

STAT 2220 Section A01
Contemporary Statistics for Engineers
Fall 2015

Instructor	Richard Gagnon 355 Machray Hall Telephone: 204-474-6623 Email: richard.gagnon@umanitoba.ca	Time	MWF 11:30 a.m. – 12:20 p.m.
		Location	200 Armes
		CRN	10102

Office Hours Monday 1:00 p.m. – 2:00 p.m.
Tuesday 10:30 a.m. – 11:30 a.m.
Thursday 1:00 p.m. – 2:00 p.m.
(or by appointment)

Web Pages UM Learn: <http://umanitoba.ca/umlearn>
Statistics: <http://umanitoba.ca/statistics>

Course Objectives

Upon completion of this course, the student will have an understanding of the fundamental concepts of statistics and an appreciation for the application of statistics in the field of Engineering.

Calendar Description

(Lab Required) (Formerly 005.222)

Descriptive statistics, basic probability concepts, special statistical distributions, statistical inference-estimation and hypothesis testing, regression, reliability, statistical process control.

Not to be held with STAT 1000, STAT 1001, or 005.100.

Prerequisite: a "C" or better in one of MATH 1690 (136.169), the former MATH 1680 (136.168), MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), or the former 136.173.

Textbook & Resources

The following textbook is the required textbook for this course: *Probability and Statistics for Engineers and Scientists*, Ronald E. Walpole et al., 9th edition, Pearson, 2012. A copy will be placed in the Science and Technology Library on two hour reserve.

All course material (class notes, assignments, practice exams and solutions) will be available to you on UM Learn at <http://umanitoba.ca/umlearn>.

For the labs, you will be required to use an i►clicker which is a classroom response system. You will need have an i►clicker (with working batteries) for each of your lab sessions. Please register your i►clicker on UM Learn.

Evaluation

Lab Quizzes	— 10%
First Term Test	— 25%
Second Term Test	— 25%
Final Exam	— 40%

Lab Information

Tutorials will begin Thursday, September 24, 2015. The T.A will go over homework problems and answer students' questions. You will also be given approximately 30 minutes to do a short quiz using your i►clicker. Remember that the use of another student's i►clicker constitutes impersonation and is strictly forbidden.

Each question during the lab quiz will be marked out of two points. One point will be awarded simply for answering the question, and the second point awarded for the correct response. At the end of the term, your points will be converted into a percentage. The mark received for the Lab Quizzes component of the mark breakdown will be the ceiling of your percentage converted, out of 10. For example, if you received 72% for your i►clicker percentage, you will receive 8 for your Lab Quizzes.

Exams

The term tests are scheduled for **Thursday, October 15** and **Thursday, November 12** during the lab time slot. The location will be provided closer to the exam date. The final exam will be scheduled by student records. All exams will consist of both multiple choice and long-answer questions. **Graphing calculators are not permitted during all exams.**

Voluntary Withdrawal

Note that the voluntary withdrawal date is November 18, 2015 (by which time you will have received your marks for the first two term tests).

Academic Dishonesty

It is important that you understand what constitutes academic dishonesty and that you are familiar with the very serious consequences. Links to resources that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation; as well typical penalties) can be found at:

<http://umanitoba.ca/science/undergrad/resources/webdisciplinedocuments.html>.

See also:

http://umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html.