1.0 Course Overview

This course is the capstone class for students enrolled in the B.S. in Economics. Students will be asked to combine the analytical and problem-solving skills they learned in their economic-theory classes with the data-analysis and computer skills they learned in their math, statistics and econometrics classes.

This course has the following five main goals:

First, students will study the make-up of the U.S. economy on a concrete level, sector by sector. For each sector, students will research the data sets available here at UNH and online. To demonstrate their knowledge of the U.S. economy and the data, students will be divided into teams and each team will be assigned sectors on which they will write a report. These reports will summarize data for the assigned sectors and provide discussions of all data used, including where the data are generated and how the data are constructed. (See below for more detail on these reports.)

Second, students will further improve their data-analysis skills through the study of econometrics. The main topics to be covered are time-series and simultaneous equations models. As part of this segment of the class, students will be asked to learn a popular statistical package called PcGive.

Third, students will think seriously about economic problems and issues. To this end, teams of students will prepare reports on what, in their view, is one of the major issues in economics currently confronting our society. (See below for more detail about these reports.) Moreover, each student, separately, will write a research paper on a questions in economics that combines their knowledge of economic theory with their improved data-analysis skills. (See below for more detail about these papers.) All papers will make use of data and data analysis to provide motivation and empirical support for arguments and conclusions.
Fourth, students will improve their writing skills not only by completing the writing projects assigned in this class, but by having their writing critiqued by other students and by me at various stages of development.

Five, students will improve their presentation skills by presenting in class their reports and papers. Student presentations must be done using PowerPoint.

2.0 Reading Materials

Required:


A one-semester subscription to the *Wall Street Journal*.

3.0 Prerequisites

Intermediate Macroeconomics (ECON 611), Intermediate Microeconomics (ECON 605), Calculus for Social Sciences (MATH 424A or equivalent), Introduction to Econometrics (ECON 726) and curiosity.

4.0 Writing Assignments

**Project 1: The Make-Up of the U.S. Economy**

The 2008 U.S. presidential race seems far away, but Ian Elmslie, a virtual unknown, has decided to begin working towards running as an independent. Ian has an impressive background in the military, business and the public sector. One of his main problems, however, is his limited background in economics and his poor knowledge of the U.S. economy (Ian was an English major in college and did not take one economics class).

Your job is to help Ian Elmslie acquire the knowledge he needs of the U.S. economy so that he can run a good campaign. Students will be divided into teams and each team will be assigned a sector of the U.S. economy to research (see below). Each team will write a report characterizing their assigned sector in a way that is easily understood by a non-economist. To carry out their projects, students are responsible for retrieving their own data and deciding on how best to summarize and report these data. In addition to reporting on one sector of the U.S. economy, all reports will provide a discussion of the national income and product accounts. This topic of national income accounting will be covered in class and will
give students a good idea of the level of analysis the Elmslie campaign needs. Reports will provide a discussion of all data used, including where the data are generated and how the data are constructed. For more detail about the sectors of the U.S. economy to be researched and the content that the Elmslie campaign is looking for, see the class handout.

The sectors of the U.S. Economy that will be studied are:

1. Investment and Capital Expenditures
2. Population, Employment and the Labor Market
3. Industry and Commerce
4. Government
5. Private Consumption and Saving
6. International

**Project 2: Major Issues in Economics**

The purpose of this project is to get students thinking seriously about major issues in economics. Students will be divided into the same teams used for project 1 and each team will write a report on one major issue in economics that is current and that they believe is important. To provide evidence that the chosen issue is current and important, each team will refer to more than one article from the *Wall Street Journal, New York Times* and/or the *Economist* published since September 2004. Moreover, students should use data and summary statistics in discussing the nature and importance of their chosen issue.

**Project 3: Empirical Research Paper on an Economic Question**

Students will write an empirical research paper on a question in economics that combines their knowledge of economic theory with their improved data-analysis skills. Papers will make use of data and data analysis to provide motivation and empirical support for arguments and conclusions. In motivating their economic question, students will also include a section on the findings and methodologies of some studies published in the economics literature. In carrying out their data analysis, students are responsible for collecting their own data and they should use some of the time series techniques learned in class. See the class handout for more detail on this project.

This is a writing-intensive course. Students will be graded on the quality and content of all of their writing. Good writing is a product of much thought and work prior to writing a final draft. Most good non-fiction writing requires multiple outlines and preliminary drafts. Consequently, students will be asked to follow the following eight-stage writing process for projects 2 and 3.

**An Eight-Stage Writing Process**
1. Summary statement outlining the main purpose and motivation of the piece of writing. This statement should also spell out the major messages that the writers intend to make in their writing. Summary statements may include some graphs and/or tables and should not be more than two pages (excluding any graphs and tables) in length.

2) Critique of summary statement (to be carried out by students and me). Critiques will include responses to a number of constructive questions. See the class handout for more detail.

3) Preliminary outline of the paper. This outline will include a revised summary statement. It will also show how the paper will be organized into sections and, if needed, subsections. The preliminary outline will also spell out the purpose of each section and sketch the logical arguments and methods that will be used in achieving this purpose.

4) Critique of preliminary outline (to be carried out by students and me). Critiques will include responses to a number of constructive questions. See the class handout for more detail.

5) Final outline of paper.

6) First draft of paper.

7) Critique of first draft (to be carried out by students and me). Critiques will include responses to a number of constructive questions. See the class handout for more detail.

8) Final draft of paper.

5.0 Presentations

Students will present their finished projects 1 and 2 in class. All members of each team will participate in the presentations. All presentations will use PowerPoint. Presentations will be graded on: 1) their clarity of purpose (it should be clear to the listeners as to why they are sitting in the class); 2) the clarity of their main messages and conclusions; 3) the ease with which slides can be read and understood; 4) the level of interest generated; and 5) the degree to which stated objectives are achieved.

6.0 Homework

Homework assignments will be handed out almost every week. Students will usually have one
week to complete these assignments.

7.0 Exams

There will be two examinations. One mid-term and one final examination. The mid-term will test you on national income accounting, your knowledge of economic data and some introductory time series topics. The final exam will cover the remaining econometrics topics studied in class, as well as on the information learned from the 1st and 2nd class projects.

8.0 Grading

All students must complete all three projects and both examinations to pass this class. Breakdown of grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Project 1</td>
<td>20%</td>
</tr>
<tr>
<td>Project 2</td>
<td>5%</td>
</tr>
<tr>
<td>Project 3</td>
<td>25%</td>
</tr>
<tr>
<td>Mid-term</td>
<td>15%</td>
</tr>
<tr>
<td>Final</td>
<td>25%</td>
</tr>
</tbody>
</table>

Project 1 will be graded on the written product (70%) and on the presentation (30%). Project 2 will be graded on the written product (60%), presentation (30%) and on the quality and timeliness of critiques of other teams (10%). Project 3 will be graded on the written product (80%) and on the quality and timeliness of critiques of other teams (20%).

9.0 Food for Thought

The following three unproven propositions are offered for rumination:

**Proposition 1:** Of the people borne into this world, some will develop exceptional brilliance while others will remain incredibly inept. But the overwhelming majority are, at first, remarkably similar in their intellectual capacity as generally understood.

**Proposition 2:** Of the overwhelming majority, the difference between those who are "smart" and those who are "slow" stems from the former training their minds to think (whether creatively or analytically, whether deliberately or accidentally); whereas the latter put forth relatively little effort in this regard.

**Proposition 3:** The greatest inefficiency in our world economy has been and continues to be the billions of minds that enter and leave this world untrained.
9.0 Outline and Sequencing of Topics and Assignments

Weeks 1-3

Assignments
Summary statement for project 1 due Monday, January 31st
Summary statement for project 2 due Wednesday, February 2nd
Critique of summary statement for project 2 due Monday, February 7th
Preliminary outline for project 1 due Monday, February 7th

Lectures
Macroeconomic Issues (1 lecture)
National Income and Product Accounts (NIPA) (3 lectures)
Measuring Inflation and Real Magnitudes (2 lectures)

Week 4

Assignments
Preliminary outline for project 2 due Wednesday, February 9th
Critique of preliminary outline due Monday, February 14th

Lectures
Statistics Review (2 lectures)

Week 5

Assignments
Final draft of outline for project 2 due Wednesday, February 16th
First draft of project 2 due Monday, February 21st

Lectures
Chapter 1, NDEP: Traditional Methodology in Retrospect (1 lecture)
Chapter 2, NDEP: Data Mining (1 lecture)

Week 6

Assignments
Critiques of first draft Wednesday, February 23rd
Final draft of project 2 due Monday, February 28th
Lectures
Chapter 3, NDEP: Origins of a Modern Methodology (2 lectures)

Week 7

Assignments
Presentations of project 2, Wednesday, March 2nd
Mid-term examination, Monday March 7th

Lectures
Chapter 3, NDEP: Origins of a Modern Methodology (1 lecture)

Week 8

Assignments
Summary statement for project 3 due Monday, March 21st

Lectures
Chapter 4, NDEP: General to Specific Modeling (2 lectures)

Week 9

Assignments
Critiques of summary statements due Wednesday, March 23rd
Preliminary outline for project 3 due Monday, March 28th

Lectures
Chapter 5, NDEP: Cointegration Analysis (2 lectures)

Week 10

Assignments
Critiques of preliminary outlines due Wednesday, March 30th
Final outline for project 3 due Monday, April 4th

Lectures
Chapter 5, NDEP: Cointegration Analysis (2 lectures)

Week 11

Assignments
None

Lectures
Simultaneous equations models (2 lectures)

**Week 12**

Assignments
Presentations for project 1 April 13th
First draft of paper for project 3 due Monday, April 18th

Lectures
Simultaneous equations models (1 lecture)

**Week 13**

Assignments
Critique of first draft, Wednesday, April 20th

Lectures
Chapter 6, NDEP: The Cointegrating VAR (2 lectures)

**Week 14**

Assignments
None

Lectures
Chapter 6, NDEP: The Cointegrating VAR (2 lectures)

**Week 15**

Assignments
Final draft of project 3, Wednesday, May 9th

Lectures
Chapter 6, NDEP: The Cointegrating VAR (2 lectures)