COURSE OUTLINE
Introduction to Quantitative Methods in Geography

Contact: ianoc@uvic.ca or 250-721-7338
Office Location: DTB B322
Office Hours: See CourseSpaces, or by appointment
Class Meetings: Mondays and Thursdays 9:00 am to 9:50 am
Location: DTB A102

Labs: You must be registered in a Lab Section.
B01 T 830-1120 CLE A105
B02 T 1430-1720 HSD A160
B03 W 1230-1520 HSD A160
B04 F 1130-1420 CLE A060

COURSE OBJECTIVES

introduce methods for analyzing data;
introduce descriptive statistics;
introduce probability;
introduce sampling;
introduce inferential statistics;
introduce non-parametric statistics;
introduce correlation and simple linear regression;
introduce basic plots and charts;
gain familiarity with statistical software (R).

LEARNING OUTCOMES

ability to choose appropriate statistical methods;
ability to complete hypothesis tests;
ability to use R to carry out basic statistical analyses;
ability to report and present statistical analyses.
REQUIRED TEXT
There is no required textbook for this course, however weekly readings and online learning resources will be provided on CourseSpaces throughout the course.

EVALUATION
Midterm Exam #1 (October 11th in class) 10%
Midterm Exam #2 (November 8th in class) 13%
Laboratory Assignments x 8 37%
Final Exam (During Exam period) 40%

Advice: Students have in the past found that the lab assignments can be time-consuming and challenging. We are here to help with this – Please make sure you schedule your time effectively. The Labs are three hours. Please plan to be there for the entire lab time. The labs materials are designed to be both supplemental and complementary to the lectures. Slides are not designed to replace attendance in class or lab.

No audio or video recordings are permitted unless approved in writing (in advance) by the course instructor.

Exam Format: The questions for the midterm exams and final exam will be based on lectures, labs, posted learning resources and class discussion. The final exam is comprehensive. Formats includes a combination of short-answer, calculations, and multiple-choice questions. Electronic devices for use during exams are limited to non-graphing scientific calculators unless otherwise expressly permitted by the course instructor.

GRADING SYSTEM
As per the Academic Calendar:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade point value</th>
<th>Grade scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>9</td>
<td>90-100%</td>
<td>An A+, A, or A- is earned by work which is technically superior, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students.</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>85-89%</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>7</td>
<td>80-84%</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>6</td>
<td>77-79%</td>
<td>A B+, B, or B- is earned by work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student’s full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material. Normally achieved by the largest number of students.</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>73-76%</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>4</td>
<td>70-72%</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>3</td>
<td>65-69%</td>
<td>A C+ or C is earned by work that indicates an adequate comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in class activities.</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>60-64%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>50-59%</td>
<td>A D is earned by work that indicates minimal command of the course materials and/or minimal participation in class activities that is worthy of course credit toward the degree.</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0-49%</td>
<td>F is earned by work, which after the completion of course requirements, is inadequate and unworthy of course credit towards the degree.</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0-49%</td>
<td>Did not write examination or complete course requirements by the end of term or session; no supplemental.</td>
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GEOGRAPHY DEPARTMENT INFORMATION

Geography Department website: [http://geog.uvic.ca](http://geog.uvic.ca)
Undergraduate Advisor: Phil Wakefield [geogadvisor@uvic.ca](mailto:geogadvisor@uvic.ca)
Department Chair: Dr. Johannes Feddema [geogchair@uvic.ca](mailto:geogchair@uvic.ca)

COURSESPLAYES

CourseSpaces learning management systems (LMS) will serve as the main avenue of communication ([http://coursespaces.uvic.ca](http://coursespaces.uvic.ca)). Please monitor the page on a regular basis for course announcements. If you are having difficulty logging in or password problems, contact the Computer Help Desk Email: helpdesk@uvic.ca, Tel: 250-721-7687

IMPORTANT COURSE POLICIES

A high level of student cooperation and participation, involving asking and answering questions is expected. Students are expected to attend all lectures, take notes and be punctual for class.

Cell phones and portable music players must be turned off or silenced during lectures and labs.

Topic handouts based on lecture presentations will be provided before the beginning of class meetings on CourseSpaces. These handouts will be removed 7 days after the posting date. Students are responsible for downloading/saving and completing notes packages. If you miss any material, make arrangements to get handouts from a fellow student, not from the instructor.

Students must complete all evaluation components to obtain credit. Failure to complete an any evaluation component without permission from the instructor, will result in an ‘N’ grade, which equals a Grade Point Value of 0.

Students will not be permitted to write make-up tests except for documented medical or compassionate reasons. Please inform the instructor of your situation promptly and present written proof within five working days. Any make-up test or examination may not follow the same format as the in-class one.

Lab assignments are due at the beginning of your lab section; thereafter late penalties will be applied.

Late assignments will be penalized 25% per day (including weekends and holidays). Exceptions will only be granted for documented medical or compassionate reasons. Written proof must be provided within five working days. Only the course instructor can grant exceptions.

Details regarding your labs and their marks are managed by the course Lab Instructors. Please discuss any issues or questions on labs with your Lab Instructor first. Any discrepancy with lab grades must be reported to your Lab Instructor, then the Course Instructor within seven days of receiving the marked assignment.

Please attend only the laboratory section for which you are registered. If you must miss a lab for exceptional circumstances, please make arrangements with your TA in advance to attend another section. This however does not change the due date of your lab assignment.

Conflicts with holidays or travel plans are not considered an acceptable reason to apply for a deferred
examination or an assignment extension.

Unless otherwise stated students are expected to complete assignments independently.

PLAGIARISM

Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Victoria. The responsibility of the institution: Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects. The responsibility of the student: Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations or for referencing your sources, ask your instructor.

Infractions will be dealt with in accordance with University policy. Commonly, the penalty for any form of cheating/plagiarism is a grade of F on the tests or laboratory assignments, or a final grade of F in the course. However, depending on the severity of the case other penalties may include a record on the student’s transcript or expulsion.

Please familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website. Please contact me if you have any questions.

http://www.uvic.ca/learningandteaching/students/resources/expectations/

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL) as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course. Please note: You are under no obligation to disclose.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members. To ensure that all class members feel welcomed and equally able to contribute to class discussions, we will all endeavour to be respectful in our language, our examples, and the manner in which we conduct our discussions and group work. If you have any concerns about the climate of the class, please contact me.

Course Experience Survey (CES)

We value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.
### Lecture Topics Tentative Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates (week of)</th>
<th>Lab</th>
<th>Due</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Sept. 5(^{th})</td>
<td>No Lab</td>
<td></td>
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<tr>
<td>Week 2</td>
<td>Sept. 10(^{th})</td>
<td>Lab 0 Introduction to Labs (0%) Mandatory attendance</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Sept. 17(^{th})</td>
<td>Lab 1 Descriptive Statistics (3%)</td>
<td></td>
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<tr>
<td>Week 4</td>
<td>Sept. 24(^{th})</td>
<td>Lab 2 Probability (4%)</td>
<td>Lab 1</td>
</tr>
<tr>
<td>Week 5</td>
<td>Oct. 1(^{st})</td>
<td>Lab 3 Sampling (4%)</td>
<td>Lab 2</td>
</tr>
<tr>
<td>Week 6</td>
<td>Oct. 8(^{th})</td>
<td>No Lab</td>
<td></td>
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<tr>
<td>Week 7</td>
<td>Oct. 15(^{th})</td>
<td>Lab 4 Confidence Intervals (6%)</td>
<td>Lab 3</td>
</tr>
<tr>
<td>Week 8</td>
<td>Oct. 22(^{nd})</td>
<td>Lab 5 Non-Parametric Statistics (6%)</td>
<td>Lab 4</td>
</tr>
<tr>
<td>Week 9</td>
<td>Oct. 29(^{th})</td>
<td>Lab 6 T-Tests and ANOVA (6%)</td>
<td>Lab 5</td>
</tr>
<tr>
<td>Week 10</td>
<td>Nov. 5(^{th})</td>
<td>Lab 7 Correlation (4%)</td>
<td>Lab 6</td>
</tr>
<tr>
<td>Week 11</td>
<td>Nov. 12(^{th})</td>
<td>Reading Break</td>
<td></td>
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<tr>
<td>Week 12</td>
<td>Nov. 19(^{th})</td>
<td>Lab 8 Regression (4%)</td>
<td>Lab 7</td>
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<tr>
<td>Week 13</td>
<td>Nov. 26(^{th})</td>
<td>Review</td>
<td>Lab 8</td>
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