



FALL 2017

BIOLOGY 1P03
INTRODUCTORY BIOLOGY

PROFESSOR

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COURSE DESCRIPTION

This course covers an introduction to basic biological principles for students without Grade 12 Biology U.

Antirequisite: Not open to students with credit in Grade 12 Biology U

BIOLOGY 1P03 COURSE OBJECTIVES

1. To provide students with the background information to effectively discuss the fundamental concepts and underlying processes related to Biology.
2. The primary goal of the course is to prepare students academically for subsequent, specialized Biology courses and to ensure that students acquire skills essential for upper-level biology courses and biology related fields of study.

BIOLOGY 1P03 LECTURES

Please refer to the Fall/Winter McMaster University Undergraduate Master Course 2017-2018 Timetables posted on the McMaster University website. Lectures will be held on Tuesdays, Thursdays, and Fridays at 2:30-3:20pm in Burke Science Building (BSB) 147.

The Biology 1P03 lectures will be a synthesis of several sources (the required course textbook, primary scientific literature, such as journal articles, current research, and guest speakers). Lecture and supplementary resources will be posted on the Biology 1P03 Avenue website. Note that the Biology 1P03 resources are NOT detailed lecture notes. Students are expected to attend ALL lectures and supplement the posted Biology 1P03 Avenue postings with their own written "in-class" lecture notes.

The Biology 1P03 Lecture Quiz, Midterm Test & the Final Exam will include some concepts and current experimental work, which are not covered in the textbook. These topics will be discussed **EXCLUSIVELY** during in-lecture activities.

IT IS EXTREMELY IMPORTANT THAT STUDENTS ATTEND ALL LECTURES.

The use of supplementary lecture resources will demonstrate how the concepts covered in Biology 1P03 lead directly to recent work and to applied research.

****IMPORTANT ACADEMIC PROPERTY STATEMENT****

NO part of the BIOLOGY 1P03 lectures, in-class discussions, course information or resources may be reproduced, in any form or by any means, without permission in writing by the professor.

NO visual media, voice recordings, Powerpoint slides, MP3 media or lecture-related information may be reproduced or communicated by any means.

Usage of cameras or video / camera-capable cellphones, smartphones or digital media are **NOT PERMITTED** to be used during lectures.

THERE are NO BIOLOGY 1P03 TUTORIALS

Please note that there will be NO Biology 1P03 tutorials during the Fall 2017 academic term. If students have any questions regarding lecture concepts, they may email Dr. Kajiura (kajiura@mcmaster.ca) or the Teaching Assistant for assistance with the lecture content.

REQUIRED BIOLOGY 1P03 TEXTBOOK

LIFE ON EARTH, (McMaster University Customized 3rd Edition) by Teresa Audesirk, Gerald Audesirk, and Bruce E. Byers. Students must purchase the current customized edition of the textbook at the McMaster Campus Store (bookstore). The current Biology 1P03 edition of the textbook has a maroon front cover with photos of the earth, cells, microscope, karyotype, polar bear, forest and DNA on it. The Biology 1P03 customized textbook contains selected chapters from a larger textbook and updated Canadian context.

DO NOT BUY AN OLD EDITION of the textbook, since it is missing the updated concepts and new figures. Using an older edition of the textbook will put a student at a disadvantage.

LIFE ON EARTH TEXTBOOK CHAPTERS TO BE COVERED IN BIOLOGY 1P03:

| | |
|------------|---|
| Chapter 1 | An Introduction to Life on Earth |
| Chapter 2 | Atoms, Molecules, and Life |
| Chapter 3 | Biological Molecules |
| Chapter 4 | Cell Structure and Function |
| Chapter 5 | Cell Membrane Structure and Function |
| Chapter 9 | Cellular Reproduction |
| Chapter 10 | Meiosis: The Basis of Sexual Reproduction |
| Chapter 11 | Patterns of Inheritance |
| Chapter 12 | DNA: The Molecule of Heredity |
| Chapter 13 | Gene Expression and Regulation |
| Chapter 15 | Principles of Evolution |
| Chapter 16 | How Populations Evolve |
| Chapter 27 | Population Growth and Regulation |
| Chapter 31 | Conserving Earth's Biodiversity |

HOW TO LOG INTO THE BIOLOGY 1P03 AVENUE SITE

1. Start your web browser and go to: <http://avenue.mcmaster.ca>
2. USER ID: Type in the first part (in lower case letters) of your McMaster e-mail address (your MAC ID).

For example: if your McMaster e-mail address is janedoe@muss.cis.mcmaster.ca, then your Avenue User ID is janedoe.

3. PASSWORD: Type in your McMaster Modem / Printing / CIS Lab Access /Proxy Services password.
- 4.
5. Then click on the Login button.

You will need Adobe Acrobat Reader (this is freeware) to read the Biology 1P03 *pdf* files. Most computers have Adobe Acrobat Reader installed as standard software. If your computer does not have it, you may download it from the Adobe website: <http://www.adobe.com/products/acrobat/readstep2.html>

Note: In this course, we will be using Avenue for some assessments. Students should be aware that when they access the electronic components of this course, private information, including first and last names, user names for the McMaster University e-mail accounts, and program affiliations may become apparent to others participating in the course. Continuation in this course will be deemed as consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss them with the professor of this course.

BIOLOGY 1P03 POLICIES

1. It is the responsibility of the student to attend the lectures to which he or she has been assigned. If a lecture is missed, students are responsible for the covered material.
2. Only use of the McMaster University approved calculator (*Casio fx 991*) is allowed during evaluations (Quiz, Midterm Test, and Final Exam).
3. Any term mark corrections must be made before the Biology 1P03 Final Exam is written.
4. All evaluations must be completed and submitted individually. All cases of academic dishonesty will be dealt with through the office of Academic Integrity at McMaster University.
5. The professor and university reserve the right to modify elements of the course during the term. The university may change dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with the explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster e-mail and course websites regularly during the term and to note changes.
6. If you are absent from the university for a minor medical reason, lasting fewer than **3 days**, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). Absences for a longer duration or for other reasons must be reported to the Associate Dean of Science Office, with documentation, and relief from term work may not necessarily be granted. When using the MSAF, report your absence to the professor. You must then contact the the professor immediately (normally within 2 working days) by email at kajiura@mcmaster.ca to learn what relief may be granted for the evaluation you have missed, and relevant details, Please note that the MSAF may not be used for term work worth 25% or more, therefore you cannot use the msaf for the Midterm Test (since it worth 30%) or for the Final Exam (since it is worth 50%).
7. As a student enrolled in this course you have been granted permission to access an online learning management system, Avenue to Learn. Avenue to Learn course pages are considered an extension of the classroom and usage is provided as a privilege subject to the same code of conduct expected in a lecture hall (see relevant section of the student code of conduct below). This privilege allows participation in course discussion forums and access to supplementary course materials. Please be advised that all

areas of Avenue to Learn, including discussion forums, are owned and operated by McMaster University. Any content or communications deemed inappropriate by the course instructor (or designated individual) may be removed at his/her discretion. Per the University Technology Services Code of Conduct, all members of the McMaster community are obligated to use computing resources in ways that are responsible, ethical and professional. Avenue to Learn Terms of Use are available at <http://avenue.mcmaster.ca>.

8. Requests for Relief for Missed Academic Term Work

For absences from classes lasting up to three calendar days:

Using the McMaster student absence form (MSAF) on-line, self-reporting tool, undergraduate students may report absences lasting up to three calendar days and may also request relief for missed academic work. The submission of medical or other types of supporting documentation is not required. Students may use this tool to submit a maximum of one request for relief of missed academic work per term. Students must immediately follow up with their course instructors regarding the nature of the relief. Failure to do so may negate the opportunity for relief. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in his/her course.

For absences from classes lasting more than three calendar days:

Students who are absent more than three calendar days cannot use the on-line, self-reporting tool to request relief. They MUST report to their Faculty Office to discuss their situation and may be required to provide appropriate supporting documentation. If warranted, students will be approved to use a discretionary version of the MSAF on-line, self-reporting tool.

For the reporting of more than one request for relief per term:

Students who wish to submit more than one request for relief of missed academic work per term cannot use the on-line, self-reporting tool to request relief. They MUST report to their Faculty Office to discuss their situation and may be required to provide supporting documentation. If warranted, students will be approved to use a discretionary version of the MSAF on-line, self-reporting tool. For absences from classes lasting more than three calendar days or for the reporting of more than one request for relief per term: if the reason was medical, the approved McMaster University Medical Form covering the relevant dates must be submitted. The student must be seen by a doctor at the earliest possible date, normally on or before the date of the missed work and the doctor must verify the duration of the illness. Relief will not be considered for minor illnesses. If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, normally within five working days. In some circumstances, students may be advised to submit a Petition for Special Consideration (Form A) seeking relief for missed academic work. In deciding whether or not to grant a petition, adequacy of the supporting documentation, including the timing in relation to the due date of the missed work and the degree of the student's incapacitation, may be taken into account. If the petition is approved the Faculty Office will notify the instructor(s) recommending relief. The student must contact the instructor promptly to discuss the appropriate relief. Failure to do so may negate the opportunity for relief. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in his/her course.

The MSAF on-line, self-reporting tool cannot be used to apply for any course work that is valued at 25% or greater than the final grade, or any final examination or its equivalent. See *Petitions for Special Consideration* in this section of the calendar. Students should expect to have academic commitments Monday through Saturday but not on Sunday or statutory holidays. Students who require accommodations to meet a religious obligation or to celebrate an important religious holiday should make their requests within three weeks of the start of term to their Faculty office. With a valid MSAF report, a missed test's percent worth will be added to the percent worth of the final exam.

Without a valid MSAF report, a missed test will be given a mark of zero.

There will be no discretionary approvals given by the Biology 1P03 instructional team.

STUDENT CODE OF CONDUCT - APPENDIX D

Major Offences include, but are not limited to: (h) engaging in disruptive behaviour. Disruptive behaviour is behaviour in class or out of class which involves substantial disorder and/or disrupts the operation of the University (j) engaging in verbal or non-verbal behaviour or communication toward an individual or group which is considered to be intimidating, harassing and/or discriminatory

BIOLOGY 1P03 GRADING

Final Biology 1P03 grades will be determined by the following evaluations:

| | <u>VALUE</u> |
|---|---------------------|
| IN-LECTURE & ON-LINE PARTICIPATION ACTIVITIES (5 each worth 2%) | 10% |
| <ul style="list-style-type: none"> - Participation activities will be announced in advance in lecture and posted on the Announcements on the Biology 1P03 Avenue website. Activities will occur during in-lecture discussions and on the Biology 1P03 Avenue online Discussion Forum | |
| QUIZ on Tuesday October 3rd | 10% |
| <ul style="list-style-type: none"> - Will consist of 10 multiple choice questions - To be written during the lecture timeslot in the BSB 147 lecture hall - Duration of Quiz is 15 minutes | |
| MIDTERM TEST on Tuesday October 24th | 30 % |
| <ul style="list-style-type: none"> - Will consist of 25 multiple choice questions - To be written during the lecture timeslot in the BSB 147 lecture hall - Duration of Midterm Test is 40 minutes | |
| FINAL EXAM - Date and locations to be posted on MOSAIC | 50 % |
| <ul style="list-style-type: none"> - Will consist of 60 multiple choice questions held during the December Final Examination Period - Duration of Final Exam is 2 hours | |

Biology 1P03 final marks for the course are based on a total assessment of each student's record. It is a student's responsibility to make sure that his/her marks are complete and correct before the final exam is written. Grade adjustment techniques may be used. However, marks will NOT be bell-curved at any point in the term. The Professor reserves the right to change or revise information contained in this course outline. The professor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, students will be given reasonable notice with an explanation and an opportunity to comment on changes. **It is the student's responsibility to check their McMaster email and course websites regularly (daily) during the term and to note any changes.**

Marks will be calculated according to the above grading scheme in order to be consistent with previous years. The Biology Department does not approve of altering marks arbitrarily at a student's request.

BIOLOGY 1P03 QUIZ, MIDTERM TEST, AND FINAL EXAMINATION FORMAT

Biology 1P03 Quiz, Midterm Test, and Final Exam will consist of multiple choice questions that may assess descriptive, conceptual, and applied knowledge. For multiple choice questions, each question is worth 1 mark, no partial marks will be awarded. The Final Exam is cumulative and will evaluate information covered during the entire academic term.

ACADEMIC ACCOMODATIONS OF STUDENTS WITH DISABILITIES

Students who require academic accommodation must contact the Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905 525-9140, ext 28652 or e-mail sas@mcmaster.ca. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities <http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentWithDisabilitiespdf>

Students who are registered with SAS must ensure that they meet with Dr. Kajjura at the start of the academic term in order to discuss their academic accommodations.

McMASTER UNIVERSITY GRADING SCHEME

Grades obtained for Biology 1P03 will be converted according to the following scheme, which is the one in general use at McMaster University.

| | |
|---------|----|
| 90-100% | A+ |
| 85-89% | A |
| 80-84% | A- |
| 77-79% | B+ |
| 73-76% | B |
| 70-72% | B- |
| 67-69% | C+ |
| 63-66% | C |
| 60-62% | C- |
| 57-59% | D+ |
| 53-56% | D |
| 50-52% | D- |
| 0-49% | F |

STUDY SKILLS

The academic transition from high school to university is often very challenging for many students. For students who wish to improve their academic skills, study habits, time management, or for students who require specialized services (learning challenged students and ESL (English as a second language students)], assistance is available at the Student Success Centre in Gilmour Hall 110.

ACADEMIC DISHONESTY

All students in Biology 1P03 are expected to display honesty and utilize ethical behaviour in all aspects of their academic learning. Academic dishonesty is to knowingly act or fail to act in a manner which results or could potentially result in consequences, including a grade of zero on a test or assignment, loss of course credit with a notation that reads "Grade F, assigned for academic dishonesty", and/or suspension or expulsion from McMaster University. Students are responsible for understanding what constitutes academic dishonesty. Refer to <http://www.mcmaster.ca/academicintegrity> for further clarification.

The following descriptions some of the forms of academic dishonesty:

1. Plagiarism (the submission of work that is not a student's own or for which other credit has been obtained)
2. Improper collaboration in group work.
3. Copying or using unauthorized aids during tests and examinations.

In order to uphold the integrity of the Department of Biology at McMaster University, please consult the Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty stipulated in the Senate Policy Statements, presented at registration in the Senate Office, accessible on the web, <http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf>

Any student who infringes one of these resolutions will be treated according to published policy. To deter acts of academic dishonesty in Biology 1P03, there will be multiple versions of the Quizzes, Midterm Tests, and the Final Exam. In addition, marked student course work will be randomly scanned and photocopied.

MISSED FINAL EXAM

Students who miss the Biology 1P03 Final Exam for a valid reason may apply to the Associate Dean of their respective faculty for permission to write a Deferred Final Exam to be written during the Deferred Final Exam period. The student must submit a completed McMaster University Medical Certificate and the completed application for the deferred Final Exam to the Office of the Associate Dean within one week of the Final Examination period.

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