

Department of Economics
University of Toronto at Mississauga

ECO 220Y5

Quantitative Methods in Economics
Fall 2009

Instructor: G. J. Anderson

Office Hours (KN 238): Monday and Wednesday 5 to 6 pm

Office (UTM): 905-828-3904

Office (STG): 416-978-4620

Home: 519-853-2427

Email: anderson@chass.utoronto.ca

Course Description:

An introduction to the use of statistical analysis, including such topics as elementary probability theory, sampling distributions, tests of hypotheses, estimation, analysis of variance and regression analysis. Emphasis is placed on applications in economics and business problems.

Prerequisite: ECO100Y (63%/CGPA 2.50); MAT132Y5/133Y5/134Y5/135Y5, 138Y5

Exclusion: ECO227Y5; STA220H5, 221H5, 250H1, 255H1, 248H5/258H5, 257H5, 261H5; PSY201H5, 202H5; SOC300Y5; BIO360H5, 361H5

Prerequisites are strictly checked and enforced and must be completed before taking this course. By taking this course you acknowledge that you will be removed from the course at any time if you do not meet all requirements set by the Department of Economics.

Course Materials:

There is no recommended textbook for this course. Course notes and exercises are provided on *Blackboard*. You don't need to create a new login for Blackboard; it already knows who you are. You just need your UTORid and password. If you're confused about your UTORid or don't remember your password, go to: <https://www.utorid.utoronto.ca/>

Teaching Assistant:

Tutorials meet every Monday, Tuesday and Wednesday, except during the week of a term test. The TA (T.B.A.) will provide solutions to the problem sets, which can be found on *Blackboard*. It is strongly recommended that you complete these problem sets before attending the tutorials. Please visit website for TA office hours and contact information.

Course Content:

This course consists of four segments of roughly equal length.

Segment	Content Description
1	Data summary, probability theory, axioms of probability, event probabilities, conditional, marginal and independence concepts, Bayes' rule, random variables and their distributions, expected values, variances and co-variances.
2	Sampling theory, distribution of the sample mean, properties of estimators, hypothesis testing and confidence intervals for population means and variances.
3	Comparisons of two populations, Goodness of Fit tests, Independence tests, Analysis of Variance.
4	Regression: Theory and Practice

Evaluation and Course Policies:

There are 4 term tests of equal weight of 15% and a final exam worth 40% in this course. Test dates are as follow:

Term Test One: Wednesday, October 21st 2009
Term Test Two: Monday, November 30th 2009
Term Test Three: Wednesday, February 10th 2010
Term Test Four: Monday, March 22nd 2010

For term tests, students are allowed to have aids include the following: a one-sided 8 ½ x 11 inch hand-written aid sheet, non-graphing, non-programmable calculators. Students should also have their Student ID card on their examination desk. Possession of dictionaries, computers, cellular phones, pagers, PDA's or any other electronic items is allowed.

Request for re-grading must be submitted to the Professor in office hours within one week from the date the test is returned to the class. A re-grade request must formally justify in writing where additional consideration is warranted by reference to the lecture notes. Re-evaluation involves the entire test and may raise or lower the original mark. Please note that any term tests written with pencils or have been corrected with White Out will be accepted for re-grades.

Students missing a term test for a legitimate reason should notify the department within one week of the term test. In the case of illness, only the *Student Medical Certificate* or *UTM Health Services Form* will be accepted. There will be a makeup test in the last week of the course for these cases. Students can only miss one test for any reason; additional missed tests will be assigned a value of zero. There will be no re-weighting of other graded work in lieu of a missed term test.

The Governing Council of the University of Toronto has approved a *Code of Behaviour* that sets out clearly the standard of conduct in academic matters expected of members of the University community. Students should note that copying, plagiarizing, or other forms of academic misconduct will not be tolerated. Any student caught engaging in such activities will be subject to academic discipline ranging from a mark of zero on the assignment, test or examination to dismissal from the university as outlined in the academic handbook. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties. The *Code of Student Conduct* defines non-academic offenses and establishes a standard for behaviour in these matters. Vexatious or threatening behaviour, crimes against property, unauthorized entry, false accusation or aiding in the commission of these offenses are matters that are punishable under the code. Disruption of university organized events, i.e. disruption of lectures, is expressly prohibited by the code.