

Faculty of Science DEPARTMENT OF MATHEMATICS AND STATISTICS Course Information Sheet

1. Course: STAT 217

 Lecture/Time/Location:
 L91
 MW
 19:00
 Room:
 MS 527

 MW
 20:30
 Room:
 MS 515

Instructor: Alberto Nettel-Aguirre

Office: MS 346 **Phone**: 220-7199

E-mail/Website: nettel@math.ucalgary.ca www.math.ucalgary.ca/~nettel/

Office Hours: By appointment or

Monday Tuesday Wednesday Thursday Friday 18:00 – 19:00 11:00 – 12:00 18:00 – 19:00

Winter 2004

2. Prerequisite: Stat 213 (with a grade of C – or better)

NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined on page 198 of the 2003-2004 Calendar. It is the students' responsibility to ensure that they have the pre- and co-requisites for the course. If they do not, they will be withdrawn from the course without notice.

- **3. Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
- **4. The University policy on grading and related matters** is described on pages 41-42 of the 2003-2004 Calendar. In determining the overall grade in the course, the following weights will be used:

Quizzes [Best 4 of 5] 40% Mid-term Test 15% Final Exam 45%

It is not mandatory to achieve a passing grade on each and every component or on any particular component in order to pass the course as a whole. However, successful completion of the course will be extremely difficult if the overall contribution of any component is less than half of the marks available for that component.

There will be a final examination scheduled by the Registrar's Office. A calculator and one formula sheet will be the only aids permitted for the midterm and final examinations.

- **5. Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined on page 199, of the 2003-2004 Calendar. It is the student's responsibility to familiarize herself/himself with these regulations.
- 6. Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the 2003-2004 University Calendar under the heading "Student Misconduct", pages 53-56.
- 7. There will be no out-of-class-time activities.

8. There is no <u>required</u> text for this course.

Recommended Texts: Statistics Ninth Edition

McClave & Sincich Prentice Hall

Statistics: A First Course First Canadian Edition

Sanders, Smidt, Adatia, Larson

McGraw-Hill

9. Support materials: As shown in the accompanying outline, the syllabus has been divided into five "blocks" for easy reference. There will be brief notes, tutorials, "typical quiz questions" and worksheets available for each block. The tutorial sheet will introduce required computer skills; the worksheet will provide practice problems (more challenging than "typical quiz questions"). In addition, midterm and final review exercises will be provided. Copies of these support materials will be available on the instructor's website or some other webpage for which the web address will be given.

Solutions to all the worksheets, tutorials, and reviews will be on the web pages. The master may be borrowed for photocopying.

10. When you need help, take advantage of the various course support services available. Ask early and ask often. Don't expect a miracle the night before an exam!

Lecturers and lab instructors have **office hours** for the sole purpose of answering your questions.

A continuous tutorial is available each weekday in the Statistics lab room MS 571. This tutorial provides a study space, access to computers, and an opportunity for students to receive one-on-one assistance with any aspect of the course from the faculty member or teaching assistant supervising the room. The continuous tutorial schedule is

Monday	Tuesday	Wednesday	Thursday	Friday
11:00–14:00	11:00-14:00	11:00-14:00	11:00-14:00	11:00-14:00

SCUM (The Society for Calgary Undergraduate Mathematics) is located in MS 337A. They sell exam packages, run final reviews, and can often assist with problems. The office is open from 10am to 3pm Monday-Friday, and you are welcome to drop by.

The textbook publishers have also provided a web site,

http://cwx.prenhall.com/bookbind/pubbooks/esm_mcclave_statistics_9/ for McClave's and www.mcgrawhill.ca/college/sanders, For Sanders' with *Student Resource* links. One feature of Sanders' site is *NetTutor*, which offers the opportunity to ask questions of on-line tutors. Access to the page will require key words related to the text.

11. Five quizzes will be administered during the regularly scheduled <u>lab</u> times of the "Quiz weeks" shown on the course schedule below. The **best four** of these marks will constitute the "quiz" component of the final course grade. The material tested on each quiz will come entirely from the block of corresponding number with any necessary clarification given in the lecture immediately preceding the quiz.

Calculators may be used when writing quizzes and it is anticipated that you will use the statistical software provided on the computers in the lab rooms.

The quizzes will be "closed-book" – texts, notes, aid-sheets, and statistical tables will not be allowed. An attempt to use any such aids or to access e-mail or the Internet during the writing of a quiz will constitute academic misconduct (Item 6) and will be dealt with accordingly.

You will be given 45 minutes to write each quiz although the expectation is that you should be able to complete the questions in 30 minutes.

12. Examinations: There will be **one 60 minute mid-term test** written during the <u>lecture period</u> on March 8, The Registrar will schedule **a two hour final examination**.

One 8½" x 11" aid-sheet (content of student's choosing) and a calculator will be permitted for the mid-term test and for the final examination. Necessary statistical tables will be provided for both exams.

13. The **labs/tutorials** shown in the timetable are held in the Statistics computer lab MS515. Every second Monday, the lab time will be used for the writing of quizzes.

In weeks between quizzes, computer techniques relevant to the current lecture material will be introduced, quizzes will be returned, and individual help will be given as requested.

The statistics labs have printers so this also provides an opportunity for downloading the course support materials. However, the printers are not stocked with paper so you will be required to provide your own.

Labs will begin the first week of classes.

Note: AN AIX username and password will be required to log on to the computers in the Statistics labs. IF you do not have a username and password, you must complete an account registration with Information Technologies by the end of the first week of classes to be prepared for the first lab. See "IT Account Registration" at www.ucalgary.ca/it/mp/students.html

15. Important Dates Winter 2004

	January 12	Lectures begin
Week of	January 26	Quiz #1 (Monday)
Week of	February 9	Quiz #2 (Monday)
Week of	February 16	Reading week - no classes
Week of	March 1	Quiz #3 (Monday)
	March 8	Midterm test (Monday)
Week of	March 8 March 22	Midterm test (Monday) Quiz #4 (Monday)
Week of Week of		
	March 22	Quiz #4 (Monday)

Course Outline Winter 2004

	Topics	Textbook Sections *	Quiz Week
Block 1	Review of Statistics 213 - binomial, Poisson, and normal probability distributions - the sampling distribution of the mean - inference about the mean of one population - Type I and Type II errors	McClave's: Sections 4.4, 4.5 and 5.3. Chapter 6. Sections 7.1,7.2, 7.6, 8.1- 8.4 Sanders': Chapter 5. Section 6.1. Sections 7.1- 7.3, 7.6, 8.1-8.2	January 26
Block 2	Probability of Type I and Type II errors; - The power of a test. Inference about the proportion of success in one population. Inference about the median of one population.	McClaves': Section 8.6. Section 7.3, 8.5. Sections 14.1- 14.2 Sanders': Sections 7.4, 7.6, 8.3. Section 13.1- 13.2	February 9
Block 3	Inference about the variance of one population. Inference about the means and medians of two populations	McClaves': Section 8.7. Sections 9.1-9.2, 14.4, 14.3 Sanders': Sections 7.5, 8.4. Sections 9.2, 13.2- 13.4	March 1

Block 4	Inference about proportions in two populations. {Inference about variances in two populations.} Analysis of Variance.	McClaves': 9.3-9.4. Section (9.5). Sections 10.1-10.2 Sanders': Section 9.3. {Section 9.1}.Chapter 10	March 22
Block 5	Chi-square tests Regression and correlation	McClaves': Chapter 13, sections 11.1-11.8 Sanders': Chapter 11. Sections 12.1-12.4	April 5

• Textbook sections indicated as **McClaves**' refer to <u>Statistics</u> (9th Edition by McClave and Sincich); and those indicated as **Sanders**' <u>Statistics</u>: A <u>First Course</u> (First Canadian Edition by Sanders et al)

You will be responsible for material presented in class that is not in the textbook. Italicized topics will be covered only if time permits.