

PHIL 245: Philosophy of the Biology of Sex

Professor: Karen Kovaka

Fall 2024

E-mail: kkovaka@ucsd.edu
Office Hours: Wed 3-5pm
Office: A & H Building 0450

Web: karenkovaka.com
Class Hours: Mon 9-11:50am
Class Room: A & H Building 0427

Course Description

Sex is a central concept, process, and category in the biological sciences, from evolutionary biology to medical research. This course will explore puzzles related to sex in biology, as well as question the practice of classifying organisms according to sex at all. Key topics we will cover include:

- Different theories about the **evolution of sexual reproduction**, and why biologists haven't settled the issue yet
- How **sexual selection** produces evolutionary change
- Defenses and criticisms of the standard model of **two biological sexes**
- The status of scientific research on various kinds of **sex differences**
- Normative issues related to the use of **sex as a variable in biomedical research**

Evaluation

1. Class presentation: 10%
2. Individual writing assignments: 90%
 - (a) Research question survey (due 10/25): 15%
 - (b) Literature review (due 11/8): 15%
 - (c) Paper (due 12/13): 50%
 - (d) Peer review (due 12/16): 10%

Fine Print

- **Attendance:** I expect you to come to every class session except when illness or other personal circumstances prevent you. You should be prepared to contribute to the discussion by sharing your own thoughts, answering my questions, and responding to others' observations. If your circumstances require you to miss classes, you and I need to speak about alternative ways for you to participate in the course.
- **Accessibility:** We all learn differently, and I am committed to making this course accessible to everyone. Please come talk to me if some aspect of the course isn't working for you: we can collaborate on alternatives that suit your needs, interests, and learning style. If you have a disability (or think you might), it's also a good idea to contact [Services for Students with Disabilities](#).
- **Technology:** Our phones, tablets, and laptops are crucial tools for learning, yet they are also notorious distractions. I will leave it to you to regulate your technology use. But my expectation is that during our weekly seminar, you do not check your email, message people, or use the Internet for things that aren't course-related. That's why we have a break halfway through.
- **Academic integrity:** I take academic integrity very seriously. It's important that all the assignments you complete are your own work and that you know how to credit and cite sources appropriately. If you have any questions about my expectations for a particular assignment, be sure to talk to me!
- **Changes to the syllabus:** I may adjust the course readings and schedule as the semester goes along. It is your responsibility to pay attention to Canvas and your email so that you are aware of any changes.

Texts

There are no required books for this course. All of the texts I assign are available on our Canvas site.

Reading Schedule

Date	Content
Week 1 9/30	Sex and Evolution: The Received View <ul style="list-style-type: none"> • Carl Zimmer, <i>The Tangled Bank</i>, ch 9 • Paul Griffiths, "What are biological sexes?"
Week 2 10/7	Evolution of Sex <ul style="list-style-type: none"> • John Maynard Smith, "Why Sex?" • Sarah Otto, "The evolutionary enigma of sex" • Matthew Hartfield and Peter Keightley, "Current hypotheses for the evolution of sex and recombination"
Week 3 10/14	Sexual Selection <ul style="list-style-type: none"> • Joan Roughgarden, <i>Evolution's Rainbow</i>, ch 1-9
Week 4 10/21	Sexual Selection <ul style="list-style-type: none"> • Richard Prum, <i>The Evolution of Beauty</i>, ch 1-3
Week 5 10/28	How Many Sexes, and Do We Need Them At All? <ul style="list-style-type: none"> • Jess McLaughlin et al., "Multi-variate models of animal sex" • Aya Evron, "What do sexes have to do with models of sexual selection?" • Aja Watkins and Marina DiMarco, "Sex eliminativism"
Week 6 11/4	Feminism and Evolutionary Biology <ul style="list-style-type: none"> • Elisabeth Lloyd, <i>The Case of the Female Orgasm</i>, selections
Week 7 11/11	No Class. Veterans Day.
Week 8 11/18	Sexual Desire <ul style="list-style-type: none"> • Jacob Stegenga, "Sex differences in sexual desire" • Jacob Stegenga, "Medicalization of sexual desire"
Week 9 11/25	Sex and Medicine <ul style="list-style-type: none"> • Helen Zhao et al., "Making a sex difference fact" • Sara Richardson, "Sex contextualism"
Week 10 12/2	Sex Differences and the Brain <ul style="list-style-type: none"> • Daphna Joel and Anne Fausto-Sterling, "Beyond sex differences: new approaches for thinking about variation in brain structure and function" • Daphna Joel, "Beyond the binary: rethinking sex and the brain" • Ginger Hoffman and Robyn Bluhm, "Neurosexism and neurofeminism"