# APPLIED PHYSIOLOGY AND KINESIOLOGY

### **Program Information**

Graduate study in Applied Physiology and Kinesiology (APK) is focused on research in concentration areas including: biomechanics; motor control and learning; exercise physiology; and performance psychology. Graduate students are exposed to and directly involved in research covering the full multidisciplinary spectrum of human potential from young to old, fit to unfit, healthy to diseased, able-bodied to disabled, and from the casual recreational participant to the high-level athlete. In addition to human performance issues, APK faculty and students study the immediate and lasting effects of exercise and its use in disease prevention and rehabilitation.

For more information, please see our website: http://apk.hhp.ufl.edu/index.php/current-students/prospective-students (http://apk.hhp.ufl.edu/index.php/current-students/prospective-students/).

#### **Degrees Offered**

## Degrees Offered with a Major in Applied Physiology and Kinesiology

- · Doctor of Philosophy
  - · concentration in Biobehavioral Science
    - optional second concentration in Clinical and Translational Science
  - concentration in Exercise Physiology
    - optional second concentration in Clinical and Translational Science
- · Master of Science
  - · without a concentration
  - · concentration in Biobehavioral Science
  - concentration in Clinical Exercise Physiology
  - · concentration in Exercise Physiology
  - · concentration in Human Performance

Requirements for these degrees are given in the Graduate Degrees (http://gradcatalog.ufl.edu/graduate/degrees/) section of this catalog.

#### Courses

## Applied Physiology and Kinesiology Departmental Courses

| Code      | Title                                                    | Credits |
|-----------|----------------------------------------------------------|---------|
| APK 5102  | Kinetic Anatomy                                          | 3       |
| APK 5121  | Anatomy and Physiology for Sport and Exercise Science    | 3       |
| APK 5127  | Assessment in Exercise Science                           | 3       |
| APK 5133  | Human Pathophysiology for the Exercise<br>Sciences       | 3       |
| APK 5150C | Clinical Anatomy for the Exercise Sciences               | 3       |
| APK 5166  | Sports Supplements                                       | 3       |
| APK 5171  | Clinical Exercise Prescription                           | 3       |
| APK 5177  | Strength and Conditioning for Beginning<br>Practitioners | 3       |
| APK 5404  | Sport Psychology                                         | 3       |

| FEI 0941              | Sciences                                                      | 3-9        |
|-----------------------|---------------------------------------------------------------|------------|
| PET 6910<br>PET 6947  | Supervised Research Graduate Internship in Exercise and Sport | 1-5<br>3-9 |
| PET 5936              | Special Topics/Seminars                                       | 1-3        |
| PET 5064              | Athlete Sexual Health and Wellness                            | 3          |
| HLP 7980              | Research for Doctoral Dissertation                            | 1-15       |
| III D 7000            | Performance                                                   | ,          |
| HLP 7979              | Advanced Research in Health and Human                         | 1-12       |
| HLP 7939              | HHP PhD Professional Development Seminar                      | 3          |
| HLP 6935              | Variable International Topics                                 | 1-6        |
| HLP 6911              | Research Seminar                                              | 1          |
|                       | Performance                                                   | ŭ          |
| HLP 6535              | Performance Research Methods in Health and Human              | 3          |
| HLP 6515              | Evaluation Procedures in Health and Human                     | 3          |
| ATR 6934              | Seminar in Athletic Training                                  | 3          |
| ATR 6625              | Athletic Training Research and Technology II                  | 3          |
| ATR 6624              | Athletic Training Research and Technology I                   | 3          |
|                       | Injuries                                                      |            |
| ATR 6304              | Extremity Rehabilitation and Modalities of Athletic           | 3          |
| ATR 6216              | Extremity Evidence-Based Orthopedic Exam II: Lower-           | 3          |
| ATR 6215              | Evidence-Based Orthopedic Exam I: Upper-                      | 3          |
| ATR 6124              | Clinical Anatomy for the Exercise Sciences                    | 3          |
| APK 7117              | Exercise Metabolism                                           | 3          |
| APK 7108              | Environmental Stress Exercise Physiology                      | 3          |
| APK 7107              | Science Cardiovascular Exercise Physiology                    | 3          |
| APK 6940              | Advanced Practicum in Exercise and Sport                      | 3-6        |
| APK 6900              | Directed Independent Study                                    | 1-5        |
|                       | Performance                                                   |            |
| APK 6715              | Grant Writing in Health & Human                               | 3          |
| APK 6704              | MATLAB for Biomedical Sciences                                | 3          |
| APK 6611              | Tactical Strength & Conditioning                              | 3          |
|                       | Populations                                                   |            |
| APK 6417              | Attention & Emotion in Tactical Athlete                       | 3          |
| APK 6408              | Performance Enhancement                                       | 3          |
| APK 6406              | Exercise Psychology                                           | 3          |
| APK 6320C             | Corrective Exercise                                           | 3          |
| APK 6226C             | Biomechanics of Human Motion                                  | 3          |
| APK 6225              | Planning Motor Actions Biomechanical Instrumentation          | 3          |
| APK 6205C<br>APK 6206 | Nature and Bases of Motor Performance                         | 3          |
| APK 6195              | Cell Physiology & Biophysics                                  | 0          |
| ADI/ 6105             | Practitioners                                                 | 0          |
| APK 6176              | Strength and Conditioning for Advanced                        | 3          |
| APK 6170              | Advanced Exercise Physiology                                  | 3          |
| APK 6145<br>APK 6167  | Nutrition Aspects of Human Performance                        | 3          |
| APK 6124<br>APK 6145  | Extreme Environment Physiology Movement Disorders             | 3          |
| APK 6118              | Neuromuscular Adaptation to Exercise                          | 3          |
| 101/6110              | Sciences                                                      |            |
| APK 6116C             | Physiological Bases of Exercise and Sport                     | 3          |
| APK 5702              | Applied Sport Science                                         | 3          |
| APK 5620              | Genetics of Human Performance                                 | 3          |

#### Student Learning Outcomes

## **Applied Physiology & Kinesiology (MS)**

SLO 1 Subject Matter

#### 2 Applied Physiology and Kinesiology

Discuss, explain, and defend subject matter relevant to the discipline – exercise physiology, biobehaviorial science, clinical exercise physiology, human performance, athletic training

#### SLO 2 Discipline specific skills

Discuss, explain, and defend in the discipline specific skills - exercise physiology, biobehaviorial science, clinical exercise physiology, human performance, athletic training

#### SLO 3 Professional Behavior

Display ethical behavior, cultural sensitivity, team work, professional conduct and professional communication