

SYLLABUS
Spring 2006

ECO 6415
Decisions with Data

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1. OFFICE HOURS

Tuesday and Thursday 9:30-12:00; other times by appointment. Walk-ins are acceptable.

2. REQUIRED TEXTBOOKS AND OTHER READINGS

- Keller, Gerald, *Statistics for Management and Economics*, 7th. Ed. (Albany, NY: Duxbury, Thomson Learning, 2004). This is the main textbook in this course.
- Anagnoson and DeLeon, *StataQuest 4*, 1997. ISBN 0534521371
- Wall Street Journal (WSJ).

Please note: CCB is a *Wall Street Journal* Partner School. Each student enrolling in one or more Coggin College of Business (CCB) courses numbered 3000 or higher is assessed a \$15 fee during each fall and spring semester. The fee is just \$15, regardless of how many CCB courses the student takes. The fee is assessed at the same time and in the same manner as all other UNF fees, and the student pays this fee when he/she pays his other tuition and fees. In return, each student is able to pick up a copy of *The Wall Street Journal* (WSJ) from locations within the College. Moreover, each student will receive access to all of the WSJ's on-line editions (e.g., European, Asian), as well as the *WSJ Employment Edition* and *Barron's*. Access to these publications is free during summer terms for students enrolled in these courses. Students who already have personal subscriptions can have the WSJ refund those dues. For information on that process, as well as more about CCB's partnership with the WSJ, please visit <http://www.unf.edu/ccb/wsj.htm>.

3. PREREQUISITES

Graduate Standing in the Coggin College of Business.

Since we will be using computers, students are expected to have a working knowledge of popular microcomputers. Students are also expected to have an understanding of basic business vocabulary and a good knowledge of algebra.

4. COURSE OBJECTIVE AND APPROACH

The main objective of this course is to provide the skills that will enable the student to successfully make business decisions and analyses using data. Upon successful completion of this course, students should be able to:

- Understand tests based on Chi-square distribution and how to apply them
- Use simple and multiple regression in a variety of contexts
- Perform inferences and testing based on regression results
- Do time series analysis and forecasting
- Understand the applicability, limitations, and appropriateness of the statistical/econometric tools for various kinds of business cases.

I will use lectures as well as applications and discussions. In addition, this course makes extensive use of computer applications. Students are encouraged and expected to participate in class discussions. Concepts and techniques learned in class are also applied in the research projects and other assignments.

5. GRADING

There will be three (3) exams, a 3-to-5 person research project, class participation/attendance, and several homework assignments. Exams I and II are in class exams. Exam III is a take-home exam. Exams carry equal weight (20 % each). The research project contributes 25% to the final grade. Participation, homeworks (other assignments) and attendance contribute 15%. Obviously, poor attendance lowers the participation grade. Frequent tardiness will be treated as poor attendance. The participation score for a missed class is zero.

Letter grades will be assigned as follows:

95 –100	A	76 – 79	C ⁺
90 – 94	A ⁻	70 – 75	C
86 –89	B ⁺	60 – 69	D
85	B	59 and below	F
80 – 84	B ⁻		

6. PEER-LEARNING GROUPS

Students must form peer-learning groups (PLGs). Each PLG will consist of a minimum of 3 and a maximum of 5 students. PLG members work together on homework assignments and projects in this course throughout the semester. PLG members must designate a group leader who will be responsible for communicating with me on PLG-related work and issues. This will enhance efficiency and communication in the course. Needless to say that students are also welcome to talk to me individually. Students are encouraged to start forming PLGs during the first week of classes.

By the January 24, PLG leaders must e-mail me the list of members in their respective groups, each member's name and e-mail address, each member's educational background (business, engineering, health, accounting, etc.) and current professional activity (type of industry). In previous semesters, most research projects conducted by students involved data related to their professional activity. In addition to the obvious benefits to the student who brings the data and uses the project to tackle important issues at his/her workplace, teaming up with students with full time professional activities provides an excellent opportunity for other PLG members to benefit from the experience by studying these issues and learning about industries and activities in Northeast Florida, in general, and Jacksonville in particular.

7. ASSIGNMENTS

Students are expected and encouraged to complete assigned readings prior to class. The take-home exam, homeworks and projects are to be turned in by the due date. There will be no make-up for missed exams, unless the student has a valid and verifiable excuse. Unless specified otherwise, all assignments associated with this course must be handed in as hard copies. E-mails, faxes, or other electronic formats will not be accepted.

8. GROUP PROJECT

Students will perform multiple regression estimations using data from their professional activity (if working) or from other sources. Students using other sources are strongly encouraged to use financial data from the Wall Street Journal. More details will be provided after we cover regression analysis.

Groups must submit a proposal identifying the topic and the variables to be included in the project, and the source of data by March 16.

For cross-sectional data, use at least 4 independent variables and at least 40 data points (observations). For example, if you start with 5 independent variables you should have at least 50 observations; if you start with 6 independent variables you should have at least 60 observations; and so on. For time-series data, use at least 50 observations and 2 independent variables.

The project has two parts: (1) A 20-25 minute class presentation (everyone in the group must be able to present the work). (2) A written report. The paper must be typed and presented in no less than 4 and no more than 8 double-spaced pages (excluding references, tables and appendices), 12PT font, and one-inch margins (top, bottom, left and right).

The following are requirements for the completion of a good research project for this course.

- a. Explain why you have selected the independent (explanatory) variables.
- b. Correct for any econometric problems (multicollinearity, heteroscedasticity, etc.) and show how you performed the correction.
- c. Discuss the overall significance of the model.
- d. Discuss and analyze the impact of changes in each of the explanatory (independent) variables on the dependent variable.
- e. Make recommendations with regard to the findings and implications of your model.
- f. Perform a forecast for the dependent variable. If you are working with time-series data forecast at least two (2) periods in the future. If you are working with cross-sectional data perform a forecast at the means of the explanatory variables

9. TIME SERIES ANALYSIS AND FORECAST – GROUP ASSIGNMENT

PLGs must collect daily data from the Wall Street Journal on the value in US Dollar of a foreign currency from the following list of countries (or regions):

Euro Zone, Great Britain, Japan, Australia, Canada, Switzerland, New Zealand, Norway, Sweden, Russia, South African, Egypt, Mexico, Chile, Peru, Argentina, Brazil, Singapore, and South Korea.

Data must be for the period January 16- April 14, 2006. This assignment contributes one third of the participation/homeworks/attendance grade (or 5% of the overall grade for this course).

10. ORAL COMMUNICATION REQUIREMENTS

Oral communication skills will be demonstrated through presentation of the research project and class participation.

11. INTERNATIONAL COVERAGE

As markets become more global, understanding how business is conducted in other countries becomes increasingly important. We will use many examples and problems that deal with global issues. I will also use international data from my empirical research on some macroeconomic variables, as well as international data from other sources, to illustrate the behavior of certain time series in developed and developing countries.

12. WRITTEN COMMUNICATION

Written communication skills will be demonstrated through interpretation of the results in the take-home exam, and in the research reports.

13. CLASSROOM PROTOCOL

Disturbance of **any kind** is not acceptable.

14. ACADEMIC INTEGRITY

"UNF places high priority on and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should any instructor find evidence of cheating, plagiarism, or other inappropriate assistance in work presented by a student, the instructor should inform the student of the action to be taken" (UNF current Catalog).

At minimum, the action I will take for any incidence of violation of academic integrity will be an F (failing grade) in the course and dismissal of the student committing the violation from the class.

15. STUDENTS WITH DISABILITIES

If you have a disability as defined by the Americans with Disabilities Act (ADA), which requires a classroom accommodation or auxiliary aid(s), you should inform me of your needs during the first week of class so that I may take appropriate action. You should also immediately inform the Disability Resource Center of your disability and the assistance you need. The Disability Resource Center is located in Building 10, Room 1201 [Tel: 904- 620-2769 (Voice), 904- 620-2969 (TDD/TTY)].

CLASS SCHEDULE

Date	Topics	Textbook Assignment (required reading)
Weeks 1 and 2	Introduction and review	Chapters 4, 7 and 8 We will review some sections from these chapters in class
Week 3	The Chi-Square Distribution -Goodness-of-fit tests	Chapter 16 and handouts
Week 4	The Chi-Square Distribution -Tests of independence and homogeneity	Chapter 16 and handouts
Week 5	Chi-squared Tests (cont.)	Chapter 16 and handouts
Week 6	Review of main topics Exam I (in class) on February 9 Linear correlation and simple regression	Chapter 17
Weeks 7-9	Linear correlation and simple regression (cont.) Multiple Regression February 23: Instructor is out of town; students work on library assignment	Chapter 17 Chapter 18
Week 10	Exam II (in class) on March 16 Multiple Regression - Inferences and Testing	Chapters 18 and 19 Handouts
Weeks 11	Spring Break (March 20-24)	
Week 12	Multiple Regression - Inferences and Testing (cont.) Multicollinearity, Autocorrelation, and Heteroscedasticity Model Building.	Chapters 18 and 19 Handouts
Week 13	Time Series Forecasting	Chapter 20 Handouts
Week 14	Summary of the main topics and more applications Exam III (Take-home) distributed on April 11	
Week 15	Exam III collected on April 18 Research Projects Due Group Presentations (Part I) Course evaluation No class on April 20 – To make up for the take-home exam time.	
Week 16	Group assignment on time series analysis is due Group Presentations (Part II). Presentations will be during the time scheduled for final examination. Final exam schedule is available online at: http://www.unf.edu/registrar/finals.html	