Environmental Science 1C03
Climate, Water and Environment
Course Outline
September 2017

Instructor           Instructional Assistant
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GSB-202              BSB 317D
Email: berniejm      Email: leonil

Introduction

The primary aim of this course is to introduce you (the student) to the major environmental processes and how human activities impact them. We begin with an introduction to the principles of sustainability and how science can be used to better understand how we interact with our environment.

We will discuss how Earth’s atmosphere functions and its composition, Earth’s global energy balance, the role of climate processes, and how human activity has impacted them. Topics will include the greenhouse effect, the loss of the ozone layer, acid precipitation, urban heat islands, and global climate change.

We will see how our understanding of the hydrologic cycle and of global climate patterns can be used to better manage water resources. The discussion on global atmospheric and oceanic circulation will be an opportunity to examine how remote areas can still be impacted by human activities occurring far away.

Finally, we will examine the role of ecosystems and how they function. Topics will include the impact of biodiversity loss on ecosystems, soil erosion, water pollution and eutrophication, solid waste disposal, sewage treatment, the management of hazardous chemicals and the path to a sustainable future for the global human population.

You will learn in this course by participating actively in lectures, watching short video clips, listening to weekly online modules and by participating in labs. Also, a guest speaker will present on Geographic Information System (GIS) and how this can be used in environmental science to address many important issues. This course aims to balance the development of knowledge with that of personal transferable skills.

Course Materials

1. EnvirSc1C03 – Climate, Water, and Environment Custom Publication (ISBN 9780199021604)
2. Custom Courseware (Lab Manual) for Envir Sc 1C03.
3. Handbook for the Earth & Environmental Sciences Student (Free; Available on Avenue to Learn).

**Lectures**

Lectures will be on Mondays and Wednesdays at 4:30-5:20 pm in LRW B1007. Please note that the Thursday lecture will not be used, unless otherwise announced during the term. Check your lecture schedule attached for further details. ALL students are expected to attend ALL lectures. Partial lecture notes will be available on A2L. It is the responsibility of the student to ensure that notes are obtained for any classes missed.

The live lectures will be supplemented by Online Modules that will be posted on Avenue to Learn (A2L). **The material covered in these podcasts is just as important to your understanding of the course as the material covered during the live lectures. It is recommended that you watch these modules prior to attending the lectures to which they are associated.**

The live lectures will be captured by Classroom Audio Visual Services (e.g. ECHO 360), and the link to ECHO 360 Cloud will be posted on Avenue to Learn. You will receive by email an invitation to join the course on ECHO 360 Cloud by Monday September 18. **Therefore students are NOT authorized to record the live lectures (video recording, audio recording; taking pictures, etc.) without explicit and documented approval from the course instructor. If approval is given, students are forbidden to redistribute this material through any platform (social media, etc.).**

**Evaluation**

This course will consist of online quizzes, lab assignments, i-Clicker participation and a final exam. There will be 5 quizzes in the course covering lecture and textbook material. Quizzes are valued at 5% each and the lowest quiz mark will be dropped. Quizzes will be available on A2L (Avenue to Learn) for a 4-day period. Their schedule will be posted on A2L. It is the responsibility of the student to be aware of quiz start and end dates, and of due dates for assignments. Please see the section titled ‘Missed Work or Late Work’ for information regarding missed quizzes.

This course will also contain a Final Exam. The final exam will cover all lecture, online modules, and textbook readings, as well as subjects covered by the lab assignments. The final exam will consist of calculations, definitions, and short answer questions.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Labs (7 @ 5%)</td>
<td>35%</td>
</tr>
<tr>
<td>A2L Quizzes (best 4 of 5 @ 5% each)</td>
<td>20%</td>
</tr>
<tr>
<td>i-Clicker Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
</tr>
</tbody>
</table>
Labs

You have been assigned a lab time by the registrar's office. Attendance at labs is mandatory. The first lab begins the week of September 18th. A complete lab schedule is attached.

Each lab will be accompanied by an online tutorial (podcast) released on Avenue to Learn, the week before a lab is assigned (see attached schedule). **It is your responsibility to watch and listen to these tutorials, and to come prepared to lab.**

ALL submitted assignments MUST contain the following information: name, student ID number, course name and number (i.e. Envir Sc 1C03), assignment number (e.g. Lab 1), name of your teaching assistant (T.A), lab section number or day/ time of your lab section, and due date. Assignments submitted without this information will be penalized, i.e. 10% of the mark obtained will be deducted.

**Active Participation during Lectures using i-Clicker**

We will be using the i-Clicker during lectures. Clicker questions are part of every lecture, so bring your clicker to class every day. **If you have registered your i-Clicker and you click a response to at least 80% of clicker polls during the term, you will receive the full 10% clicker grade.**

If you respond to less than 80% of possible polls, your clicker grade is pro-rated, in the following manner:

<table>
<thead>
<tr>
<th>% of polls participated to</th>
<th>Participation Mark %</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 or more</td>
<td>10 (full %)</td>
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<tr>
<td>75 to 79</td>
<td>9</td>
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<tr>
<td>70 to 74</td>
<td>8</td>
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<td>60 to 69</td>
<td>7</td>
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<td>50 to 59</td>
<td>6</td>
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<td>40 to 49</td>
<td>5</td>
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<tr>
<td>30 to 39</td>
<td>4</td>
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<td>20 to 29</td>
<td>3</td>
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<tr>
<td>10 to 19</td>
<td>2</td>
</tr>
<tr>
<td>1 to 9</td>
<td>1</td>
</tr>
</tbody>
</table>

The percentage of the polls you will have provided an answer to, and your i-Clicker Participation mark (out of 10) will be will be updated weekly on Avenue to Learn. To register your i-Clicker, please use your MacID here:

http://www1.iclicker.com/register-clicker/

No accommodations will be made for i-Clicker issues such as: lost devices,
devices forgotten at home, dead batteries, mistakes in programming the Base Frequency, or malfunctioning devices. It is the student’s responsibility to make sure that they have their i-Clicker with them for lecture, that the device is functioning properly, and that they know how to use it. **When contacting the course instructor regarding i-Clicker issues, please always make sure to include the code of your device.**

Should there be a discrepancy between the record of participation obtained from the i-Clicker Base System and a student’s own personal tracking of her/his participation during the term, the record from the Base System will prevail.

**Participation for marks will start to be recorded on September 18th, 2017**

Participation marks will be updated weekly on Avenue to Learn. Make sure to verify your marks on a regular basis, and to contact the course instructor in case of a possible discrepancy. **The last day to have register your i-Clicker device registered will be Wednesday December 6th, 2017, 4:30 p.m. If your device is not registered by that point, your participation mark will stay as it is.**

**Attendance and Emails Policy**

Appointments can be scheduled with the instructor to help clarify the content of lectures. It is not the instructor’s responsibility to go over an entire lecture with you, if you missed it. It is your responsibility to acquire the necessary information from classmates.

It is not appropriate to use email to ask detailed questions (including asking about what was discussed in lecture). As a general rule, you should not expect to receive answers to emails on weekends or late in the evening. Rather, emails will typically be responded to during regular working hours on weekdays, and as schedule allows. Emails sent 24 hours prior to, or on the date of a deadline for an assignment, etc., will not be answered.

As a courtesy, and to ensure your emails are properly answered, you must include your name and student ID number in the email signature, and the course code and number (ENVIR SC 1C03). Emails must be sent from McMaster email accounts or they will not be read or responded to. **Emails sent from Avenue or within Avenue will not be responded to.** Emails should be written in a professional manner, spell-checked and proof-read before sending them. The subject line **must** state for which course the query is about. Online discussion terminology (e.g. Twitter) must be avoided.

**Course Contract**

All students are required to read and understand the Student Responsibility Contract included in this outline (a copy can also be found in your courseware). This contract is a component of the course outline, and extends as well as specifies a number of course policies students must be aware of. Academic Integrity is an important issue at McMaster University and it is the responsibility of all students to understand what
constitutes Academic Dishonesty. All students must agree to the Course Policies and demonstrate an understanding of what constitutes Academic Dishonesty by completing the Academic Integrity and Responsibility (AIR) Quiz. All students are required to complete the AIR Quiz on Avenue and score a grade of greater or equal to 90% by Friday, September 22nd, 2017 at 4:30pm. Students will receive a grade of zero on Lab 1 if the AIR Quiz has not been completed successfully by the deadline.

Avenue to Learn (A2L)

URL: http://avenue.mcmaster.ca/

A2L is an online system which will be used in this class for communicating information relating to the course (e.g. lecture notes, lab preparation etc.). To log in to A2L, use your Mosaic login and password. See the A2L home page above for more instructions if you need them. It is the student’s responsibility to check A2L regularly (i.e. AT LEAST twice a week) for updates.

Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

If you encounter any technical problems with this service go to the following website for support: http://avenue.mcmaster.ca/help/.

Please note that it is not the responsibility of the teaching staff of ENVIR SC 1C03 to assist you with A2L issues.

Missed work

If you miss a lab for a legitimate reason you must follow the following 2 steps:

1) You can report absences that last up to 3 days using the McMaster Student Absence Form (MSAF). Please see the section titled ‘McMaster Student Absence Form (MSAF)’ for further information. Do not bring a doctor’s note to your instructor or T.A

2) You must contact your instructor to find out what accommodations, if any, will be made for a missed assignment. Your marks for a missed lab may be applied to the final exam (e.g. the 5% for a missed lab will be applied to the final exam making it worth 40% of your final mark), OR you may be given a short extension.

If you do not complete these two steps within 5 days of the missed evaluation you will receive a mark of zero.
No penalties will be applied to material submitted late with justification. LAB REPORTS SUBMITTED LATE WITHOUT JUSTIFICATION WILL BE GIVEN A MARK OF ZERO (0).

NO accommodation will be made for extra-curricular activities (participation to varsity teams, academic clubs, etc.) without students having documentation approved by their Associate Dean's office in advance. Accommodations, approved by the Associate Dean's office, will need to be discussed a minimum of two weeks before a course component will be missed or due.

As online quizzes will be available for a 4-day period, MSAFs will NOT be accepted for missed quizzes; see the section titled 'McMaster Student Absence Form (MSAF)'. Marks for a missed quiz count towards the lowest quiz mark for the course.

Marks for additional missed quizzes will be allocated towards your final exam (e.g. the 5% for a missed quiz will be applied to the final exam making it worth 40% of your final mark), only with appropriate supporting documentation from your Associate Dean's office.

MSAFs will NOT be accepted for missed participation; see the section titled 'McMaster Student Absence Form (MSAF) for absences of a longer duration. Accommodations for missed in-class participation (i-Clicker) will only be possible if the absence, supported by documentation, lasts 21 days or more without interruption. Only in that instance will the percentage of the questions missed be applied to the final exam (e.g. if 50% of the Clicker questions asked during the term were missed, then half of the participation mark, 5%, will be applied to the final exam making it worth 40% of your final mark).

Students who miss a lab without either submitting the MSAF or documentation approved by their Associate Dean's office will automatically receive a mark of zero (0) for that lab.

Special Accommodations

Students with learning challenges may receive accommodations. Please contact Student Accessibility Services (SAS): http://sas.mcmaster.ca/

Students requiring accommodations for Religious, Indigenous, and Spiritual Observances (RISO) should contact their Faculty office as early as possible, preferably at the start of Term: http://multifaith.mcmaster.ca/riso

McMaster Student Absence Form (MSAF)

If you are absent from the university for a minor medical or non-medical reason, lasting fewer than 3 days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form. Absences for a longer duration or for other reasons must be reported to your Faculty/Program office, with
documentation, and relief from term work may not necessarily be granted.

When using the MSAF, report your absence to berniejm@mcmaster.ca. You must then contact your instructor immediately (normally within 2 working days) by email at berniejm@mcmaster.ca to learn what relief may be granted for the work you have missed, and relevant details such as revised deadlines, or time and location of a make-up evaluation.

Please note that the MSAF may not be used for term work worth 25% or more, nor can it be used for the final examination.

Please note: students who use the MSAF, but who do not contact the instructor within the 2 working days period, may not be granted any relief.

**Late work**

Specific instructions will be provided during the course on how to submit each of the lab reports. Labs due at the start of the lab period are due within the first 15 minutes of the lab period. Lab reports SUBMITTED LATE WITHOUT JUSTIFICATION WILL BE GIVEN A MARK OF ZERO (0). All late assignments, submitted with justification, must be handed into the drop boxes on the second floor of General Science. There is no access to the drop-boxes after 4:30 p.m. or on weekends but there is an after-hours drop box on the second floor of GSB just inside the door on the west side stairs.

Submissions of assignments via email will **NOT** be accepted under any circumstance.

**Reporting Quiz Issues**

1) You have one week after a quiz has been completed and the results released, to report an issue. Please make sure to take a good look at your quiz results once they are released.

2) Issues that are reported via email to the course instructor will not be addressed. **You need to complete the Quiz Issue Reporting Form on A2L for them to be dealt with.**

A reporting form will be available for each quiz.

3) You **must** answer the following questions in the reporting form:

   • which specific attempt you want the course instructor to look into,
   • which specific question number you want the course instructor to look into,
   • the full text of the question,
   • if relevant, which option is identified as the correct option,
   • if relevant, which option you believe is the correct one, and why.
   • and/or any other detail that you think is relevant: missing figure, repetition of the options, incomplete question, material covered by the question, etc.
4) Unless stated otherwise, the issue(s) reported will only be addressed once a quiz is over; not while it is still active. The issue(s) will then be dealt with as quickly as possible.

**Mark Appeals and A2L grades**

You will have one week from the date that marks for an evaluation (e.g. lab report) are released to appeal your mark. If you wish to appeal a mark, you must leave a written note (including your name, McMaster email address, and student ID number) in the ENVIR SC 1C03 drop box stating which evaluation you want to be investigated, and justifying why you wish to have the evaluation looked after. You must also attach to this note the material to be reviewed. If the written request is found to be insufficiently justified (e.g. simply wanting a higher mark is insufficient), the matter will not be further investigated.

Your marks will be recorded on A2L. It is your responsibility to check that all marks entered are recorded properly. You must notify the instructor about any errors with regards to how your marks are entered. You have until 48 hours prior to the final exam to report any A2L mark issues.

**Academic Dishonesty**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at [http://www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.
Acknowledgement of Course Policies

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of ENVIR SC 1C03 will be considered to be an implicit acknowledgement of the course policies outlined above and in the Course Contract, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

In addition, answers to commonly questions are available on Avenue, in a FAQ. **It is your responsibility to read it.**

Lack of awareness of the course policies cannot be invoked at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

The instructor reserves the right to modify elements of the course and will notify students accordingly (in class and post any changes to the course A2L). **The schedule is only a guideline and may be modified during the course of the class.**

*The instructor 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, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.*
# Schedule of Activities

*This lecture schedule is only a guideline and may be modified during the course of the class.*

<table>
<thead>
<tr>
<th>Week Beginning</th>
<th>Week-day</th>
<th>Lecture Topic</th>
<th>Online Module(s) to Watch</th>
<th>Lab</th>
<th>Textbook Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 4th</td>
<td>W Th</td>
<td>Introduction to Course; Principles of Sustainability</td>
<td>Module 1: What is Environmental Science?; Module 2: Earth’s atmosphere – Composition and Structure</td>
<td>No Lab</td>
<td>Dearden – Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO LECTURE</td>
<td></td>
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</tr>
<tr>
<td>Sept. 11th</td>
<td>M W ThR</td>
<td>The Science of Environmental Processes; Atmosphere: Pressure, Density and Composition</td>
<td>Module 3: Atmospheric Pollution and Ozone; Module 4: Global Energy Balance</td>
<td>No Lab</td>
<td>Watch Lab 1 Module</td>
</tr>
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<td></td>
<td></td>
<td>NO LECTURE</td>
<td></td>
<td></td>
<td>Ross- Chapters 1, 2, 3</td>
</tr>
<tr>
<td>Sept. 18th</td>
<td>M W Th</td>
<td>Atmospheric Pollution, GHG, Ozone Layer; Global Energy Balance</td>
<td>Module 5: Variation of Surface Temperature; Module 6: Climate Change</td>
<td>Lab 1: Radiation Budgets - due at the end of the lab period</td>
<td>Ross – Chapters 5, 6, 17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO LECTURE</td>
<td></td>
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<tr>
<td>Sept. 25th</td>
<td>M W Th</td>
<td>Temperature and Urban Environments; Climate Change</td>
<td>Module 7: Atmospheric Moisture; Module 8: Adiabatic Processes and Cloud Formation</td>
<td>No Lab</td>
<td>Watch Lab 2 Module</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO LECTURE</td>
<td></td>
<td></td>
<td>Ross- Chapter 6, 17</td>
</tr>
<tr>
<td>Oct. 2nd</td>
<td>M W Th</td>
<td>Atmospheric Moisture; Adiabatic Processes and Clouds</td>
<td>Module 9: Precipitation and Acid Rain; Module 10: The Hydrologic Cycle and Water Balance</td>
<td>Lab 2: Lapse Rates - due at the end of the lab period</td>
<td>Ross - Chapters 7, 8, 9; Dearden – Chapter 3</td>
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<tr>
<td></td>
<td></td>
<td>NO LECTURE</td>
<td></td>
<td>Watch Lab 3 Module</td>
<td></td>
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<tr>
<td>Oct. 9th</td>
<td>M W Th</td>
<td>Precipitation; Hydrologic Cycle and Water Balance</td>
<td>Module 11: Winds; Module 12: The Global Atmospheric Circulation</td>
<td>Lab 3: Acidification – due at the end of the lab period</td>
<td>Ross- Chapter 10; de Blij Chapter 10</td>
</tr>
<tr>
<td>Oct. 16th</td>
<td>M W Th</td>
<td>NO LECTURE</td>
<td></td>
<td>Watch Lab 4 Module</td>
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</tbody>
</table>

1Please note:  M = Monday, W = Wednesday, Th = Thursday
<table>
<thead>
<tr>
<th>Week Beginning</th>
<th>Week-day</th>
<th>Lecture Topic</th>
<th>Online Module(s) to watch</th>
<th>Lab</th>
<th>Textbook Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 23rd</td>
<td>M W Th</td>
<td>Winds</td>
<td>Module 13: The Global Oceanic Circulation</td>
<td>Lab 4: Water Balance - due at the end of the lab period</td>
<td>Ross - Chapters 11, 12; de Blij – Chapter 11</td>
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<tr>
<td></td>
<td></td>
<td>Atmospheric Circulation and Long-Range Transport</td>
<td>Module 14: Global Climate</td>
<td>Watch Lab 5 Module</td>
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<td></td>
<td></td>
<td>NO LECTURE</td>
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<tr>
<td>Oct. 30th</td>
<td>M W Th</td>
<td>Oceanic Circulation</td>
<td>Module 15: Water Resources</td>
<td>Lab 5 – Tree ID - due at the end of the lab period</td>
<td>Ross – Chapter 16; de Blij – Chapter 11</td>
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<tr>
<td></td>
<td></td>
<td>Global Climate</td>
<td>Module 16: Soils</td>
<td>Watch Lab 6 Module</td>
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<td></td>
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<td>BY EXCEPTION: Water Resources</td>
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<tr>
<td>Nov 6th</td>
<td>M W Th</td>
<td>Soils</td>
<td>Module 17: Soils and Water</td>
<td>Lab 6 – Soil Analysis - due at the end of the lab period</td>
<td>de Blij – Chapter 10; Dearden – Chapter 2</td>
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<td></td>
<td></td>
<td>GIS and Environmental Science</td>
<td>Module 18: The Nutrient Cycles</td>
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<td></td>
<td></td>
<td>NO LECTURE</td>
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<tr>
<td>Nov. 13th</td>
<td>M W Th</td>
<td>Soils and Water</td>
<td>Module 19: Ecosystem Processes</td>
<td>No Lab Watch Lab 7 Module</td>
<td>Dearden – Chapters 2, 4</td>
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<td></td>
<td>Nutrients</td>
<td>Module 20: Water Pollution</td>
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<td></td>
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<td>NO LECTURE</td>
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<tr>
<td>Nov 20th</td>
<td>M W Th</td>
<td>Ecosystems</td>
<td>Module 21: Waste Management</td>
<td>Lab 7: Debates week 1 – assigned in lab</td>
<td>Dearden – Chapter 2, 3, 4</td>
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<td></td>
<td></td>
<td>Water Pollution</td>
<td>Module 22: Hazardous Chemicals</td>
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<td></td>
<td></td>
<td>NO LECTURE</td>
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<tr>
<td>Nov 27th</td>
<td>M W Th</td>
<td>Waste Management</td>
<td>Module 23: Global Population and Sustainability</td>
<td>Lab 7: Debates week 2 – debates take place during the lab period</td>
<td>Dearden – Chapter 3</td>
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<tr>
<td></td>
<td></td>
<td>Hazardous Chemicals</td>
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<td></td>
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<td>NO LECTURE</td>
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<tr>
<td>Dec. 4th</td>
<td>M W</td>
<td>Global Population and Sustainability</td>
<td>No online module</td>
<td>No Lab</td>
<td>Dearden – Chapter 1</td>
</tr>
</tbody>
</table>

### Labs:
- Lab 1: Global Radiation Budgets
- Lab 2: Environmental Lapse Rates
- Lab 3: Acidification
- Lab 4: Water Balance
- Lab 5: Tree Identification and Carbon Sequestration
- Lab 6: Soil Analysis in the Field
- Lab 7: Debating the Earth’s Future Today
ENVIR SC 1C03 - Student Responsibility Contract:

Being a university student requires you to assume a level of responsibility towards your academic career. Rules and Regulations regarding coursework change during the transition from high school to university as well as varying between Faculties and courses at McMaster. We want to ensure that you (the student) understand and acknowledge certain aspects of how this course operates.

All students are required to read and understand this course contract. This contract is a component of the course outline, and extends as well as specifies a number of course policies students must be aware of. All students must agree to the course policies and demonstrate their understanding of Academic Integrity by completing the Academic Integrity and Responsibility (AIR) Quiz on Avenue. Students will receive a grade of zero on Lab 1 if they have not successfully completed (grade of ≥ 90%) the AIR Quiz.

Assignment Submission and Late Assignments:
I am aware that all submitted assignments will need to include ALL of the following information: name, student ID number, course name and number (i.e. Envir Sc 1C03), assignment number (e.g. Lab 1), name of my TA, Lab section number or day/time of my lab section, and due date. I am aware that assignments submitted without this information will be penalized, i.e. 10% of the mark I obtained will be subtracted.

I am aware that the timeline for the submission of each assignment is specified in the Custom Courseware. I understand that labs due at the start of the lab period are due within the first 15 minutes of the lab period. I also understand that no late assignments will be accepted in this course, unless supporting documentation is provided and arrangements are made with the course instructor (see ‘Illness’ below). I understand that any assignment submitted late without justification will be given a mark of zero (0).

☐ I understand and agree to the course policies with respect to Assignment Submission.

Illness:
If I have a medical or non-medical (personal) situation that results in my missing course-work (e.g. deadlines), it is my responsibility to get proper medical (or other) documentation. I understand that absences that last up to 3 days must be reported using the McMaster Student Absence Form (MSAF). I also understand that a maximum of 1 MSAFs may be filed per term and MSAFs cannot be filed for term work worth 25% or more, during examination periods. If I am absent for more than 3 days or exceed the maximum of 1 request per term I must visit my Associate Dean’s Office. It is my responsibility, after submitting this documentation, to contact the Instructor to discuss what, if any, accommodations will be made with respect to any missed work. I have 2 days once a MSAF has been submitted to contact the Instructor, otherwise I will receive a mark of zero.

In total, I have one week (5 working days) from the date in which the
assignment was originally due to complete this process; otherwise I will receive a mark of zero.

Furthermore, I am not to assume that I do not have to complete any missed work; it is up to my Instructor (not my T.A.) to determine what, if any, accommodations will be made.

If accommodations are made for missed work and an extension is granted, I understand that there is an EnvirSc 1C03 dropbox located on the second floor of GSB where the missed work may be submitted.

I also understand that if I miss a lab without approved documentation I will automatically receive a mark of zero (0) for that lab.

☐ I understand and agree to the course policies with respect to Illness.

Mark Appeals and A2L Grades:
I have one week from the date that an assignment (or online quiz) is returned to class (or once results are released) to appeal my mark. If I wish to appeal a grade, I must submit to my T.A. a written note justifying why I wish to have the assignment remarked, with the assignment attached. If my T.A. considers the written justification to be insufficient (e.g. simply wanting a higher grade is insufficient), the assignment will not be re-graded. If the justification is considered sufficient, the entire assignment will get re-graded. I therefore understand that my mark can increase or decrease.

My marks will be recorded on A2L. It is my responsibility to check that all grades entered into A2L are recorded properly. I must notify my T.A. about any errors with regards to how my mark was entered. I have until 48 hours prior to the final exam to discuss any A2L mark issues.

☐ I understand and agree to the course policies with respect to Appeals and Avenue Grades.

Academic Integrity:
Academic Integrity is a very important issue at McMaster University. It is my responsibility to understand what constitutes Academic Dishonesty, and to complete the A2L module Academic Integrity and Responsibility. Among possible forms of academic dishonesty are: cheating on tests or exams by using unauthorized aids; inappropriately collaborating in group work; and plagiarism. This extends to A2L as well, and sharing of answers on the Discussion board constitutes a form of academic dishonesty as well. For more information on what constitutes Academic Dishonesty, I should consult the University policy, and its interpretation by the Faculty of Science as included in the Custom Courseware of the course.

Furthermore, and of particular importance for this course I am aware that I must source ALL information that is not my own. If I submit an assignment with
inadequate referencing I may face serious academic consequences (e.g. mark deductions, grade of zero, notation on my transcript, etc.).

☐ I understand and agree to the course policies with respect to Academic Integrity.

**Lab Attendance/T.A. Emails:**

Labs are held to enhance the lectures, as well as to provide essential information for my assignments. I understand that lab attendance is mandatory in this course. I am aware that if I miss a lab I will receive a grade of zero on the lab unless a MSAF or approved documentation is provided to my Associate Dean’s office and arrangements are made with the course Instructor. If I am more than 15 minutes late, I will not be allowed to participate in the lab and to complete it. If I am late for a lab or miss a lab, it is not the T.A.’s responsibility to go over the missed work with me.

It is not appropriate to use email to ask detailed questions (including asking about what was discussed in lab). T.A’s are not expected to answer emails on weekends or late in the evening. Rather, emails will typically be responded to during regular working hours on weekdays, and as schedule allows. Emails on assignment due dates will not be answered.

As a courtesy, and to ensure that emails reach my T.A. or the instructor, I will use the following subject line: ENVIR SC 1C03 - my name and student ID number. My name and student ID number should also be included in the email signature. Emails must be sent from McMaster email accounts or they will not be read or responded to. Emails should be written in a professional manner, spell-checked and proof-read before sending them. Online discussion terminology (e.g. Twitter) must be avoided.

☐ I understand and agree to the course policies with respect to Attendance & Email.

**Student Conduct:**

I acknowledge that my behaviour in all aspects of this course should meet the standards of the McMaster University Student Code of Conduct. I understand that any inappropriate behaviour directed against any of my colleagues, my T.A., or the instructor will not be tolerated. Disruptive behaviour during labs such as talking while a T.A. presents information, or constantly being late to lab, will also not be tolerated.

Students are encouraged to check the course discussion board on A2L on a regular basis and to ask questions in this forum rather than via email. If a question arises, in all likelihood many other students in the course will have it as well. This also means that the A2L Discussion Board is an extension of the classroom. These spaces are to be considered inclusive and safe. Abuse, ridicule, slander, inappropriate language, and discrimination towards the instructor, teaching staff, and other students will not be tolerated in any capacity.

☐ I understand and agree to the course policies with respect to Student Conduct.
Acknowledgement of Understanding of Course Policies:

☐ I have read the Student Responsibility Contract and acknowledge that I fully understand and will abide by these course policies. I understand that it is my responsibility to ask for clarification on any policies that I do not understand.

Faculty of Science
Statement of Academic Dishonesty

Introduction

The University Senate has approved a set of resolutions that define academic dishonesty and outline the procedure to be followed in the event that a student is charged with academic dishonesty. Most of the following information has been abstracted or summarized from the Senate Resolutions and further details can be obtained from the Office of the Secretary of the Senate or the Office of the Associate Dean.

Purpose of a University

The main purpose of a university is to encourage and facilitate the pursuit of knowledge and scholarship. The attainment of this purpose requires the individual integrity of all the scholars. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University; it is furthermore unfair and discouraging to the majority of students who pursue their studies honestly. The University thus states unequivocally that it demands scholarly integrity from all members and that it will impose sanctions on those who directly or indirectly contribute to the weakening of this integrity.

Academic Dishonesty

Academic dishonesty is not qualitatively different from other types of dishonesty. It consists of misrepresentation in an attempt to deceive. In an academic setting this may take any number of forms such as: copying or the use of unauthorized aids in tests, examinations and laboratory reports; plagiarism; the submission of work that is not one's own or for which previous credit has been obtained, unless the previously submitted work has been presented as such to the instructor of the second course and has been deemed acceptable for credit by the instructor of that course; aiding and abetting another student's dishonesty; giving false information for the purpose of gaining admission, credits, etc.
Most of the above instances of dishonesty are clearly attempts to cheat or falsify. Plagiarism, however, may be less obvious than other instances of dishonesty, especially for the student new to the University. The following paragraph attempts to make clear the distinction between proper and improper use of source material in essays, assignments, lab reports, and other written work.

Direct quotation (i.e. use of another writer's exact words) is proper so long as the quotation is an exact copy, including punctuation, or the original. It must be enclosed in quotation marks and be fully documented as to source by a footnote or by a reference in parentheses directly following the quotation. When a passage is not exactly reproduced but is summarized or paraphrased, it should not be enclosed in quotation marks but must nevertheless be similarly documented. Each such use of another's material, whether that material is published or unpublished, must have its own footnote or reference. It is not sufficient simply to list the source in the reference given at the end of the assignment.

Tests and Examinations

In all tests and examinations, including take-home examinations, you are expected to work strictly on your own using only aids authorized for use in the test or examination area by invigilators. Use of other aids or assistance to other students during tests or examinations will be dealt with under the procedures outlined in the Senate Resolutions and can involve expulsion from the University. Examination regulations must be followed and any attempt to communicate with others about any matter is an infringement of these regulations.

Laboratory and Project Assignments

In some Faculties laboratory and project assignments are part of the learning process. In such activities it will be necessary to work in groups in which case it will be your responsibility to ensure that you make an effective contribution to the activity. The laboratory or project instructor will be able to clarify the amount of collaboration acceptable.
Interpretation of the Faculty of Science
Statement on Academic Dishonesty

Introduction

In the last several years it has become apparent that a large number of students are unsure/unaware of exactly what is and what is not permitted with regards to plagiarism. The cause of this uncertainty is not the focus of this interpretation rather the intention is to identify the most frequently encountered pitfalls and to make students aware of the consequences of plagiarism.

Tests and Exams

Most students understand that tests must be worked on independently. The use of unauthorized aids (e.g. cheat sheets) or copying/discussing during the test period will result in a mark of zero on the test/exam. Senate Resolutions allow for the possible expulsion from the University of a student involved in cheating of this type.

Lab Exercises

This is the section of the course that the largest numbers of students are unaware/unsure of what constitutes plagiarism.

One of the most frequently asked questions is "may we work on this exercise together?" The answer is a resounding YES. Yes, you may discuss the question together, and yes, you can locate relevant information from the text or library together BUT you must each hand in your own version of the lab answers. This means that the written answer must be in your own words and no two students may have identical written answers. It also means that each student must complete any graphing independently. All the graphs completed for this course may be computer generated. Information obtained from the text or other sources must be referenced using the author, date referencing system. The bibliographic information must then appear at the end of your lab in a section entitled References. For further details on reference style, refer to The Handbook for the Earth & Environmental Sciences Student in the School of Geography and Earth Sciences.