JMB170Y - 2013-2014

Biology, Models, and Mathematics

This course is intended to teach mathematical techniques in a biological context. It is taught jointly by the departments of Cell and Systems Biology, Ecology and Evolutionary Biology, and Mathematics.

• **Corequisite:** BIO120/BIO150

Students who have not studied highschool calculus should expect to have to devote extra time to the part of the course in which calculus is covered.

- Classes: MWF1, SS2117.
- **Textbooks:** none required.

• **Calculator:** SHARP calculator with model number beginning EL520, EL531, or EL546. The additional letters at the end of the model number do not make any difference to us, with one exception:

EL531V is an old model that is not appropriate!!!!

The EL520 series cost about \$25 at the university bookstore; the EL531 series cost about \$18; the EL546 series cost about \$35. They are equally good for our purposes. It is *extremely important* to have a calculator which does linear and *power function* regressions. Graphing calculators and laptops will not be allowed on tests or the examination.

• Marks: Three term tests, worth 10%, 10%, and 5%; problem sets most weeks, worth a total of 10%; 500-word essay, worth 25%; final exam in April, worth 40%.

• Test dates (during the class hour, 1:10 – 2:00): October 28, in room EX100, October 30, in EX320; January 13, in EX300, January 15, in EX300; March 10, in EX300. The first two tests (of three) are scheduled for two consecutive class hours. The tests and exam are "open-book" format.

• Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

• Note that *e*-mail should NOT be seen as an alternative to meeting with the instructors (or the TAs) during office hours. Nor should *e*-mail be used as a mechanism to receive private tutorials (especially prior to tests) or to explain material that was covered in lectures you missed. Please include your full name and student number in all *e*-mail messages and use your *utoronto.ca* address.

• Problem sets with multiple sheets of paper must be stapled together. Only the first page will be marked on unstapled sets.

• Problem sets must have the student's name and student number printed on the top of the first page, followed by the following sentence: *"This problem set is entirely my own work."* This sentence must be followed by the student's signature. Problem sets without this sentence and signature will not be marked.

• Normally, problem sets will not be accepted late.

• In the event that problem sets or tests are missed, students should notify the instructor as soon as possible, and in any case no later than one week after the original due date. Students should also record their absence on ROSI. We will follow university policies concerning missed term work.

Academic Integrity

Academic integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the UofT degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously. The University of Torontos Code of Behaviour on Academic Matters (www.artsci.utoronto.ca/osai/students) outlines the behaviours that constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

Obtaining or providing unauthorized assistance on any assignment (this includes working in groups on assignments that are supposed to be individual work). Using someone else's ideas or words without appropriate acknowledgement, especially failing to place quotation marks around material taken from other sources. Submitting your own work in more than one course without the permission of the instructor. Making up sources or facts.

On tests and exams:

Using or possessing any unauthorized aid, including a cell phone. Looking at someone else's answers. Misrepresenting your identity. Submitting an altered test for regrading.

Misrepresentation:

Falsifying institutional documents or grades. Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code of Behaviour on Academic Matters. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact the instructor. If you have questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other available campus resources like the College Writing Centers or the Academic Success Centre. • Students often learn a lot from working with one another. You are encouraged to meet with other students from class for this purpose. For example, you might work through exercises in the course notes together or discuss any material you found confusing in lecture or in the course notes. It is also legitimate to discuss assignment problems with other students in the class or consult a textbook. However, you must destroy any notes concerning assignment problems made during this time and you must not write down anything for at least two hours afterwards. Assignments must be written up completely by yourself using only the text and your own notes as aids. The point is that your written report should be your own work. Do not let other students even look at your completed assignment solutions, since this can lead to copying. These rules are meant to ensure that all students understand their solutions to the problems well enough to write up solutions by themselves. Failure to comply with these guidelines is a serious academic offense.

• Contacts:

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