

# School of Arts & Science SOCIAL SCIENCES DEPARTMENT

GEOG 216-001 Ecosystems and Human Activity 2010W

# **COURSE OUTLINE**

## The Approved Course Description is available on the web @\_\_\_\_

 $\Omega$  Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.

### 1. Instructor Information

| (a) | Instructor:   | Trisha Jarrett            |
|-----|---------------|---------------------------|
| (b) | Office Hours: | ТВА                       |
| (C) | Location:     | Fisher 308B               |
| (d) | Phone:        | 370-3378                  |
| (e) | Email:        | jarrett@camosun.bc.ca     |
| (f) | Website:      | http://online.camosun.ca/ |

## 2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

Upon completion of this course the student will be able to:

- 1. Demonstrate a working knowledge of elementary statistics and elementary statistical models as applied to spatial processes.
- 2. Demonstrate an ability to handle spatial data through the application of SPSS software.

## 3. Required Materials

#### **Required Textbook:**

McGrew, J. Chapman and C. B. Monroe, An Introduction to Statistical Problem solving in Geography, 2<sup>nd</sup> Edition.

Used copies should be available, but note these were substantially more expensive (hardcover). The new publisher is now producing the book as a softcover. I have also requested that a copy of the textbook be placed on reserve in the library for your use.

#### Additional material:

I have requested a few copies of SPSS for students to be sold in the bookstore. If you have difficulty making the lab sessions or feel you need more time than you can get in the Camosun student labs, I recommend that you purchase and use this software.

### Lab Materials:

A lab materials packet will be available for purchase in the bookstore. In the event of changes or shortages, I will make lab materials available the class before the lab session. If you are not at lecture you are responsible for getting a copy of the lab before the lab begins.

## 4. Course Content and Schedule

You are expected to attend each day as a lot of material is covered. No lecture notes will be made available, if you are not able to make a class you must make arrangements ahead of time for what will be covered.

You are responsible for reading your text. I will draw from the text but will also present other material in the lecture. Your text should be used as a base on which you build other knowledge. Examinations will look to the text for basic concepts. Lecture, exercises, and labs will provide more specific information and examples that will be on the exams.

| Date       | Week | Lecture (Mon)   | Lab (Wed)                             | Reading        |
|------------|------|---|---------------------------------------|----------------|
| Jan 4, 6   | 1    | Introduction to Quantitative Methods                        | Lab 0: SPSS Tutorial.                 |                |
| Jan 11, 13 | 2    | Introduction to Geographic Data                             | Lab 1: Statistics Introduction: M&M's | Chapter 1      |
| Jan 18, 20 | 3    | Geographic Data - Types and measurements                    | Lab 2: SPSS & Student survey          | Chapter 2      |
| Jan 25, 27 | 4    | Descriptive Statistics                                      | Lab 3: Descriptive Statistics         | Chapter 3      |
| Feb 1, 3   | 5    | Descriptive Spatial Statistics                              | Lab 4: Descriptive Spatial Statistics | Chapter 4      |
| Feb 8, 10  | 6    | Probability<br>Review                                       | Lab 5: Probability                    | Chapter 5      |
| Feb 15, 17 | 7    | Midterm Exam  | No Lab this week                      |                |
| Feb 22, 24 | 8    | Sampling and estimation                                     | Lab 6: Sampling Methods and Survey    | Chapter 6 /7   |
| Mar 1, 3   | 9    | Introduction to Inferential statistics and one sample tests | Lab 7: Inferential Statistics         | Chapters 8     |
| Mar 8, 10  | 10   | Two sample tests  | Lab 8: One and Two sample tests       | Chapter 9      |
| Mar 15, 17 | 11   | Inferential Spatial Statistics                              | Lab 9: Inferential Spatial Analysis   | Chapter 12     |
| Mar 22, 24 | 12   | Correlation, Regression and Mapping                         | Lab 10: Correlation and Regression    | Chapter 13 /14 |
| Mar 29, 31 | 13   | Non-Parametric Sample Tests                                 | Lab catch-up                          | Chapter 10 /11 |

| Apr 5, 7 | 14 | No class - Easter Holiday | Review | Review |
|----------|----|---------------------------|--------|--------|
|----------|----|---------------------------|--------|--------|

#### Learning Opportunities:

<u>Lectures</u>: There will be two hours of lecture per week in Fisher 334. The lecture period will include overheads and lecture material. In addition there will be an in-class problem session to further expand the concepts. A calculator will be useful for the in-class problem solving.

<u>Labs</u>: Lab sessions are held in the Camosun general computing lab room in the Ewing building, room E115, on Wednesdays. All labs are computer based. Lab sessions will be weekly.

There are ten marked labs in the course. Each lab contains exercises to familiarize students with different aspects of spatial statistics used in geography. Attendance during lab periods is <u>mandatory</u>. In the case of illness, the instructor must be contacted <u>prior</u> to the class time and an alternate arrangement must be made; otherwise, a mark of zero will be assigned. All labs are due one week from the lab period, except where noted. Each lab is worth 5%.

<u>Examinations:</u> There two exams during the term. There will be 1 midterm exam in class time and one final exam in the exam period. The midterm exam is worth 20% of your final mark. The midterm will focus on the theoretical aspects of the course, the lectures and relevant chapters in the textbook. The final lab exam is worth 30% of your final mark and will focus on both the theoretical and the practical application of your lab experiences and problem sets discussed in class.

### Lab Materials:

Please read your lab exercise over before coming to the lab class. There will be a short introduction to the lab but you will benefit more by having read the material prior to doing the lab.

Lab exercises are due one week from the day of the lab. Labs that are late will be deducted at 10% per day. You will need to bring pencil, eraser, ruler and a calculator for lab periods. The labs do not need to be typed. That said, your handwriting must be legible for me to mark your labs.

Teamwork is encouraged in labs. However, do not copy from each other when handing in assignments. While you may brainstorm and work together, all assignments must be written in your own words. Any students involved in copying will be given a mark of zero for that assignment.

## 5. Basis of Student Assessment (Weighting)

| Total         | 100% |
|---------------|------|
| Final Exam    | 30%  |
| Midterm Exam  | 20%  |
| Lab Exercises | 50%  |

## 6. Grading System

## Standard Grading System (GPA)

| Percentage | Grade | Description   | Grade Point<br>Equivalency |
|------------|-------|---|----------------------------|
| 90-100     | A+    |   | 9                          |
| 85-89      | A     |   | 8                          |
| 80-84      | A-    |   | 7                          |
| 77-79      | B+    |   | 6                          |
| 73-76      | В     |   | 5                          |
| 70-72      | B-    |   | 4                          |
| 65-69      | C+    |   | 3                          |
| 60-64      | С     |   | 2                          |
| 50-59      | D     | Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite. | 1                          |
| 0-49       | F     | Minimum level has not been achieved.  | 0                          |

## **Temporary Grades**

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary<br>Grade | Description   |
|--------------------|---|
| I                  | <i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.  |
| IP                 | <i>In progress</i> : A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 <sup>rd</sup> course attempt or at the point of course completion.) |
| CW                 | <i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.   |

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

## LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at <u>camosun.ca</u>.

## STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.