

Short Course Outline for:

Biology of Sex, NATS 1660 6.0

This is a full year course (6 credits) that is run at quadruple speed (12 hours per week for 6 weeks instead of 3 hours per week for 24 weeks). This course satisfies science credits for York Faculties that require science credits for general education.

Format: Lectures, text readings, 2 midterms (2 x 25%), in-class final exam (50%, partly cumulative). No labs.

Course Management System: Moodle page for announcements, PowerPoint presentations, midterm grades.

Dates: Monday through Thursday each week from Monday June 4 to Thursday July 12 (6 weeks).

Lectures: 9:30 am to 12:30 pm, Curtis Lecture Hall room I (CLH I). Lectures will be recorded using Camtasia Lecture capture. Camtasia captures voice and projected images, but sometimes lectures will also temporarily use the blackboard, which are not captured by Camtasia. Attendance is encouraged, as research shows students who attend lectures prepare better for exams and therefore fare better in grades.

Students must attend on midterm and exam dates: Thursday June 15, Thursday June 29, Thursday July 12.

Textbook: *Biology of Sex*, A. Mills, 2018, University of Toronto Press. Available in York bookstore. There are no copies yet available on the used market. \$74.95. Two copies will be on library 2-hour reserve.

Anticipated topics (which we will cover as time allows):

- *Introduction:* tools needed to study the biology of sex
- *Sex and biological purposes:* not just reproduction?
- *Sex and genetics:* sex is a compromise between two individuals
- *Sex determination:* not simply X and Y
- *Sex and evolution:* there are pleasure rewards for a reason
- *Sexual selection:* why males are more likely to display and fight
- *Mating systems:* how common is monogamy?
- *Sexual conflict:* males and females often have different strategies
- *Pollination:* flowers are sex organs dependent upon other agents
- *Our own species:* human sexual function and fertility