# THE UNIVERSITY OF CALGARY FACULTY OF SOCIAL SCIENCES DEPARTMENT OF SOCIOLOGY

# SOCIOLOGY 315-01: INTRODUCTION TO SOCIAL STATISTICS II COURSE OUTLINE - Fall 2009

Instructor: Dr. Linda Henderson Classroom: SA 124A
Office: SS 903 Classtime: Tues & Thurs
Phone: 220-6501 2:00-3:15 pm

Phone: 220-6501 2:00-3:15 pm
Office Hours: Tues 3:30-4:30 Lab: Thurs 3:30 to 6:30 pm

or by appointment Location: SA 124A/TriFaculty Lab

Note: lab fees for instructional materials are \$15.00/student

Teaching Assistant: Caroline Sommerfeld

VERY IMPORTANT NOTE: Lap top computers may only be used in this class with special permission of the instructor. Cell phones and all other electronic devices MUST be turned off and stowed during class. Class attendance is essential for success in this class.

#### **COURSE DESCRIPTION**

This course provides a continuation of the introduction to the basic principles and techniques of social statistics used in social scientific research. This is NOT a course which emphasizes mathematics, but one which focuses on the logic involved in selecting, applying and interpreting statistical tools for the kinds of data analyses indicated by specific research problems. This goal involves *thinking* about how statistics fits into the overall process of research design and when and why a certain technique is the most appropriate and/or useful.

#### **TEXTS**

- 1. Frankfort-Nachmias, Chava and Anna Leon-Guerrero. 2009. *Social Statistics for a Diverse Society 5<sup>th</sup> Edition*. Thousand Oaks, California:Pine Forge Press.
- 2. Allison, Paul D. 1999. *Multiple Regression: A Primer*. Thousand Oaks, California:Pine Forge Press.

Find out more about the U of C Students' Union at www.su.ucalgary.ca Find out more about the U of C Career Services at www.ucalgary.ca/careers

Campus SAFEWALK - call 220-5333

## **COURSE SCHEDULE**

## **SECTION 1: INTRODUCTION AND REVIEW**

1. The BASICS see F-N & L-G - Chpts 1-9

- descriptive and inferential statistics
- review of descriptive statistics for one variable
- review of descriptive statistics for two variables

#### SECTION 2: DESCRIPTIVE STATISTICS FOR THREE OR MORE VARIABLES

2. Nominal and Ordinal Variables see F-N & L-G - Chpt 6

- multiple contingency tables

3. Interval/Ratio Variables see ALLISON

- partial correlation

- multiple regression

4. An Introduction to Path Analysis - An Application of Multiple Regression Techniques

5. A Few Other Descriptive Statistics Techniques

#### SECTION 3: INTRODUCTION TO INFERENTIAL STATISTICS

6. Inferential Statistics: A brief overview see F-N & L-G – Chpts 10-12

- probability theory and sampling theory

- the logic of null hypothesis testing

#### SECTION 4: INFERENTIAL STATISTICS FOR ONE SAMPLE

7. Estimating Parameters see F-N & L-G - Chpt 11

- point and interval estimates

8. Inferences about Means and Proportions see F-N & L-G - Chpt 11

#### SECTION 5: INFERENTIAL STATISTICS FOR TWO OR MORE SAMPLES

9. Inferences about Means and Proportions see F-N & L-G - Chpt 12

10. ANOVA (Analysis of Variance) see F-N & L-G - Chpt 14

#### SECTION 6: INFERENTIAL STATISTICS FOR REGRESSION

11. Inferences about slopes see ALLISON

12. Inferences about r<sup>2</sup> and R<sup>2</sup>

# STUDENT EVALUATION

Test #1, Thursday, October 8, 2009 (in lab)	25%
Test #2, Thursday, November 5, 2009 (in lab)	25%
Lab Assignments	20%
Final Exam (registrar scheduled)*	<u>30%</u>
total	100%

<sup>\*</sup> The final exam could be on any day between December 11-21, 2009.

**IMPORTANT NOTE**: To obtain a passing grade in this course, the following requirements MUST be met:

- 1. All lab assignments must be handed in. (i.e., The lab assignments are MANDATORY.)
- 2. A passing grade on the final exam must be achieved.

University of Calgary regulations (as outlined in the University of Calgary Calendar) will apply in the case of plagiarism, missed exams or assignments. Calculators may be used for all tests.

The Freedom of Information and Protection of Privacy (FOIP) Legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside the instructor's office, from the department office, etc. Term assignments must be returned to the students individually, during class, or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they may provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignments.

#### **LETTER GRADE ASSIGNMENT**

Letter Grade	% Range	<u>Letter Grade</u>	% Range
A	90 or higher	C	63-66
A-	85-89	C-	59-62
B+	80-84	D+	54-58
В	76-79	D	50-53
B-	72-75	F	49 or less
$\mathbf{C}$ +	67-71		

Students who achieve overall numerical grades of 95% or higher will have A+ recorded on their official transcripts. Please note that grades in this course are NOT negotiable.

**IMPORTANT NOTE:** Please see the next page for other Important Course and Administrative Information

#### IMPORTANT COURSE AND ADMINISTRATIVE INFORMATION

#### Emergency evacuations:

In the case of fire or other emergency evacuation of this classroom/lab, please proceed to the assembly point by the Food Court in the Professional Faculties Building.

#### Deferrals:

If at all possible you must provide *advance* notice to the instructor if you are unable to take a test or pass in an assignment or essay on time. All requests for deferral of a course component due to health reasons must be accompanied by written documentation as outlined in the University Calendar and should be obtained while the student has the physical or emotional problem rather than after recovery. Deferrals will be allowed in the following circumstances: illness, domestic affliction or religious conviction. Travel arrangements and misreading of the syllabus are not valid reasons for requesting a deferral. Deferrals will not be granted if it is determined that just cause is not shown by the student.

If you have missed a test for a legitimate reason, the instructor can require you to write a "make up" test as close in time to the original test as possible or can choose to transfer the percentage weight to another course component. If the instructor schedules a "make up" test for you, its date and location will be at the convenience of the Sociology Department.

Please note that requests to defer a final examination or to defer term work past the end of a term go through the Undergraduate Programs Office (UPO) and must be processed by the deadlines that are established in the U of C Calendar. You can find the forms you need online:

#### Deferred Final Exam Application:

http://www.ucalgary.ca/registrar/files/registrar/Winter2008DEFERREDFINALEXAMINATIONS.pdf Deferred Term Work Form:

http://www.ucalgary.ca/registrar/files/registrar/defTW.pdf

You must submit these deferral forms to the Social Sciences Associate Dean (Students) through the UPO office: Undergraduate Programs Office, 4th Floor, MacEwan Student Centre. Only the Associate Dean approves requests for deferrals which extend beyond the end of a term. Instructors are not involved in such decisions. To make an appointment with the Associate Dean, phone (403) 220-8155.

*Ethics Research*: Students are advised that any research with human subjects--including any interviewing (even with friends and family), opinion polling, or unobtrusive observation--must have the approval of the Departmental Ethics Committee. In completing course requirements, students must not undertake any human subjects research without discussing their plans with the instructor, to determine if ethics approval is required.

Academic Misconduct: Plagiarism, cheating and other academic misconduct are regarded as serious academic offences. Students are advised to consult the University Calendar which presents a Statement of Intellectual Honesty and definitions and penalties associated with cheating, plagiarism, and other academic misconduct.

The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside an instructor's office or the Department main office. Written assignments must be returned to students individually, during class, or during the instructor's office hours; if a student is unable to pick up her/his assignment s/he may provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

*Safewalk*: The University of Calgary provides a "safe walk" service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-5333. Campus Security can also be contacted from any of the "Help" phones located around Campus.

Academic Accommodation: Students with a disability, who require academic accommodation, need to register with the Disability Resource Centre (MC 295, phone 220-8237). Academic accommodation letters need to be provided to course instructors no later than fourteen (14) days after the first day of class. It is a student's responsibility to register with the Disability Resource Centre and to request academic accommodation, if required.

#### Handing in papers outside of class, return of final papers, and release of final grades:

- 1. When students are unable to submit papers in class, they should make arrangements to hand in their papers directly to the instructor or teaching assistant. Papers will not be accepted in the main Sociology Department office.
- 2. Final papers will not be returned through the main Sociology Department office. The Freedom of Information and Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place (i.e. outside an instructor's office, the department office etc.) Students who want their final papers returned by mail must attach a stamped, self-addressed envelope with the paper. Otherwise final papers will be available for pick-up only during the instructor's office hours at the end of this term or at the beginning of the next term.
- 3. Final grades are not posted by the Sociology Department. They are available only online.