University of Regina Statistics 257-Applied Sampling Techniques

Section: 001 Lecture: MWF 1130–1220 in Classroom Building, room 125 (CL 125).

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http://www.math.uregina.ca/~kozdron/Teaching/Regina/257Fall04/
M 1300–1400, Tu 1230–1330, F 1400–1530, or by appointment

 Laboratory Section 010:
 Th 1000–1050 in College West, room 307.20 (CW 307.20).

 Laboratory Section 020:
 Th 1130–1220 in College West, room 307.20 (CW 307.20).

 Laboratory Section 030:
 Th 1300–1350 in College West, room 307.20 (CW 307.20).

Required Texts:

- Richard L. Schaeffer, William Mendenhall III, R. Lyman Ott, *Elementary Survey Sampling*, fifth edition, Duxbury Press 1996.
- Sarah Carnochan Naqvi, Stat 257 Laboratory Manual, University of Regina 2004.

Optional Materials:

• Calculator

Course Description:

3 credits. Simple random sampling, systematic sampling, stratified and cluster sampling, ratio and regression estimators.

Prerequisites:

STAT 151 with a grade of at least 60%.

Student Responsibilities:

Students should familiarize themselves with the *Responsibilities of Students* in Section 5.1, page 28 of the *Undergraduate Calendar*.

Grading Information:

Your final grade will be determined by your performance in the course, including laboratory work, assignments, office visits, the midterm, and the final exam.

Evaluation Type	Number	Percentage of Final Grade
Laboratory Assignments	10	25%
Assignments	12	10%
Participation and Office Visits	2	5%
Midterm Exam	1	20%
Final Exam	1	40%

Laboratory:

There is a separate laboratory for this course which meets weekly in the Department of Mathematics & Statistics undergraduate lab located in College West, room 307.20. The lab instructor is Sarah Carnochan Naqvi (carnoc@math.uregina.ca), and she is responsible for assigning your laboratory grade. Please consult with her regarding any additional lab policies that might be in place.

Assignments:

As is the norm in a university-level course, it is not possible to cover all of the required material in lecture. As a result, each student must take an active role in his or her own education. Mathematics and Statistics are not spectator sports. They cannot be learned passively only by watching the instructor lecture. Instead they must be learned by doing. Consequently, most of what you learn in this course will be the result of working exercises that are designed to reinforce key concepts, develop skills, and test your understanding of the material. Before you try working the exercises, however, do the reading assignment. Reading the text will help you review the important concepts before you start on the exercises. Some of the exercises are straightforward, others are very complex. After each class meeting, you should work all problems assigned from the section discussed that class. Assignments will take on the average 6–10 hours. You are encouraged to talk with your classmates about the homework; you might even want to form a study group to work together on the most difficult homework problems. However, all problems you submit must be your own work. It is dishonest, and a serious University of Regina violation, to submit someone else's work as your own.

Participation and Office Visits:

An important part of conducting a survey requires the interviewer to speak with the subjects. Therefore, communication and class interaction are vital. Each student is also required to schedule an appointment with me once before Fall break (October 11, 2004) and once after Fall break to discuss the course and your progress.

Midterm Exam:

There will be one major term test, called a *midterm exam*, that will be given during the semester. The midterm will be closed-book, although a formulæ page will be provided. It will be comprehensive, and cover all the material covered on the syllabus before the midterm, including lectures, laboratories, assigned readings, and lecture/lab assignments.

Final Exam:

As with the midterm exam, the final exam will be closed-book, although a formulæ sheet will be provided. The final exam will be comprehensive and cover all of the material listed on the syllabus, including both lecture and laboratory work.

Exam Dates:

The midterm will be held in class during the usual class time, and the location of the final exam will be determined by the Registrar near the end of the term.

- Midterm Exam: Monday, October 25, 2004, 1130–1220
- Final Exam: Friday, December 17, 2004, 900–1200

Policy for Missed Classes, Missed Midterm, and Missed Final Exam:

Students should familiarize themselves with the sections Attendance (Section 5.3, page 28) and Deferrals (Section 5.8, pages 29–30) of the University of Regina Undergraduate Calendar.

Web Site:

I have written a web site for this section. The URL is

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http://www.math.uregina.ca/~kozdron/Teaching/Regina/257Fall04/.
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I will be updating this site throughout the term and you will be able to download any handouts that you don't get in class.

Email:

Email will be a significant form of course related communication between both students and the instructor. Therefore, please check your email regularly for course updates and homework/prelim information. Feel free to email your questions to me. I will endeavour to respond within 24 hours. Should you not receive a reply within 24 hours, try sending the message again, or ask me in person if I received your mail. *IMPORTANT NOTE*: I DO NOT HAVE EMAIL ACCESS AT HOME. THEREFORE YOU WILL NOT RECEIVE A REPLY TO EMAIL SENT LATE AT NIGHT UNTIL THE NEXT DAY, OR TO MESSAGES SENT DURING THE WEEKEND UNTIL MONDAY.

Academic Integrity:

For a university community of scholars, academic integrity is the heart of intellectual life—both in learning and in research.

Students should read carefully the University of Regina guidelines on *Student Behaviour* in Section 5.14, pages 32–34 of the *Undergraduate Calendar*, and not assume they understand what integrity and cheating are and are not. Academic integrity most certainly implies more at the university than it did in high school. The standards of integrity are those that prevail in professional life. Students must acknowledge and cite ideas they adopt from others (not just direct quotations), and understand the general standards and policies of academic integrity, as well as specific expectations in individual courses. When in doubt, ask!

Students should also consult the pamphlet *Academic Integrity* published by the University Secretary, or contact that office for more information.