

STA221H1S – The Practice of Statistics II - Winter 2017

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Course Website <http://portal.utoronto.ca>
Github <http://github.com/sta221-winter-2017>

General Information

The course website will be an important source of official news and information. Lecture materials will be placed on Github.

This course is a “continuation of STA220H1 (or similar course), emphasizing major methods of data analysis such as analysis of variance for one factor and multiple factor designs, regression models, categorical and non-parametric methods.”

The course is based on the lectures. The textbook is another source of information and the primary source of practice problems. Here is a tentative guide to the material and the order in which it might be covered, along with a suggested correspondence to selected textbook sections.

Topic	Textbook chapters
Review of important concepts typical of a prerequisite	
Goodness-of-fit testing	23.1 to 23.5
Simple regression	24.1 to 24.5
Logistic regression	24.6
Analysis of designed experiments	25.1 to 25.5
Experiments with more than one factor	26.1 to 26.3
Regression with more than one input variable	27.1 to 28.5
Nonparametric statistics	29.1 to 29.5

Required Text

de Veaux et al. *Stats: data and models* Second Canadian edition.

Evaluation

The grading scheme will be as follows:

- **25%** – **Term Test I** – 1h 30mn minute term test held on 2016-02-13 during class time.
- **25%** – **Term Test II** – 1h 30min term test held on 2016-03-27 during class time.
- **50%** – **Final Exam** – Held during the exam period and will cover the entire course.

Missed Term Work

You should not tests when you are sick. It is far, far better to miss a test with some documentation than it is to write a test in the middle of an illness and ask for special consideration after the fact. Use the Faculty term work petition system for these situations.

Missed term work due to any other reason will require similar, if not more stringent documentation.

The weight of any missed term work will be given proportionately to the other components of the final grade.

Reviewing Marks

It is very important that your work be evaluated fairly. The instructor is committed to ensuring that a fair evaluation takes place, from the setting of test questions, to the time you are given to complete the work, to the physical environment in which the evaluation takes place, and to the marking of the work itself.

Your term work will be returned to you in tutorial. You are allowed to have your marks reviewed if you believe there has been an error made. For this course you must follow the following procedures:

1. Make sure the total mark you received is the sum of the marks awarded per question and that all work was marked. If not, you must notify the TA immediately to have the error corrected.
2. If you disagree with the number of marks awarded return your work to the instructor or your TA along with a **written** description of your complaint. The TA who actually marked that question will provide a **written** response to you.
3. If you cannot resolve your complaint with the TA you may as a last resort submit the work to the instructor. The instructor will remark it *in its entirety* and the mark you receive will be final.
4. The TAs will be instructed not to enter into verbal discussions over marks. Trust me—the will be glad to hear of this policy! Endless arguments over marks by students who seek merely to wear down the TA are time consuming and stressful.

All matters relating to the final exam fall under the jurisdiction of the Faculty itself. Consult its regulations for further details.

Computing

It will not be possible to be successful in this course without the use of a computing environment for the analysis of datasets. The officially supported environment is R. Extensive instructions are on the course website on how to get yourself set up.

If you use some other computing environment, the teaching staff may not be able to assist you if you run into trouble.

Tutorials

Some practice questions will be suggested for you to work on. TAs will select some to work through in tutorial.