

Economics 224-001/002
Empirical Economics
Fall 2008
Lectures: CK 187, Monday and Wednesday 2:30-3:45

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	Office: CL237/CB101.1	CL237

Office Hours: CL237, Monday and Wednesday 3:45 – 4:30 or by appointment or by drop-in

Class Webpage: Maintained on UR Courses (<http://urcourses.uregina.ca>)

Hand in assignments at Department of Economics Office (CL 241)

Note: Please ensure you read the Faculty of Arts Announcements at the end of this syllabus.

Calendar Entry

This is a project based course in which student will collect and analyse economic data using spreadsheets and basic statistical techniques. Prerequisite: 15 Credit Hours.

Course Description

Economics 224 is not a statistics course, although we will learn key statistical concepts as we go. Our ultimate goal is for you to be able to use data to improve your understanding of economics. We will explore the following themes in this course (which will be the individual pieces of what you would need to do on an empirical project):

- How to find, evaluate the quality of, describe and present economic data.
- How to calculate probabilities and understand probability distributions.
- How to relate sample data to the underlying population.
- How to analyze sample data: testing hypotheses about economic variables, including relationships between variables and between different populations (inference).
- How to use regression analysis to examine the ways economic variables can affect each other in complex manners. (This is the first step to econometric analysis, the heart of empirical economics, which is analysed in depth in ECON 324.)
- How to understand data when it is presented to you (looking for exaggerations and miscommunication), and how to properly present data and your analysis of data.
- How to use Excel to aid you in doing the above tasks.

We will pose many questions in this course, and outline *how* to approach the answers. The emphasis will not be so much on answering all possible questions, but in learning some tools that can be applied to answer some of these questions.

Textbook

The course textbook is *Essentials of Statistics for Business and Economics*, 5th Edition, by David Anderson, Dennis Sweeney and Thomas Williams, Thomson South-Western Publishing, 2009. You may also use the 4th edition of this textbook, but please ensure that your copy has a copy of the Data Files CD.

Expectations

- All listed readings are required. It is expected that you have read/skimmed the relevant material before class, and we expect you to reread it again after class. We expect you to know the material in the textbook that is on the reading list, even if we do not cover every thing explicitly.
- This is an interactive class – you will get much more out of it if you work at it. This includes coming to class and participating in discussions and interactive exercises. You also need to work on the assignments yourself, although we encourage you to work in groups as this can be a superior learning method (even for the best student in the class). It is also beneficial to work through extra exercises from the text. If necessary, you can consult us for the answers to these questions.
- We expect you to come to class, although we will not take attendance. We will be covering a great deal of material in class that is not in the textbook.
- It is expected that you will pay attention to the webpage, where we may place announcements between classes (such as hints/clarifications on assignment questions).
- We expect you to talk to one of us or the TA when you are in trouble. Leaving this to the last minute will make it difficult for you to be helped in a timely manner.
- Students may work in groups on the assignments, but all assignments and exams are to be individually completed. Academic misconduct will be reported as appropriate.

Course Evaluation

Six assignments, Due Dates: Sept. 19, Oct. 3, Oct. 17, Nov. 7, Nov. 21, Dec. 5	35%
Midterm Exam, October 22, in class	25%
Final Exam, as scheduled by the Registrar (Friday Dec. 12, 2-5 pm)	40%

Assignments

- 1) Due by 12:00 p.m. (noon) on the day in question, in the Department of Economics office (CL241). They may be handed in late one University working day with a 20% penalty, but after that they will be assigned a grade of 0.
- 2) If you have a documented, acceptable medical/personal reason for missing an assignment, you may shift the weight of the assignment to the midterm (for the first three) or to the final (for the last three).
- 3) Assignments answered in pencil or with the use of whiteout will not be remarked.
- 4) You may work together on assignments (indeed, we encourage this). However, we expect you to work, not just copy from someone else. We expect you to write up the assignment on your own. Copying will result in you being reported to the Associate Dean of Arts for academic misconduct.
- 5) You will need access to a computer that has EXCEL 2002 or later. Various computer labs on campus will have this if you do not have it yourself. Please note that many employers expect you to know how to use EXCEL!
- 6) There are several computer labs on campus. A directory to public computer labs maintained by Computing Services is available at <http://www.uregina.ca/compserv/ITSC/labs.shtml>.

Midterm

- 1) Missing the midterm is not acceptable, except for a documented medical or compassionate reason. If a valid excuse is accepted, the weight will be placed on the final exam. Failure to follow these rules will result in an automatic zero on the midterm.
- 2) The midterm is 75 minutes long. You may bring a copy of your textbook, one study sheet (with whatever you wish on it), and a calculator. No other electronic devices are permitted.
- 3) Midterms or assignments answered in pencil or with the use of whiteout will not be remarked, should you wish to appeal your grade.

Final Exam

- 1) The final will be 3 hours long, and will cover the entire course. You may bring a copy of your textbook, **two** study sheets, and a calculator. No other electronic devices are permitted.
- 2) If you wish to be excused from your final exam, you must seek a deferred examination from your Faculty or College.

If your grade in the course is close to a key cut-off point (like 50% or 65% or 80%) and there is some good reason for generosity (for example, good contributions to classroom discussion, or a significant increase on your final exam grade compared to your midterm), your official grade may be increased by the necessary percentage points. In addition, if one or more of the course components proved more difficult than anticipated, I usually compensate by adding a few percentage points to everyone's final grade.

Class Website

We will maintain a class website on UR Courses at <http://urcourses.uregina.ca/>. It is expected that students consult the website at regular intervals, as we will use it for announcements between class meetings.

Tentative Outline and Reading List

1. Introduction: The Role of Data and Empirical Analysis in Economics – King Lecture Notes

An introduction to the course, including some background on the role of empirical analysis in understanding economic models of the economy.

2. Data and Statistics – King ASW, Chapter 1 Lecture Notes and Class Website

What is data, what and where are the reliable and usable economic data sources, as well as a look ahead at what we will be doing with this data.

3. Descriptive Statistics: Tabular, Graphical and Numerical – King
ASW, Chapters 2 and 3

How to summarize and describe data and the relationships between variables, in a clear and understandable manner.

4. Probability and Probability Distributions – Gingrich
ASW Chapter 4 (skip section 4.5), Chapter 5 (skip sections 5.5, 5.6), Chapter 6 (skip section 6.4)

Learning about probability, and how economic variables such as wages or prices are random variables that can come from different probability distributions.

5. Sampling, Point Estimation and Confidence Intervals – Gingrich
ASW Chapter 7, Chapter 8

The difference between samples and populations, and how we can estimate the mean and standard deviation of the population from our sample data.

6. Hypothesis Testing and the Comparison of 2 or More Populations – King
ASW Chapter 9 and 10 [Chapter 11 will be briefly discussed in lectures, you do not need to read it]

The first step in testing economic models and economic hypotheses: using our data to test economic hypotheses such as whether average salaries have increased compared to last year or whether women get paid more than men.

7. Simple Linear Regression: The Relationships Between 2 Variables – Gingrich
ASW (Chapter 12)

Testing whether (and by how much) an explanatory variable (such as crude oil price) affects a dependent variable (such as the price of gasoline).

8. Multiple Regression – Relationships between Several Variables – King
ASW, Chapter 13

Expanding simple linear regression to the full case of multiple regression, with more than one explanatory variable. For example, how your salary is affected by your level of education, your age, your type of degree, your sex, etc.

9. Statistical Communication: “Lies, Damned Lies, and Statistics” – King and Gingrich
Lecture Notes

Once you have constructed your statistics, how to communicate them in an understandable manner without miscommunication (either by confusing language or inappropriate choice of statistics). We will also study how to recognize such miscommunication, whether unintentional or intentional “lying”.

Announcements for Students in Faculty of Arts Courses, Fall 2008

Academic Regulations

It is **your** responsibility to understand and follow the relevant academic regulations outlined in the Undergraduate Calendar. The most important of these are summarized in Section 5.1 of the Calendar: "Responsibilities of Students". I strongly urge you to read this section at your earliest convenience. Every year some of our students lose money or academic credit because they overlooked one or more of the university's rules; don't let this happen to you.

Procedures and Dates for Dropping Courses

If you want to be withdrawn from a class without academic penalty and/or have some part of your fees refunded, you must make a formal request to this effect before the relevant deadline. This will not be done on your behalf simply because you stop attending classes. Students who are no longer attending classes but have not formally withdrawn **are still considered to be registered, will not have their fees refunded, and will be assigned a failing grade of NP for the course**. Please consult section 1.2.1 of the Undergraduate Calendar for the various deadlines for dropping courses and obtaining full or partial fee refunds.

Procedures for Requesting Deferrals of Final Exams or Term Work

If for reasons beyond your control (such as illness, accident, or a death in the family) you become unable to complete your term work or final exams, please contact the Student Services Office of your Faculty or College **as soon as possible** for advice about getting your course work deferred. The procedures for requesting deferrals are outlined in section 5.7.4 of the Undergraduate Calendar.

Academic Misconduct

It is **your** responsibility to know all of the formal definitions of plagiarism, cheating and other forms of Academic Misconduct, as provided in section 5.13.2 of the Undergraduate Calendar. You will not be able to excuse academic misconduct by arguing that you didn't know it was misconduct. If you are unsure whether or not something constitutes academic misconduct, **check with your instructor beforehand**. The Faculty of Arts will vigorously pursue all suspected cases of academic misconduct; the penalties for it can be severe.

University Email Accounts

You should check your University of Regina email account regularly because the University or your instructors will often try to contact you at that address. You can easily have your University email forwarded to a commercial account like Hotmail by using the form available at item 3 on the "Top ten items of interest" listed at <http://www.uregina.ca/comperv/>. If you do so, however, be sure to check your junk folder regularly for the first few weeks, since commercial email accounts often classify university-related emails as junk.

Special Needs Students

Any special-needs students requiring accommodations must first contact the Coordinator of the Disability Resource Office (585-4631) and then arrange to meet with the course instructor. The rights and responsibilities of special-needs students in Faculty of Arts courses are outlined in a document entitled "Faculty of Arts Special Needs Procedures", which is available from the Faculty of Arts Student Services Office in CL 411 or via the web at www.uregina.ca/arts/.

University Harassment and Discrimination Prevention Policy

All members of the University community are entitled to a professional working and learning environment, free of harassment and discrimination. See section 8.4.6 of the Undergraduate Calendar for more details.

I wish you an enjoyable and successful semester.

Richard Kleer, Associate Dean (Undergraduate), Faculty of Arts