Instructor Information
James Holland Jones  
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Office Hours: by appointment

Meeting Time and Location:
Fridays, 12-3 pm, Building 50, Room 52T

Course Description

In this course we will discuss aspects of the theory of evolution of particular relevance to the human sciences. While exceptionally powerful as an explanatory model, evolutionary theory is all too frequently poorly applied to problems of human behavior and the diversity of the human phenotype. The goal of this class is to provide a critical introduction to the aspects of contemporary evolutionary theory that are most likely to be yield important insights into human evolution and behavior. Among these are quantitative genetics, formal optimality models, game theoretic approaches to social interactions, and niche construction models for cultural evolution. All of these approaches are built around a formalism that is largely absent in the contemporary study of anthropology. This class will attempt to address this critical omission in current anthropological training.

One historical question that we will deal with extensively is that of sociobiology and its intellectual legacy in anthropology, particularly the development of evolutionary psychology.

Assignments
Starting in the second week, students will turn in short written assignments synthesizing the important issues of the week. These assignments will be no more than 1000 words and are meant to be concise summaries of the issues dealt with that week and the ways the readings address them.

Evolutionary theory, like most scientific theory, is couched in a formalism grounded in the language of mathematics. One goal of the writing in this class is to develop skills at writing about formalism. This is a very distinct skill from doing the mathematics and is essential for effective scholarly communication and the advancement of the science.

Students are also expected to do in-class presentations on a rotating basis. For weeks in which you are assigned to present to class, you are expected to do at least one reading in addition to the readings assigned for the class. You can then use your enhanced understanding of the week’s material to elucidate the questions, controversies, and methodologies particular to that week.

There will be no class on 24 January,

Students are expected to write a synthetic 20 page research paper on a topic of their choosing. The due date for the paper is Friday, 21 March at 5:00 pm. Please follow the style for scientific papers presented in my online guide available at:
Grading

Grading will be based on a weighted combination of class participation, weekly writing assignments, and the term paper. There are three key components to class participation: (1) coming to class having done the reading and prepared to discuss, (2) discussing the reading in a frank, honest, professional way, (3) giving class presentations based on the material for the week. The breakdown for grading is as follows:

- Class participation: 20%
- Weekly writing assignments: 20%
- Term paper: 60%

Syllabus

(Readings Subject to Change)

Fitness and Adaptation (11 January)


Determinism, Biological Causation, Ontogeny, and Interactions (18 January)


Optional:


24 January: NO CLASS

Evolution of Quantitative Traits (31 January)


Optional:

Sociobiology and Evolutionary Psychology (7-14 February)

Week 1:

Optional:

Week 2:

Optional:

Altruism, Levels of Selection (21 February)

Optional:

Cultural Evolution and Niche Construction (28 February)

**Optional:**


**A Case Study in Cultural or Biological Evolution? (6-13 March)**


Supplementary Readings to Follow.