

# STA 302 / 1001 – REGRESSION ANALYSIS

Fall 2003

**Lectures:** Mondays 1:10–2:00 p.m. in SS 2118  
Wednesdays 1:10–3:00 p.m. in SS 2118  
No lecture on Monday, October 13 (Thanksgiving)  
**Instructor:** A. Gibbs  
**E-mail:** alison.gibbs@utstat.toronto.edu  
**Web page:** [www.utstat.toronto.edu/alisong/Teaching/Fall03/sta302.html](http://www.utstat.toronto.edu/alisong/Teaching/Fall03/sta302.html)  
**Office:** SS 3103  
**Phone:** (416) 946-7589  
**Office hours:** Mondays 2:00–3:00 p.m. and by appointment  
More office hours will be scheduled before tests and assignment due dates.

This course covers some of the theory and methodology of regression, that is, how to fit a curve to data points. Topics to be covered include: least squares estimation, residual analysis, inference of regression parameters under assumptions of normality of errors, remedial procedures for violation of assumptions, and model selection. This course will also be an opportunity to begin to develop skills in data analysis for which the SAS software program will be taught.

## Textbook

The textbook is *Applied Linear Regression Models*, 3rd edition by Neter, Kutner, Nachtsheim and Wasserman. We will be covering the most of chapters 1 through 8 and 11 and selected material from chapters 9, 10 and 14, as time permits.

## Evaluation

The grading scheme is the following:

	Weight	Date (to be confirmed)	Time
Test 1	20%	Monday, October 6	1:10-2:00 p.m.
Test 2	20%	Monday, November 10	1:10-2:00 p.m.
Assignment 1	10%	Wednesday, October 22	due at beginning of lecture
Assignment 2	10%	Wednesday, November 26	due at beginning of lecture
Exam	40%	scheduled by Faculty	

Tests will be written in rooms other than the lecture room (locations to be announced). Practice problems will be assigned weekly. The practice problems are to help you prepare for the tests and exam and are not to be handed in. The assignments will involve small data analysis projects for which you will use SAS. You will not need to know SAS syntax on the tests and exam, but you will need to interpret output from SAS.

If a test is missed for a valid reason, you must submit appropriate documentation to the Course Instructor (Alison Gibbs) or the Departmental Office (SS 6018) within one week of the test. Print on it your name, student number, course number, and date. If

documentation is not received in time, your test mark will be zero. If a test is missed for a valid reason, its weight will be shifted equally to the other test and to the final exam. 10% of the total marks for an assignment will be deducted for each day it is late.

### **Computing**

SAS is available on the CQUEST system. CQUEST computer labs are available in Sidney Smith, Ramsey Wright, and the Earth Sciences Building. To get an account, go to [www.cquest.utoronto.ca](http://www.cquest.utoronto.ca). There you will also find information about using CQUEST. Students enrolled in STA 1001 should see me to get an account. I am assuming that students have never used SAS before.