1. Course Objectives

- To introduce quantitative data analysis with a focus on applications in geography, environment and earth science
- To teach students how to use software (Google Sheets) that is useful in university and life

2. Course Assessment

<table>
<thead>
<tr>
<th>Labs</th>
<th>27% (9 labs @ 3% per lab)</th>
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<tbody>
<tr>
<td>Labs are two hours long and are lead by teaching assistants. Material in labs build on each other; if you miss labs, subsequent labs will be harder to complete, so it is important that you attend all labs. Each lab has a short lab assignment. Students will be provided information about each week’s lab assignment in the lab. These assignments reinforce material from class with a focus on application. The lab assignments are due at the beginning of the lab session on the following week, but most can be completed during lab time.</td>
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<table>
<thead>
<tr>
<th>Online quizzes</th>
<th>8% (10 @ 0.8% per quiz)</th>
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<tbody>
<tr>
<td>Short online quizzes to reinforce class material. You will have 48 hours to complete the quizzes, on your own time. There will usually be one quiz per week, but some weeks may have none, and other weeks may have two.</td>
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<tr>
<th>Midterm (in class Nov. 4th)</th>
<th>25%</th>
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<td>Format to be determined. Students will require calculators.</td>
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<tr>
<th>Final (scheduled by registrar)</th>
<th>40%</th>
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<tr>
<td>Format to be determined. Cumulative, but mostly on second half of material and lab-related material. Students will require calculators.</td>
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</table>
3. Missing quizzes, exams and late lab assignments

For missed quizzes and missed labs use the McMaster student absence form (MSAF) on-line, self-reporting tool. Undergraduate students may report medical-related absences lasting up to 3 days using MSAF. The submission of medical or other types of supporting documentation is normally not required. Students may use this tool to submit a maximum of one request for relief of missed academic work per term. Once you use this form, you must email Pat DeLuca (delucapf@mcmaster.ca) to notify him of your missed quiz or lab within two working days.

Students who miss the midterm exam cannot use the on-line, self-reporting tool to request relief. University policy states that for assignments or exams worth 25% or more of the final mark students cannot use the self-reporting tool to request relief. If you miss the midterm, you MUST IMMEDIATELY report to your Faculty Office (the Associate Dean’s office of your Faculty) to discuss your situation and will be required to provide appropriate supporting documentation. After you have contacted the Faculty Office, email Pat DeLuca (delucapf@mcmaster.ca) to notify him that you have done so.

Other important info

- If you miss a quiz, and you have used the self-reporting MSAF tool within 3 days, the quiz grade weight gets shifted to the final exam.
- If a lab assignment is submitted late, or missed, and you have used the self-reporting MSAF tool within 3 days, the lab grade weight gets shifted to the final exam.
- If you miss a quiz or fail to submit a lab on time and do not use the self reporting tool within 3 days of the due date, you get a ‘0’ grade.
- Bonus labs must be completed on time to be graded; you cannot use MSAF for the bonus labs.
- If you fail to contact Pat DeLuca (delucapf@mcmaster.ca) to notify him that you have submitted your MSAF form within 3 days of your late/missed quiz/lab assignment/exam you get a ‘0’ grade.

4. Changes to the course outline

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.
5. Policy regarding academic dishonesty

You are expected to exhibit honest and use ethical behavior in all aspects of the learning process. Academic credentials you earn are rooted in principles of honest 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 behavior can result in serious consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (where 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 kinds of academic dishonesty, please refer to the Academic Integrity Policy, located at: 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.

6. Online learning

We will be using Avenue to Learn and Google Drive in this course. Students must ensure that they have working A2L and Gmail accounts in order to complete labs and quizzes. Students should be aware that when they access the electronic components of this course, private information such as first and last names, user names associated with 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.

7. Course Textbook

There is no required textbook for this course

The textbook: Statistical Methods for Geography by Peter Rogerson (2015) is optional. You can order it online. I recommend buying the book if you anticipate going to graduate school, want to do numerical/analytical work in the future (GIS or spatial analysis), or want to be sure to do well in this course.

8. Course Calculator

Students will need a calculator for exams in this course as some questions will require students to apply basic formulae to data. Students are required to use the McMaster approved Casio fx-991 calculator for all exams.