

THE UNIVERSITY OF GUELPH
DEPARTMENT OF MATHEMATICS AND STATISTICS
STAT*2040: Statistics I
Course Outline in Brief
Fall 2015

Instructor: Gary J. Umphrey

Contact: My office is in MacNaughton 551.
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Website: Go to <http://courselink.uoguelph.ca> and follow the links to STAT*2040. We have a conferencing site for discussion of topics related to Stat*2040. Conferencing may be monitored by myself or TAs.

Classes: Rozanski Hall 104, MWF 11:30 a.m. – 12:20 p.m. We have a lecture on Friday December 4 to make up for the holiday on Monday October 12.

Text: *Introductory Statistics: A Problem-Solving Approach*, second edition, by Stephen Kokoska (required). Hard cover, loose-leaf, and electronic versions are available. This edition is new this semester. Two copies of the text are on reserve in the Library. We will cover almost all of the material in chapters 1–13.

<u>Evaluation:</u>	Graded Assignments	15%	or	15%
	Worst term test	20%		15%
	Best term test	30%		25%
	Final exam	35%		45%

If you write both tests and the final exam, I will use the marking scheme which gives you the higher mark. If you miss one test for a validly documented reason (such as illness), the grade breakdown is: graded assignments 15%, test written 25%, final exam 60%.

Test 1 is on Monday, October 5, 2015 at 5:30–6:45 p.m. (75 minutes, 20 MC).
Test 2 is on Monday, November 9, 2015 at 5:30–6:45 p.m. (75 minutes, 20 MC).
The final exam is on Wednesday, December 16, 2015 at 7:00–9:00 p.m (2 hours, 30 MC).
Room assignments will be announced. Check the "Test Archive" on our course website for past tests. Past exam questions will come later in the semester.

You are allowed a crib sheet for the first test: one 8.5 × 14" sheet (legal size) or smaller, double-sided. For the second test you can use two double-sided 8.5 × 14" (or smaller) sheets. You can bring in either three double-sided 8.5 × 14" (legal size) or four double-sided 8.5 × 11" (letter size) sheets for the final exam. You can put anything you want on these sheets.

Graded Assignments: This semester we will have three Graded Assignments; these will be equally weighted and worth 15% of your final grade. The Graded Assignments are a separate course component from the (ungraded) Question Sets. Graded Assignments will be posted at least one week

before the due date on our Courselink website. Late submissions will be subject to a 20% penalty per day and will not be accepted once they are more than two days late unless academic consideration for extenuating circumstances is granted. Instructions for completing and submitting each Graded Assignment will come when it is assigned.

The due dates for the Graded Assignments are:

Graded Assignment #1 – due Monday September 28

Graded Assignment #2 – due Monday November 2

Graded Assignment #3 – due Wednesday November 25

Plagiarism will not be tolerated and if detected will be subject to penalties for academic misconduct. If a Graded Assignment allows a “group work” option and you choose to work in a group make sure that you know where the contributions from each group member is coming from, as each group member is responsible for ensuring that the submitted Graded Assignment does not contain plagiarized material.

Question Sets: Question Sets will be posted as pdfs and will come reasonably regularly. This semester your solutions will not be graded, but full solutions will be posted for you to compare your own solutions against. It is in your best interests to work through the Question Sets on your own before you look at solutions in order to further develop your problem-solving abilities.

Help with R: Some assignments will require using the statistical software program "R". This course no longer has closed labs, but new this semester we will have a drop-in lab available for those seeking some help with R for their statistics assignments in any 2000-level statistics course. TAs will be available starting Monday September 14, the lab is held in SSC 1305 for two hours each weekday, 12:30-2:30 p.m. with one exception (on Sept 24 the lab hours will be 9:30-11:30 a.m.). The labs are held in SSC 1305.

Learning Centre:

The Mathematics and Statistics Learning Centre is located on the 3rd floor of the McLaughlin Library. Assistance for our statistics course will be available 9:30–3:30 on Monday & Wednesday, 10:00–4:00 Tuesday & Thursday, 9:30–2:30 Friday.

SLG'S: A Supported Learning Group is available for this course. More info on the SLG will be provided in class and on the course website.

More on Content:

This course is aimed at students who will apply statistical thinking and methodology in their own disciplines. Therefore, I will be attempting to optimize the course content such that it emphasizes application and conceptual ideas, rather than the rigorous mathematical development of statistical theory.

Many of the examples I use in class will be biological, reflecting not only my own interests and the majority of the students but also, I hope, the interests of all of us as biological entities! However, all components of this course are very broadly applicable to essentially all disciplines.

Some statistical computing is introduced in this course so that you will be able to analyze data in higher-level courses as well as after you leave university. We currently use R software, which is available free and installs on both Windows-based PC's and Macs.

Calculator: A good calculator, preferably with regression and correlation functions, is essential. Bring this to your midterm test and final exam. It's a good idea to have a backup calculator available during tests that you know how to use.