

Required Courses for  
Graduate Students in the  
*Integrative Physiology (IP)*  
Affinity Group

# IP Affinity Group

## School of Life Sciences

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## IP – Required Courses

- BIOL 701 – *Ethics in Scientific Research* (1)  
(Students must take this course during their first year in the Program.)
- At least one statistics course  
(*e.g.*, STAT 691 – *Statistics for Scientists I*, STAT 692 – *Statistics for Scientists II*; each course is 3 credits].

## IP – Required Courses

- The details of the program of study of an IP student will be decided by her/his Advisory Committee in consultation with the student during their annual meeting(s).
- It is suggested that at least one (1) course from Cluster 1 (*i.e.*, the Core Rotation) be taken each semester.

## IP – Required Courses

- Additional courses will be chosen from Cluster 2 or from Cluster 3 (*i.e.*, relevant courses offered by other affinity groups).
- It is not expected that every student will take every course from Clusters 1 and 2.

## IP – Suggested Courses — Cluster 1 (Core Rotation)

- BIOL 640 – *Mammalian Physiology* (3)
- BIOL 645 – *Cell Physiology* (3)
- BIOL 647 – *Comparative Animal Physiology* (3)
- BIOL 648 – *Endocrinology* (3)
- BIOL 742 – *Topics in Advanced Plant Physiology* (2)

## IP – Suggested Courses — Cluster 1 (Core Rotation, continued)

- BIOL 617 – *Biochemical Adaptations* (3)
- BIOL 743 – *Ecological Plant Physiology* (3)
- BIOL 748 – *Environmental Physiology* (3)
- BIOL 786 – *Bioenergetics* (3)

## IP – Suggested Courses — Cluster 2

- BIOL 605 – *Molecular Biology* (3)
- BIOL 609 – *Virology* (3)
- BIOL 653 – *Immunology* (3)
- Other 600-level courses appropriate to the student's program of study.

## IP – Additional Courses — Cluster 3

- BIOL 703 – *Biochemical Genetics* (3)
- BIOL 784 – *Conservation Biology* (3)
- BIOL 792 – *Advanced Topics in Cell and Molecular Biology* (1-3)
- BIOL 793 – *Advanced Topics in Ecology and Evolution* (1-2)
- BIOL 794 – *Techniques in Molecular Biology* (3)

## IP – Coursework

- The rationale for this approach is that it would require IP students to study physiology from the cellular to the environmental level, and to integrate this knowledge. Students proficient in ecological physiology would become familiar with relevant issues at the suborganismal level, and vice-versa.