University of Regina
Statistics 257-Applied Sampling Techniques

Section: 001
Lecture: MWF 1130–1220 in College West, room 117 (CW 117).

Instructor: Michael Kozdron
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Office Hours: M 1330–1430, 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:

- Vic Barnett, *Sample Survey: Principles & Methods*, third edition, Arnold 2002.
- 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 both the *Responsibilities of Students* in Section 5.1, and the *Responsibilities of Instructors* in Section 5.2, both on page 28 of the *Undergraduate Calendar*. Especially note item 7 which states that: Instructors are expected to conduct their courses in such a way as to obtain evidence of student writing skills, in term papers, essays, reports, or other written work, and to demand competence in writing for a passing grade.

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 Work		10%
Assignments	7	14%
Quizzes	5	20%
Midterm Exam	1	14%
Final Exam	1	42%

Caveat: In order to receive a final grade of at least 60% for the course, it is necessary (but not sufficient) to receive a grade of at least 60% on the final exam.

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 Supranee Lisawadi (`lisawa1s@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.***

Quizzes:
There will be periodic 20 minute quizzes held in lecture during those weeks in which no assignments are due. The purpose of the quiz is to ensure that students are actually reading the textbook. Consequently, quiz questions will be based exclusively on the relevant, assigned text sections.

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: **Friday, October 21, 2005, 1130–1220**
- Final Exam: **Friday, December 16, 2005, 900–1200**

Policy for Missed Classes, Missed Midterm, and Missed Final Exam:
Students should familiarize themselves with the sections *Attendance* (Section 5.3, page 29) 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 course. The URL is

`http://www.math.uregina.ca/~kozdron/Teaching/Regina/257Fall05/`.

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/midterm 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.

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 33–34 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.