GEOG 2271: QUANTITATIVE METHODS IN GEOGRAPHY Fall 2019

Instructor: Dr. Adam Cornwell Office: RC 2006D <u>acornwel@lakeheadu.ca</u>

Meeting Schedule:

Lectures Monday and Wednesday, 10:00-11:30 pm (RC 2003)

Labs Thursday 2:30 – 4:30 pm (AT 3009)

Course Content:

The course introduces Geography majors to statistical methods. Topics include: describing a distribution, discrete and continuous probability distributions, estimating means and proportions, hypothesis testing, linear regression, contingency tables and point pattern analysis. Time permitting, multiple regression and non-linear regression will be introduced. The application of statistics to geographical problems is emphasized. A more detailed schedule of the topics to be covered is included in the course manual.

Evaluation Scheme:

Assignments (11)	30%
Tests (2)	30%
Lab Exam	10%
Final Examination	30%

Please see the course manual for the schedule of assigned exercises and examinations.

Required Materials:

Course Text

Johnson and Kuby (2012). STAT, 2nd ed. Brooks/Cole.

Alternative Text

Rogerson, P (2010). Statistical Methods for Geography: A Student's Guide, 3rd ed. Sage Publications.

A good statistics textbook is an invaluable reference for this course and others you will take in the future. I can suggest other alternatives if the recommended texts are not to your liking.

Course Materials Package

The Course Materials Package contains a detailed course syllabus (lecture topics, recommended readings, dates for Term Tests). The manual also comes with a beginner's guide to SPSS, the assignments that will make up 30% of your grade, materials for in-class workshops, review questions with answers, sample exam questions and sample SPSS outputs. **Acquiring a manual is an absolute must.** Manuals will be available in the Campus Bookstore.

Other Supplies

- Bring a pencil and eraser to class
- A pocket calculator with scientific functions (factorials, logarithms, exponents) is essential
 - o Programmable calculators will not be permitted in tests and exams!
- A memory stick is recommended for backing up work done in labs

Software:

While some assignments should be completed with a calculator, others will be completed using two software packages: Microsoft Excel and SPSS. These are available for use in the ATAC computer labs, and optionally for purchase at student prices through Helpdesk or Campus Tech.

Courselink:

This course makes use of the Desire2Learn Courselink web portal. PowerPoint slideshows used in lectures can be downloaded from the course site before class. There will also be announcements and updates concerning tests, assigned exercises, etc.

Assignments:

Assignments for this course are included in this manual and may be completed at any time. The course schedule indicates the due dates and also the point at which we will have covered all of the necessary material in class (i.e. when you should get started). Late assignments will be penalized at a rate of 10%/day of the mark allocation.

Expectations:

To succeed in this course, regular attendance at lectures and labs is absolutely essential. As persons aspiring to be professionals, whether in geography or any other field, it is expected that you will be present at all lectures and labs. I am always more than willing to help students who have made the effort to come to class and still find they are struggling with a concept or technique. However, if you miss class, make sure you do the assigned reading and get some notes from one of your peers. I do not have time for students who show up having skipped class and expecting me to go over what they missed.

Accommodations:

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: http://studentaccessibility.lakeheadu.ca.