

# DOCTOR OF PHILOSOPHY WITH A MAJOR IN APPLIED PHYSIOLOGY

The School of Biological Sciences offers a multidisciplinary and integrative PhD program in Applied Physiology focused on the study of human movement and mobility, with research concentrations in biomechanics, neuromechanics, motor control and behavior, muscle cellular and systems physiology, and exercise physiology. Applied physiology refers to the study of normal and abnormal regulation and integration of mechanisms across all levels of biological organization (molecules to cells to organs to organ systems). The course of graduate study focuses on original, independent research culminating in the doctoral dissertation.

All PhD programs must incorporate a standard set of Requirements for the Doctoral Degree.

All students are required to complete the following:

Code	Title	Credit Hours
<b>Core Coursework</b> <sup>1,2</sup>		
APPH 6240	Cellular Physiology and Adaptation	3
APPH 6241	Neuromotor Physiology	3
APPH 6242	Integrative Physiology	3
APPH 6225	Biostatistics	3
APPH 8000	Seminar	3
PHIL 6000	Responsible Conduct of Research (RCR) <sup>3</sup>	1
<b>Minor</b> <sup>4</sup>		<b>9</b>
<b>Focus Area</b> <sup>5</sup>		<b>6</b>
<b>Dissertation</b> <sup>6</sup>		<b>12</b>
<b>Total Credit Hours</b>		<b>43</b>

A maximum of 3 credit hours of Special Problems and 6 hours of 4000 level courses may be counted toward PhD course requirements.

<sup>1</sup> Core coursework must be completed on a letter grade basis within first two years of graduate study.

<sup>2</sup> Students must satisfactorily complete all course courses before they are eligible to take the oral qualifying examination.

<sup>3</sup> Complete PHIL 6000 or a program's 'in-house' training approach <http://rcr.gatech.edu/doctoral-courses> within 90 days of first semester as PhD student. RCR training is mandatory for all PhD students

<sup>4</sup> Must be approved by advisor and must be non-APPH courses taken for letter grade

<sup>5</sup> Must be approved by advisor, completed for letter grade. A maximum of 3 hours of 4000-level coursework may apply. No Special Problems hours may apply.

<sup>6</sup> Twelve (12) hours is the minimum required for the PhD. Typical accrued hours will be between 40-80 hours.

## CORE COURSEWORK

The AP Graduate Committee will review any petitions to exempt these courses based on equivalent work. Students may begin taking elective

courses approved by their faculty advisor prior to completion of these core classes.

## MINOR FIELD OF STUDY

As per Georgia Tech guidelines, in addition to adequate knowledge in their major field of intended research, the student must demonstrate mastery of another body of knowledge – the minor field, preferably outside the student's school. The purpose of the minor is to encourage a more diverse interest on the part of the student and to provide a broader basis for the evaluation of their capabilities. The minor field of study will consist of at least 9 credit hours of work in related courses, agreed upon by both the student and their advisor. Once the student has satisfactorily completed the minor requirement as required by the Institute, the appropriate form (download from the Georgia Tech website) must be completed in the School office with a copy sent to the Office of Graduate Studies for final approval and recording prior to graduation. Minor field of study courses must be completed on a letter grade basis and should include non-APPH courses. The courses should be at the 6000 level or above, but use of certain 4000 level courses may be appropriate.

## FOCUS AREA

In addition to the core courses (15 credit hours) and the minor (9 credit hours), each student is required to take 6 credit hours in their focus area (for example, biomechanics). These courses must be approved by the student's advisor. A maximum of 3 hours of 4000 level courses can apply to the focus area. No Special Problems hours can apply to the Focus area. Focus area courses must be completed on a letter grade basis.

## DISSERTATION HOURS

In addition, registration for Doctoral Dissertation hours (APPH 9000) should begin with the student's initial term and continue throughout doctoral study. Dissertation hours are broadly interpreted to reflect all stages of the doctoral dissertation – literature review, topic selection, experimental/theoretical preparation, research performance, writing and presentation. In consultation with their advisor, first year students will be advised to register for only a few hours of APPH 9000 (e.g., 3-6 hours).

In contrast, advanced doctoral students who are working primarily on their dissertation research should register for 18 or more hours in fall and spring semesters and for up to 16 hours of APPH 9000 for summer semesters. Full time doctoral students are expected to commit to an intensive research program, and should register for thesis hours to reflect maximal effort. Students should register for the maximum 21 hours each semester by filling out their schedule with APPH 9000 Dissertation