# STA 304H1 Surveys, Sampling, and Observational Data Course Outline

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#### 1 Lectures

Instructor: Tadeu Ferreira (Tad)

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Office Hours: Wednesdays 3-4pm, Fridays 2-3pm Lecture Times: Wednesdays 1-3pm, Fridays 1-2pm

#### 2 Books

**Textbook:** Elementary Survey Sampling by Scheaffer, Mendenhall, Ott, Gerow (7th edition) **Additional Reference:** Sampling: Design and Analysis, by Sharon Lohr (2nd edition)

## 3 BlackBoard

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, its your responsibility to know whats been posted.

# 4 Evaluation

Programmable calculators are not permitted on test and exam. A one-sided 8-1/2"x 11" aid sheet, hand-written, is allowed on the test (two-sided on final exam). You must bring your student identification to term tests as well as the final exam. The day and time for the final exam will be announced later.

Assignments	Date TBA	20%
Term Test	Feb 25th	30%
Final Exam	Date TBA	50%

## 5 Missed Midterm Test

There are no make-up tests. Should you miss the term test due to illness, you must submit to your lecturer, within one week, completed by yourself and your doctor, the U of T Student Medical Certificate, obtainable from your college registrar, the Office of the Faculty Registrar (SS1006), the Stats Dept. office, or the Koffler health service. The tests weight will then be shifted to the final exam. If proper documentation is not received, your test mark will be zero.

# 6 Test Re-Mark Policy

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.

## 7 Statistics Aid Centre

Your primary source of help with difficulties is your TA at the Statistics Aid Centre, Room 1091, in Sidney Smith Hall.

## 8 Academic Offenses

Academic offenses are unacceptable, and harm everyone. Offenders are caught, and sanctions can be severe - zero in the course with annotation on the transcript for several years; suspension for a year; even expulsion. Various measures, announced and unannounced, will be taken throughout the year to reduce their incidence and to insure successful prosecution when they do occur (e.g. photocopying of students' tests, multiple versions of multiple choice exams). In addition, please note the following: (i) Oversights in marking on a test paper (e.g. addition error, overlooked work) must be brought to the attention of the instructor immediately - during the class when test papers are returned; (ii) Regrading requests will only be considered for term tests which are written in ink.

#### 9 Tentative Lecture Outline

Торіс	Textbook Chapters
Basic Sampling Concepts and Definitions	1,2
Types of Samples, Introduction to R	2
Questionnaire Design, Good and Bad Surveys	2
Statistics Review, Probability samples	3
Simple Random Sampling	4
Stratified Random Sampling	5
TERM TEST	chapters 1-5
Ratio and Regression Estimation	6
One-Stage Cluster Sampling	8
Two-Stage Cluster Sampling	9
Systematic Sampling	7
Estimating the Population Size	10
REVIEW	
FINAL EXAM	entire course