INTEGRATIVE PHYSIOLOGY
- DOCTOR OF PHILOSOPHY
(PHD)

The objectives of the doctoral program are to:

• Provide an academic foundation for understanding how humans and
  other animals function at the level of genes, cells, tissues, organs and
  systems.
• Develop the professional skills required to become a research
  scientist.

Requirements
Admission Requirements
To obtain materials for application and for any additional information,
visit the Integrative Physiology (http://www.colorado.edu/intphys/grad/)
website.

Entering graduate students must have an undergraduate preparation
equivalent to the basic core curriculum requirements in integrative
physiology at the University of Colorado or departmental approval of their
academic preparation for graduate study.

All graduate applicants must have an introductory course in statistics or
research design. In addition, students should have the knowledge base
that would be obtained by completing human anatomy lecture, as well as
human physiology lecture and lab courses.

Satisfactory scores on the Graduate Record Examination (general) tests
are also required for admission to the department. These scores should
be submitted at the time of application.

Deficiencies
If the undergraduate preparation of a prospective graduate student is
not adequate, the student may be allowed to pursue graduate study with
the understanding that identified deficiencies will be completed. The
graduate admissions committee will determine the nature and extent of
these deficiencies.

Deficiencies in any area of the undergraduate major may be met by
completing approved coursework in the subject at CU Boulder or at
other institutions. All entering graduate students with deficiencies must
satisfy at least one deficiency per semester until all deficiencies are
satisfied. Graduate courses taken before removing deficiencies may be
accepted for graduate degree credit only if prior approval of the graduate
coordinator has been granted.

Course Requirements
Students must complete 30 semester hours of coursework at or above
the 5000 level.

Required Courses and Semester Credit Hours
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>IPHY 5100</td>
<td>Colloquium in Integrative Physiology (2 academic-year semesters)</td>
<td>4</td>
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Advisory Committee
The student's advisory committee will consist of the student's mentor
(chair of the committee), a faculty member in the student's interest area,
and either the graduate coordinator or the chair of the department. The
committee will assist the student in developing a program of study.

Preliminary Review
After the first academic year, which usually consists of 16 to 18 hours of
coursework, the student completes the preliminary review process. The
student's advisory committee will perform this review. The preliminary
evaluation includes an evaluation of the student's academic status
(minimum GPA of 3.0 is required), a detailed proposal of the student's
program of study, written input from the student's mentor, and other
pertinent materials deemed necessary by the committee.

The outcome of the preliminary review process can be one of three
judgments: pass, fail, or probation. A student who passes may continue
to pursue the doctoral degree. A student who fails will be dismissed
from the doctoral program. A student on probation must complete any
deficiencies determined by the committee before continuing to pursue
the doctoral degree. Regardless of the outcome, the committee will
submit a written report to the graduate coordinator for filing.

Comprehensive Examination
The comprehensive exam will be administered to the student within
four semesters of entry into the doctoral program. The format of the
exam, and the composition of the comprehensive exam committee
will be determined by the mentor in consultation with the student. The
examination will be based on a document that is about 25 pages in length
designed to demonstrate the student’s comprehensive knowledge on
a topic. The composition of the committee (a minimum of five members)
is submitted to the Dean of the Graduate School for approval. Students
are given two opportunities to pass the exam. The written portion of the
exam is based on the student's coursework and requires demonstration
of a broad-based knowledge in integrative physiology. Specific areas to
be examined are determined by the mentor and the student.

Dissertation
Successful completion of the exam advances the student to doctoral
candidate status, and the student may then begin a dissertation. All
students must complete a formal written dissertation that conforms to
the requirements established by the Graduate School at CU Boulder.

Final Examination
After completion of the dissertation, a final examination is scheduled. The
exam consists of a written submission of the dissertation work and an
oral defense. The final examination committee consists of at least five
members, one of whom must be from outside the department. Three of
the members must be Boulder campus resident faculty.