

## Faculty of Science DEPARTMENT OF MATHEMATICS AND STATISTICS Course Information Sheet

1. Course: STAT 217

 Lecture/Day/Time:
 L02
 MWF
 9:00
 Room: ST 143

 L05
 TR
 9:30
 Room: A 142

 L06
 TR
 12:30
 Room: ST 143

Course Website http://blackboard.ucalgary.ca/

Instructor: Joan Stellmach

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Office Hours: Monday Tuesday Wednesday Thursday Friday

Winter 2005

**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 in the current University Calendar (see <a href="www.ucalgary.ca/pubs/calendar">www.ucalgary.ca/pubs/calendar</a>) Faculty of Science, Section 5C. 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 If they do not, they will be withdrawn from the course without notice.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 in the current University Calendar, *Academic Standings.* In determining the overall grade in the course, the following weights will be used:

Quizzes	[Best 4 of 5]	40%
Mid-term Test		15%
Assignments		5%
Final Fxam		40%

While a failing grade on any component of the course will not automatically result in an F grade for the course, students should be aware that successful completion of the course will be extremely difficult if any component contributes 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 in the current University Calendar, *Faculty of Science, Section 6A*. 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 current University Calendar "Student Misconduct". Information about 'academic integrity' may be found on a new University web page <a href="http://www.ucalgary.ca/honesty/">http://www.ucalgary.ca/honesty/</a>
- 7. There will be no out-of-class-time activities.

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY

8. There is no required text for this course.

Recommended Text: <u>Introductory Statistics</u> Seventh Edition

Neil A. Weiss

Pearson/ Addison Wesley

**9. Support materials:** The syllabus, as presented in the accompanying 'course outline', has been divided into five "blocks" for easy reference.

The Course Documents on the Stat 217 Blackboard site (<a href="http://blackboard.ucalgary.ca/">http://blackboard.ucalgary.ca/</a>) will be grouped by 'block'. Each block will include

- a Tutorial sheet which will introduce computer skills required for the current material
- a Sample Quiz to indicate the typical level of problem to be expected on the quiz for that 'block'
- a <u>Worksheet</u> which will provide additional practice problems. Often, these will be more challenging than the typical quiz questions and may include topics from previous 'blocks' to highlight relationships between various parts of the course.
- Solutions to all the problems presented.

Among the *Course Documents* there will also be a <u>Review</u> section which will provide additional exercises and a past exam for midterm and final review.

If you have difficulty accessing any of these files, copies will also be available on the instructor's web site, <a href="https://www.math.ucalgary.ca/~joans/">www.math.ucalgary.ca/~joans/</a>.

It is the student's responsibility to access and download the various documents. Nothing will be distributed in hard copy. If requested, solutions can be posted in the glass case across from MS372 and a master copy of any document may be borrowed for photocopying.

These lecture sections will also be 'piloting' the use of *WebWork* for statistics. This is web-based testing tool which will be used to provide 'practice exercises' for basic calculations required in statistics and a 'preliminary quiz' for each 'block'. The preliminary quiz results will contribute the *Assignment* marks to your overall course grade. Detailed instructions will be provided.

Success in any mathematics course requires staying current with the lecture presentations and practicing as many problems as possible.

**10.When you need help**, take advantage of the 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 is a "drop-in" tutorial which provides a study space, access to computers, and an opportunity to receive one-on-one assistance with any aspect of the course. 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

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 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 <u>will not be allowed</u>. 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. Assignment marks will be obtained from the results of the 'preliminary quizzes' taken on WebWork. Each will have a particular date on which it will be available and a date by which it must be completed. You may

work on the quiz at any time within that period and submit it at your convenience prior to the closing time. Your guiz will be marked and a score recorded automatically.

Since this term is a trial period for this program, a project may be assigned in lieu of a particular quiz if (and only if!) system problems are encountered that cannot be resolved within the designated testing period. A project would require presentation of questions and solutions that demonstrate mastery of the specific topic being tested at that time.

**13. Examinations:** There will be **one 50 minute mid-term test** written during the <u>lecture period</u> on February 16/17. The Registrar's office 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 exams.

14. The labs, shown on your timetable as B05, B06, ..., will be held in the Statistics computer labs MS 515 and MS 521. Every second week, the lab period will be devoted to writing a quiz. In the weeks between quizzes, this period will be used to introduce computer techniques relevant to the current lecture material, return quizzes, provide assistance with practice problems and give individual help as requested.

The statistics labs have printers which may be used for downloading the course support materials. However, the printers are not stocked with paper so you will be required to provide your own.

**Note:** An IT 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 to be prepared for the first lab. See "My IT Account" at <a href="http://www.ucalgary.ca/it/">http://www.ucalgary.ca/it/</a>

## 15. Important Dates Winter 2005

Week of	January 10	Lectures begin
Week of	January 24	Quiz #1
Week of	February 7	Quiz #2
	February 16, 17	Midterm Test
Week of	February 21	Reading Week - no classes
Week of	March 7	Quiz #3
Week of	March 21	Quiz #4
Week of	April 4	Quiz #5
	April 15	Last day of lectures

## Course Outline Winter 2005

	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	Sections 5.3, 5,4  Chapter 7 Chapter 8 Sections 9.1-9.3; 9.5-9.6	January 24
Block 2	Probability of Type I and Type II errors; - the power of a test. Inference about the median of one population Inference about the proportion of success in one population.	Section 9.4 Sections 9.7-9.8 Sections 12.1-12.2	February 7
Block 3	Inference about the variance of one population. Inference about the means and medians of two populations	Section 11.1 Chapter 10	March 7
Block 4	Inference about proportions in two populations. {Inference about variances in two populations.} Analysis of Variance.	Section 12.3 {Section 11.2} Chapter 16	March 21
Block 5	Chi-square tests Regression and correlation	Chapter 13 Chapters 14, 15	April 4

• Textbook sections refer to IntroductoryStatistics (Seventh Edition)

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