

# University of Toronto

## STA 304/1003 H1F: Surveys, Sampling, and Observational Data

Summer 2014

### LECTURES

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Office Hours: Tuesdays 5-6pm, Thursdays 5-6pm.

*(Office hours may change or be increased before tests and project due dates)*

### Lecture Times:

Tuesdays and Thursdays 6:00pm-9:00pm in SS 2135

### Course Books

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#### Textbook

Elementary Survey Sampling by Scheaffer, Mendenhall, Ott (7th edition)

#### Additional References

Sampling: Design and Analysis, by Sharon Lohr (2nd edition)

A Handbook of Statistical Analyses Using R, by Everitt and Hothorn

Computational Statistics An Introduction to R, by Sawitzki

### Website & Portal

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The website for this course is accessible via <http://portal.utoronto.ca>. To access course materials you must log on to Blackboard. The website is regularly updated with readings, practice problems, examples, lecture notes, and marks. Be sure to check the site regularly, it's your responsibility to know what's been posted.

## Mark Calculation

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Term Test	May 29th	30%
Project	June 19th	25%
Final Exam	June - date TBA	45%

## Statistical Computing

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This course uses the statistical package *R*. *R* is free statistical software and it can be downloaded from <http://cran.r-project.org/>. An introduction to *R* is posted on the course website.

### Term Test

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The term test begins at 6:10pm and may take place in a room other than the lecture room (location to be announced). There is no extra time given for late entrants. Note: your test solutions might be photocopied before being returned to you. The final exam covers material from the entire course.

### Missed Test Policy

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If you miss the term test for a valid reason, you must submit documentation to the instructor within one week of the missed test. If you're absent for medical reasons, then submit a U of T medical certificate indicating that that you saw the doctor on the date of the missed test. If you're absent for any other reason, then submit appropriate official documentation. The instructor determines if your absence is legitimate. If your absence is classified as legitimate, the missing score will be substituted with your exam. A makeup test will not be scheduled. If your documentation is not received on time, your test mark will be zero.

### Test Re-Mark Policy

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Requests for test remarking must be made in writing. Submit a note explaining why you believe your solutions deserve more marks and attach it to the marked test. You must submit this at the time the test is returned back to you. Tests that are taken home cannot be resubmitted for remarks. Note: original test solutions may be photocopied before being returned to you.

## Homework Problems

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Homework problems are assigned for each topic and posted on portal. These are for practice only and do not need to be handed in. Data analysis questions using R will also be assigned for practice.

## Late Project Policy

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Project is due on the due date at 6:10pm sharp in lecture and **late submissions are not accepted**. If you cannot make it to the lecture, you can submit the project through a colleague.

## Email Policy

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Email is most appropriate for personal questions. In general, I am not able to answer technical questions about the course material by e-mail. Before you send an e-mail, make sure that you are not asking for information that is already on the course web site, or questions about the course material or assignments that are more appropriately discussed during office hours. If you do not get a response, this may be why. Questions about the course material can also be posted on the discussion board on Blackboard, which will allow other students to join the discussion. This will be monitored by TAs and checked every 2 days. If your question is conceptual and does not require calculations or an elaborate answer, you can ask me by email.

Please email me using your [\\*.utoronto.ca](mailto:*.utoronto.ca) address. You will not get a response if you email from other email addresses. The **subject line should contain your full name, student number, and the course number, and a subject**. Emails will be answered within two business days.

The TAs and instructor are here to help you! Ask questions and let me know if there are any concerns.

## Accessibility Needs

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The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom, or course materials, please contact Accessibility Services as soon as possible: [disability.services@utoronto.ca](mailto:disability.services@utoronto.ca) or <http://studentlife.utoronto.ca/accessibility>.

## Academic Integrity

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You are responsible for knowing the content of the University of Toronto's Code of Behaviour on Academic Matters at: <http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>.

If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me.

## Approximate Lecture Schedule

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Topic	Textbook Chapters	Lecture Dates
Basic Sampling Concepts and Definitions	1 , 2	May 13
Types of Samples, Introduction to R	2	May 15
Questionnaire Design, Good and Bad Surveys	2	May 20
Statistics Review, Probability samples	3	May 20
Simple Random Sampling	4	May 22, 27
Stratified Random Sampling	5	May 27, 29, June 3
<b>TERM TEST</b>	Ch 1-4	May 29
Ratio and Regression Estimation	6	June 3, 5
One-Stage Cluster Sampling	8	June 10
Two-Stage Cluster Sampling	9	June 12
Systematic Sampling	7	June 17
REVIEW		June 19