

# GEOG 2271: QUANTITATIVE METHODS IN GEOGRAPHY

**Instructor:** Dr. Adam Cornwell      Office: RC 2006D      [acornwel@lakeheadu.ca](mailto:acornwel@lakeheadu.ca)  
**T.A.:** Ms. Marg Schweitzer      [mschweit@lakeheadu.ca](mailto:mschweit@lakeheadu.ca)

## Meeting Schedule:

Lectures                      Tuesday and Thursday, 5:30-7:00 PM (RC 2003)  
Labs                              Tuesday 2:30 – 4:30 (AT 3002)  
Tutorials (optional)        TBA

## 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:

Exercises	<b>30%</b>
Tests (2)	<b>30%</b>
Lab Exam	<b>10%</b>
Final Examination	<b>30%</b>

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

## Required Materials:

### *Course Text*

Johnson and Kuby (2012). *STAT*. Brooks/Cole.

### *Alternative Text*

Rogerson, P (2010). *Statistical Methods for Geography: A Student's Guide, 3<sup>rd</sup> edition*. 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 text is not to your liking.

### *Course Materials Package*

The Course Materials Package contains a detailed course schedule (lecture topics, recommended readings, dates for Term Tests). The manual also comes with a beginners 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
  - ***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 in the computer store.

### **WebCT:**

This course makes use of WebCT. 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.

### **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 simply do not have time for students who show up having skipped class and expecting *me* to go over what they missed.