

Department of Biology Course Outline

SC/BIOL 1500 3.00 Introduction to Biology Winter 2017

Course Description

An introductory course in biology for students needing adequate preparation for SC/BIOL1000 and SC/BIOL1001. The course explores underlying theories and the unity and diversity of life. Topics include evolution, cell theory, introductory biochemistry, inheritance, biodiversity, and ecology. **NOTE:** May not be taken by any student who has taken or is currently taking another university course in biology. Note: Not eligible for Biology credit towards a Biology, Biochemistry or Environmental Biology program.

Prerequisites

none

Course Instructors and Contact Information

Course Director: Dr. Tanya Da Sylva
 Email: b1500lec@yorku.ca
 Office: 210 Bethune
 Office Hours: Posted to Moodle

Email must include your full name and student number and should include a descriptive subject line. Email is NOT a substitute for office hour attendance. Emails regarding administrative details will be answered by the first year administrative assistant, Dharti Patel. Expect an average response time of two business days. Email will not routinely be replied to on weekends or holidays.

Schedule

Tuesdays and Thursdays, 2:30pm – 4pm in LAS B

Evaluation

Midterm #1: February 9th, 2017 (25%)
Midterm #2: March 21st, 2017 (25%)
Final Exam: Date and time set by Registrar's office. (35%)
Learning Activities: See the *Activities* outline for details. (15%)*

Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles

* Learning Activities mark will be calculated out of 80% of the maximum available activity points for the term.

NOTE: There will be **NO** make-up day for the midterms. If you cannot attend the midterm **AND** you have valid reasons for missing the test(s) your mark(s) will be redistributed to the final exam.

Important Dates

Classes Start: January 5th, 2017

Reading Week (no class): February 18 - 24th, 2017

Drop Date: March 10th, 2017 (course does not appear on transcript)

Last Day of Classes: April 5th, 2017

Course Withdrawal Period: March 11th –Apr. 5th (course still appears on transcript)

Exam Period: December 7th – 22nd (inclusive)

IMPORTANT! Class is cancelled February 14th, 2017 (online material will be posted to Moodle instead)

NOTE: for additional important dates such as holidays, refer to the “Important Dates” section of the Registrar’s Website at <http://www.yorku.ca/yorkweb/cs.htm>

Resources

Course Website: *Please check Moodle often.* Announcements may be posted on Moodle before they are communicated in class. Moodle will also be where you can view your midterm and final exam grades.

McGraw Hill Connect registration and access (connect.mheducation.com/class/biol1500_w2017) is required to complete course assignments as part of your *Activities* grade. Please see below and the *Activities* assignment outline for more information

Textbook (Required):

Custom Package CPS BIO 1500 Introduction to Biology with Connect Access Card Package
ISBN 9781259455278

Alternative eBook option with Connect:

Connect Access Code for Biology: The Essentials, 2nd Edition, by Hoefnagels, can be purchased separately at the York Bookstore. Connect access can also be purchased online when you register at the address above.

Note: The Connect platform is only one part of your activities mark. It was chosen to enhance your experience and help you learn. Years of student feedback on what was wanted in a textbook and online material also informed my decision. I worked with the publisher to provide a custom option that is cheaper than the full Hoefnagels text alone. **Connect access is also being provided with the purchase of a new custom text at no additional cost** (the new text would cost the same even without the Connect access). However, **if the cost of the textbook is preventing you from completing course assignments you may discuss options with me, privately, by emailing b1500lec@yorku.ca to set up an appointment.**

Learning Outcomes

Upon successful completion of this course, students should be able to:

- Discuss the process of evolution and describe how evolution is used to explain the unity and diversity of life.
- Describe the properties and processes of life and the differing scales at which life is studied.
- Discuss the process of science and biological inquiry.
- Describe the chemical nature of life and how biological macromolecules interact at a

cellular level.

- Describe the major cellular processes of replication, metabolism and communication (with other cells and the environment), relating form and function in multiple cell types (animal, plant, prokaryote).
- Discuss the role of genetic information and the environment in shaping an organism's phenotype.
- Relate genetic principles to population structure, speciation and evolution of organisms.
- Describe the evolution of biological diversity and identify major features and properties of prokaryotes, protists, fungi, invertebrates and vertebrates.
- Describe the biosphere and identify defining features of aquatic and terrestrial biomes.
- Discuss principles of population ecology, community structure and ecosystem structure, placing them in an evolutionary context and applying them to modern conservation and restoration ecology.
- Work effectively, within a group and individually, to gather, review, analyse and present biological information.

Course Content

Readings and additional information can be found on Moodle.

Experiential Education and E-Learning

Connect and LearnSmart:

McGraw Hill Connect is **part of your Activities mark**
(connect.mheducation.com/class/biol1500_w2017)

Why we are using McGraw Hill Connect - Finishing your readings before class will *prepare you for lectures*, allowing you to engage more deeply with the material in class. This will help you understand the material better. LearnSmart is guided reading, with integrated assessment of understanding. Note: you do not have to read the text before doing your LearnSmart assignments; the LearnSmart platform includes integrated readings.

Active learning aids comprehension and retention of concepts. During class you will be engaging in activities that promote analysis, synthesis of the course content, case studies and application to 'real-life' experiences. Sometimes this will take the form of individual work, but often you will be participating in small group discussions or analysis. Activities will not take place every class and warnings may not be given for when activities will occur.

To encourage participation and accountability you will have the opportunity to earn activity points for LearnSmart assignments, in-class activities, Moodle reading quizzes, reflection activities and, potentially, other mini-assignments. Activity points are usually given for active participation not accuracy.

Other Information

1) Information on 2-stage Testing:

- Numerous educators have used 2-stage tests as a way to turn the assessment process into a learning experience. 2-stage tests involve writing tests both as an individual and in a group. When your group disagrees on an answer you get to discuss the subject right away perhaps correcting your own misconceptions before you leave the exam room. **We will use 2-stage testing for our midterms and final exam.**
- You will arrive for your test and write the 1st stage - individual test; this will be like a traditional test. You will hand in your scantron and test booklet when you are done but

remain seated until the end of the 1st stage. Once everyone's tests have been collected you will assemble into groups of four.

- In your groups you will be given another test booklet to begin the 2nd stage (group test) - this test will be similar to the one you just completed by yourself. You will now have additional time to complete the test again in groups. You will not be allowed to write the group test by yourself or in groups of less or more than 4 people (unless unavoidable due to class numbers).
 - Your mark will be calculated as follows - 85% individual score plus 15% group score. However if your individual score is higher than your group score you will simply have your individual score (100%).
 - Students who normally write with Alternate Exams have been able to join the class for the 2nd stage (group). However, if you have any concerns about the testing format or joining the main room please let me know and we can discuss alternative accommodation.
- 2) You will be responsible for material presented in class and associated textbook sections. The textbook is your resource and will help you understand this material. It contains many of the visuals presented in the lectures.
 - 3) Audio recording (ONLY audio) of the lecture is permitted. Recordings can only be shared with students enrolled in the course and section the recording was made of. Therefore recordings CANNOT be uploaded to public websites or otherwise shared publicly. Students in violation of these policies may have legal action taken against them.
 - 4) The midterms will consist predominantly of multiple choice but may include short answer, fill-in, matching, calculating and drawing type questions.
 - 5) Your cumulative final will be given in a three hour block during the Winter exam period and will have the same type of questions as the midterm and may have essay questions. **It is your responsibility as a student to ensure that you are available to sit for examinations during the entire exam period.** Under no circumstances will makeup exams (midterm or final) be provided because of conflict with vacation plans or work conflicts.
 - 6) All test grades will be posted to Moodle when available. Do not email asking when grades will be posted or for your grade; these emails will not be responded to. Grades (or points) for Connect assignments can be viewed through Connect.
 - 7) It is your responsibility to earn your grade. Individually adjusting a student's grade without academic merit is unethical. All requests for grade "bumping" will be ignored.

Course Policies

Grading and Policies for Missed Tests

Grading: The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (for a full description see the York University Undergraduate Calendar – <http://calendars.registrar.yorku.ca/2012-2013/academic/grades/index.htm>)

Missed Midterm/Exam – General Policies: Students must have a documented **urgent reason** for missing a course exam, such as illness, compassionate grounds, etc., which is confirmed by appropriate supporting documentation (e.g., attending physician's statement).

- Missing a midterm/exam due to weather will be excused ONLY if the University closes/cancels classes. In all other cases, **it is YOUR responsibility to get to class on time.** Transit and/or traffic issues are never an excuse to miss exams. Plan to be at exams early.
- You MUST contact (email) your course director (b1500lec@yorku.ca) **within TWO days (48 hours)** of missing the test (the sooner the better).
- Valid and appropriately detailed documentation supporting the events (typically medical or emergency related) preventing your attendance must be submitted to the Course Director, Dr. Da Sylva, **within 5 business days of the missed test.**
- Religious accommodations must be arranged at least 3 weeks prior to the midterm/exam period (see general course policies below for guidelines).
- **IMPORTANT:** If you miss a test due to illness, **you MUST see a Physician within 24 hours of**

the missed test – normally on the same day - so that the Physician can confirm you are too ill to attend the test based on medical examination. Valid documentation for medical situations consists of an “Attending Physician’s Statement” from the petitions package. Any documentation should cover the date of the missed test.

- Contact your instructor to determine the appropriate documentation required for other circumstances.
- **If appropriate documentation is NOT provided within 5 business days, a zero will be earned on the missed test.**
- **NOT all situations will be accommodated**, meaning that a zero will be earned on the missed test.

There will be no make-up midterms. Students with acceptable documentation will have the weight of the midterm added to their final exam. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Final Exam: *It is your responsibility as a student to ensure that you are available to sit for examinations during the entire exam period.*

- If you miss the final exam for a valid reason (e.g. medical emergency, death of an immediate family member) **you must request deferred standing and notify the course director within 48 hours of missing the exam.**
 - See <http://www.registrar.yorku.ca/exams/deferred/index.htm> for additional information.
- To request deferred standing **you must complete and submit a Deferred Standing Agreement Form** (see <http://www.registrar.yorku.ca/services/forms.htm>) **along with supporting documentation** to your Course Director **within ONE week of the missed exam.**
 - **Requests submitted after this time will be denied and the student must formally petition**
- Doctor’s notes are NOT sufficient for missed final exams; **you MUST have your doctor fill out the Attending Physician’s Statement** included in the petitions package (please make sure you are using the current version of the Attending Physician’s statement form – no other versions will be accepted). If you do not use the current form you will be asked to return to your physician to have the correct form filled in.
- If the Course Director approves the deferred standing request the date and time of the deferred exam is at the discretion of the course director. Students who miss the deferred exam will have to formally petition.
- If the Course Director denies the deferred standing request you must submit a petition to the Faculty through the Office of the Registrar. An academic committee will decide whether or not permission to write will be granted based on the situation and evidence presented. Denied petitions will result in a zero on the final exam.
See <http://www.registrar.yorku.ca/petitions/academic/> for information regarding academic petitions.

Incomplete/Late Course Work Policies:

Extensions on course work deadlines (Learning Activities) **will not be granted.**

- Activity points will be earned from in-class activities and online assignments (both Moodle and LearnSmart). Your grade will be calculated out of 80% of the maximum points available throughout the term (to a maximum Activities grade of 100%).
- LearnSmart Assignments will be completed through Connect and due on the dates indicated at 11:59 pm. Assignments will be available after these dates but no mark will be earned. LS assignments are accessible before they are due and students should not leave completion to the last minute

University Policies

Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>). The Policy affirms the responsibility of faculty members to foster acceptable

standards of academic conduct and of the student to abide by such standards.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - <http://www.yorku.ca/academicintegrity/>

Access/Disability

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

Students in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Counselling & Disability Services - <http://cds.info.yorku.ca/>

Counselling & Disability Services at Glendon - <http://www.glendon.yorku.ca/counselling/personal.html>

York Accessibility Hub - <http://accessibilityhub.info.yorku.ca/>

Ethics Review Process

York students are subject to the York University *Policy for the Ethics Review Process for Research Involving Human Participants*. In particular, students proposing to undertake research involving human participants (e.g., interviewing the director of a company or government agency, having students complete a questionnaire, etc.) are required to submit an *Application for Ethical Approval of Research Involving Human Participants* at least one month before you plan to begin the research. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately.

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at

http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf (PDF)

Student Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at - <http://secretariat-policies.info.yorku.ca/policies/disruptive-and-or-harassing-behaviour-in-academic-situations-senate-policy/>