ECON 4117: BUSINESS AND ECONOMIC FORECASTING
Syllabus for Spring 2012
9:30 a.m. – 10:45 a.m. MW
Friday 107

Instructor
Rob Roy McGregor
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Email rrmcgreg@uncc.edu

Office Hours
2:30 p.m. – 4:00 p.m. MW
2:30 p.m. – 4:00 p.m. T
If the hours established are not convenient, feel free to make an appointment with me for another time or to stop by at another time when I am in the office.

Course Description
ECON 4117. Business and Economic Forecasting. (3) Prerequisite: ECON 3112. Analysis of fluctuations in economic activity, including production, employment, prices, and industry sales. Topics include forecasting methods, business cycle theories, historical record, industry and sales forecasting. Not available for credit in the M.S. program in Economics. (Spring)

Textbooks and Other Resources
There is one textbook that is required for this course:


On the course outline, I indicate the appropriate readings for each topic. From time to time, I may assign additional readings that are not currently shown on the outline.

Course Objectives
Our principal focus will be on understanding how and when to apply various forecasting techniques and how to interpret the results. In this course, we will develop and apply selected time series and regression-based approaches to forecasting. Computer applications will use ForecastX, an Excel-based forecasting tool that comes with the Wilson and Keating text.

Means of Student Evaluation
Course grades will be determined by student performance on three in-class tests, several problem sets, and a comprehensive final exam. These components will have the following weights in the calculation of your final grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Test #1</td>
<td>20%</td>
</tr>
<tr>
<td>Test #2</td>
<td>20%</td>
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<tr>
<td>Test #3</td>
<td>20%</td>
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<tr>
<td>Problem Sets</td>
<td>10%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>30%</td>
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</tbody>
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As a general rule, make-up tests will not be given. The weight of missed tests will be added to the weight of the comprehensive final exam.

Letter grades for the course will be based on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90% and above</td>
</tr>
<tr>
<td>B</td>
<td>80%-89.99%</td>
</tr>
<tr>
<td>C</td>
<td>70%-79.99%</td>
</tr>
<tr>
<td>D</td>
<td>60%-69.99%</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
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Grades will be based solely on your performance on the tests, the problem sets, and the comprehensive final exam. I do not make any individual extra credit assignments.

**Test Dates**

Test #1 will be given on February 15; Test #2, on March 24; and Test #3, on April 18. The comprehensive final exam will be given at 8:00 a.m. on May 9 (the exam slot assigned for this course).

On the day of a test, if the University is closed or is closing early (i.e., prior to the completion of the allotted time for this class), the test will be postponed until the next regularly scheduled class day on which the University is open for its normal hours.

**Academic Integrity**

All students are required to abide by the UNC Charlotte Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at [http://www.legal.uncc.edu/policies/ps-105.html](http://www.legal.uncc.edu/policies/ps-105.html).

**Disability Accommodations**

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations.

**Other**

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and by email.

The last day to withdraw from a class with a grade of W (and retain other classes) is March 19, and the last day to withdraw from all classes with grades of W is April 9.

There will be no class meeting on January 16 (Martin Luther King Day).

Spring break will be the week of March 5-10.

I will always try to be on time for each class during the semester. If I must be absent because of illness, emergencies, or University business, I will make every effort to notify you as far in advance as possible. On any given class day, though, if I am more than 15 minutes late for class and you have received no notification from me to the contrary, you may assume that class is canceled.

Between class meetings, any communication that I need to have with the class will be done by email. Students should therefore check their University-assigned email accounts on a regular basis.
The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Outline of Topics and Reading Assignments

I. Introduction to Forecasting
   Wilson and Keating, Chapter 1

II. The Forecast Process, Data Considerations, and Model Selection
    Wilson and Keating, Chapter 2

III. Moving Averages and Exponential Smoothing
    Wilson and Keating, Chapter 3

IV. Forecasting with Simple Regression
    Wilson and Keating, Chapter 4

V. Forecasting with Multiple Regression
    Wilson and Keating, Chapter 5

VI. Classical Time Series Decomposition
    Wilson and Keating, Chapter 6

VII. ARIMA (Box-Jenkins) Forecasting Models
    Wilson and Keating, Chapter 7

VIII. Combining Forecast Results
    Wilson and Keating, Chapter 8

IX. Data Mining
    Wilson and Keating, Chapter 9

X. Forecast Implementation
    Wilson and Keating, Chapter 10