BIOL 1001 3.0 – Biology II

Ecology, Evolution, Biodiversity & Conservation Biology

This course is part 2 of York’s first-year biology foundation. BIOL 1000 (Biology I) is a prerequisite.

Course Material

This course will provide students with a fundamental knowledge of evolution and ecology. It is essential material for upper level courses regardless of the program that students follow.

Course Instructor: Professor Alex Mills, Room 134 Chemistry Building
ammills@yorku.ca (NOT amills@yorku.ca). Please include an informative subject line, including “BIOL 1001”.

[Use b1001lab@yorku.ca for communicating with the Head TA]

Phone: 416-736-2100 ext. 33609

Office Hours: Monday and Wednesday afternoons 2 to 3 PM.

Website: The course will be managed through a Moodle site. Please log in at: https://moodle.yorku.ca/moodle/

New Textbook: We are NOT using the text that was used during winter 2013. We have a new custom text that draws chapters from the following: Biological Science, 2nd Canadian Edition (authors: Freeman, Harrington, Sharp; publisher: Pearson, Toronto).

[This is marketed in the bookstore as a Symbiosis Text: “The Pearson Custom Library for the Biological Sciences, Biology 1001, Biology 2”]

Important Dates:

First Class is Monday, June 24th.

Last day to DROP the course without a grade being submitted is July 19th.

No lecture on Monday, July 1st.
No labs during week of July 1 to 5.

First Midterm: Monday July 8th during class.
Second Midterm: Monday July 22nd during class.
Final Exam: To be advised.
Labs

Lab sections, times, and places:

Labs start on the first day of the course (Lab 1, June 24 to 27). There are no labs during the second week of the course (July 1 to 4) because of the Monday statutory holiday. You must attend your assigned lab section unless you obtain prior permission from the Head TA at b1001lab@yorku.ca.

- Mondays: 3 sections at 2:30 pm
- Tuesdays: 3 sections at 10:00 am
- Tuesdays: 3 sections at 2:30 pm
- Wednesdays: 3 sections at 2:30 pm
- Thursdays: 2 sections at 2:30 pm

Locations: Labs 2, 3, and 5 are in wet labs (LSB 215, LSB 217, & LSB 219). Labs 1 and 4 are in computer labs (LSB 108, CB 160, & CB 161).

Lab Duration: Labs 1, 2, 3 and 4 are 3 hours each. Lab 5 requires field work ahead of time so in-lab time is only 2 hours (but the lab starts at the scheduled time, not one hour later).

You won’t have a TA in the usual sense: There are seven TAs, but they are not assigned to particular lab sections. Accordingly, you will not have one TA. You are more likely to have a different TA demonstrating each lab. To make marking more fair, in most cases all submissions for each lab will be marked by one person (two people at most).

Lab value: The labs are worth 22% of your final grade. Labs 1, 2, 3 and 5 are each worth 10 marks of your 60 lab marks (i.e. 3.67 marks each of your course grade). Lab 4 is worth 17 marks (i.e. 6.23 marks of your course grade). There are 3 performance marks (i.e. 1.10 marks of your course grade).

Other lab comments: Labs 1 and 4 require submission to Turnitin. Lab 2 has a Moodle pre-test and lab 3 has a Moodle post-test.
Labs vary in the post-lab submissions times; in the case of Lab 5 it is only 24 hours.

See the course lab manual (mandatory purchase from the bookstore) and the Moodle site for more information.

**Course Delivery:**

There are 6 lecture hours per week (MWF 11:30 am to 1:20 pm). Lectures will primarily be PowerPoint presentations, but there will be other in-lecture events such as animations, minute papers, think-pair-share, clicker polls, and peer instruction.

There will be assigned readings from the textbook. A separate Excel workbook is posted showing the tentative lecture schedule.

**Course Evaluation:**

- Labs: 22% (Weeks, 1, 3, 4, 5, and 6)
- Midterm #1: 20% (Monday July 8)
- Midterm #2: 20% (Monday July 22)
- Final Exam: 32%
- Clickers and quizzes: 6% (throughout)

**Absences:**

There is a detailed procedure for cases of missed labs. Please consult your lab manual. Act promptly!

There are NO make-up midterms or final exams...

If you miss a midterm, you must supply documentation to Professor Mills (normally, an Attending Physician’s Statement http://www.registrar.yorku.ca/pdf/petitions/attending_physician_statement.pdf or a statement by a psychologist or counsellor, dated within 24 hours of the absence) by the Wednesday two days later. If it is not possible to supply the documentation that day, then you must send an email notification by that day. If Professor Mills finds your documentation persuasive, then that 20% will be added to the value of the Final Exam. Otherwise, you will receive a zero.

If you miss the Final Exam, we will be operating under the brand new first year policy. There will be no deferred standing agreement and you will be REQUIRED TO PETITION, in which case if your documentation is deemed adequate by the Petitions Committee then you will be entitled to write a deferred exam in the autumn. Otherwise, you will receive a zero.
**Learning Objectives:** A thorough list of Learning Objectives will be posted in a separate document. It is smart to consult this list, as the midterms and the exam will be designed to test your success in achieving these objectives.

*Area 1. Fundamental Understanding:*

*Area 2. Critical Thinking Skills:*

*Area 3. Problem Solving Skills:*

*Area 4. Effective Communication:*
Please read these FAQs!

Do I have to come to class? No one will be requiring you to come to class, but there will be some marks for clicker participation, and it is well known that in most cases, there is a positive relationship between attendance and performance on exams.

![Absences versus percent score graph]

\[ f(x) = -0.03x + 0.92 \]
\[ R^2 = 0.48 \]

Do I have to pay attention? Lectures are partnerships between the students and the professor. There is a code of conduct that places obligations on both sides, and the student role includes attentiveness and considerateness to the lecturer and fellow students.

If you wish to day dream, that is fine. However, if you wish to check email, surf the web, or text friends, you must leave the class. Cell phones are required to be put away and turned off. Transgressors will be required to leave.

This is from a 2013 paper in the journal *Computers and Education*:

Abstract

Laptops are commonplace in university classrooms. In light of cognitive psychology theory on costs associated with multitasking, we examined the effects of in-class laptop use on student learning in a simulated classroom. We found that participants who multitasked on a laptop during a lecture scored lower on a test compared to those who did not multitask, and participants who were in direct view of a multitasking peer scored lower on a test compared to those who were not. The results demonstrate that multitasking on a laptop poses a significant distraction to both users and fellow students and can be detrimental to comprehension of lecture content.
Are study notes posted on-line? PowerPoints used in lecture are posted on-line, usually prior to class, sometimes following class, and sometimes in modified form. Remember, these presentations do not constitute the whole course; they need to be understood in conjunction with what is said and demonstrated in class.

Do you bump marks at the end of the course? Very rarely; presume that a 79 is a 79, not an 80, and that a 59 is a 59, not a 60! Don't aim for a 49!

Accommodations:

Students who feel that there are extenuating circumstances that may interfere with the successful completion of their exams or other course requirements are encouraged to discuss their concerns with Professor Mills as soon as possible.

Students with physical, learning or psychiatric disabilities who require reasonable accommodations in teaching style or evaluation methods should discuss the matter with Professor Mills early in the term so that appropriate arrangements can be made.

Religious Observance Days:

Should any of the dates for tests or exams pose a conflict with a religious observance day for your particular religion, you must complete an Examination Accommodation Agreement Form (available online at Registrar’s Office site) and submit it to the instructor at least 2 weeks before the date of the test or 3 weeks before the start of the examination period.

Academic Honesty:

York students are required to maintain high standards of academic integrity and are expected to be familiar with and to follow the Senate Policy on Academic Honesty (see http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm).

Cheating and plagiarism are major academic offences and carry serious penalties, ranging from a failing grade on the work in question to expulsion from the university. Students should also complete the online tutorial available at that site.
Professionalism and Student / Instructor Conduct:

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship and to the class. It is the responsibility of the instructor to maintain an appropriate academic atmosphere in the lecture hall, and the responsibility of the student to cooperate in that endeavour.

I hope to make this course an enjoyable experience for everyone.