

Integrative Principles (IP)

Fall 2015

(ZOO 6005)

IP presents an integrative approach to fundamental principles of biology for first-year graduate students in Biology (students in other departments also are welcome). The course is not organized by subdisciplines, but rather as modules that bring together elements from several subdisciplines within Biology. The specific subjects of the modules vary from year to year. The goal is to promote integrative approaches to biology, emphasizing commonalities and differences among processes and systems by concentrating on biological principles, concepts, approaches, and ways of thinking that can span a variety of taxa, regions, or specific phenomena.

- *Who:*
 - Coordinator: Colette St. Mary
 - Teaching assistant: Judit Ungvari-Martin
- *Modules and leaders:*
 - Juliet Pulliam (Disease Dynamics)
 - Jose Miguel Ponciano (Inference)
 - Charlie Baer (Neutral models: the case of neutral evolution)
 - Colette St. Mary (Cancer, an evolution phenomenon)
- *Where:*
 - 521 Carr
- *When:*
 - T/TH periods 3&4 (9:35-11:30)

Textbooks

There is no required text in this course. Readings will be assigned from books and journal articles; these will be made available from our web page during the semester.

Course assignments and contributions to your grade

- Your IP Paper, your review of another student's paper, and your revisions of your paper (30%)
- Participation (30%) will be assessed during each class room meeting.
- In module assignments, such as classroom exercises, out of class research and group projects, and presentations, (40%).

Grading & Grade scale

An A will be assigned in the event that the student is an active participant in the class and completes the assigned work with good effort. Lack of participation, low effort, or missed assignments will reduce your grade. Consistent and/or unexcused absences reduce your

grade further. I will alert you at midterm if I have concerns that your trajectory in the course will not result in top marks.

Course policies

Readings should be done in advance of class; you are expected to come ready to discuss the topics (and this typically requires a detailed reading of the material; sometimes also requiring some background material if the reading is outside of your training). Excuses will be considered only in cases of medical and/or family emergencies, as documented by an accompanying letter, or for official academic activities (in which case I should be contacted in advance via email).

University support services

Resources are available on campus to help students meet academic goals and solve personal problems, which interfere with their academic performance. Resources include:

1. [UF Counseling and Wellness Center \(Links to an external site.\)](#), 301 Peabody Hall and Radio Rd Facility, 392-1575, personal and career counseling.
2. [Career Resource Center \(Links to an external site.\)](#), Reitz Union, 392-1601, career development assistance and counseling.

Disability Notice

Students with disabilities enrolled in this course and who may need disability-related classroom accommodations are encouraged to make an appointment to see me before the end of the second week of the term. All discussions will remain confidential, although the [Student Accessibility Services \(Links to an external site.\)](#) office may be consulted to discuss appropriate implementation of any accommodation requested.

Links to Valuable Information

- Schedule
- Lecture schedule
- Tips for reading scientific papers
- Review paper info (and how to remove your ID info from word and pdf documents)
- Peer review notes
- TREE instructions to authors