Movement Neuroscience (**Critical Tracking**)	3
Approved electives		6
	Credits	**15**
Semester Eight		
APK 4940C	Internship (**Critical Tracking**; one 12-credit APK internship or two 6-credit APK internships)	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

Courses	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6	SLO 7	SLO 8	SLO 9
APK 3110C	I	I	I	I	I	I	I	I	I
APK 3200		R			R		R		R
APK 3220C	R	R	R		R		R	R	R
APK 3400	R			R			R		R
APK 3405	R			R	R	R	R		R
APK 4050	R					R	R	R	R
APK 4125C	R, A	R, A	R, A	R, A	R, A	R, A	R, A	R, A	R, A
APK 4940C	R, A	R, A	R, A	R, A	R, A	R, A	R, A	R, A	R, A

Assessment Types

- Laboratory practical exam
- Internship evaluation