ECON 4117: BUSINESS AND ECONOMIC FORECASTING
Syllabus for Spring 2014
9:30 a.m. – 10:45 a.m. MW
Friday 155

Instructor
Rob Roy McGregor
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Phone 704-687-7639
Email rrmcgreg@uncc.edu

Office Hours
2:30 p.m. – 4:00 p.m. MW
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.

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


On the course outline, I indicate the appropriate readings from the required textbook 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.

Software
I will support STATA for the forecasting applications that you will be doing in this course, but you are welcome to use other statistical software packages that support the forecasting techniques that we cover. STATA is available in the public student computer labs (Friday 216 and Friday 338). You may purchase STATA at a reduced rate through the STATA website (http://stata.com/order/new/edu/gradplans/gp-direct.html). The STATA/IC version is sufficient for problem sets you will be assigned in this course. A website maintained at UCLA (http://www.ats.ucla.edu/stat/Stata/) has a number of resources that are quite useful for working with STATA.

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

Test #1 15%
Test #2 15%
Test #3 15%
Test #4 15%
Problem Sets 10%
Comprehensive Final Examination 30%
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 examination.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</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>
</tr>
</tbody>
</table>

Grades will be based solely on your performance on the tests, the problem sets, and the comprehensive final examination. I do **not** make any individual extra credit assignments.

**Test Dates**
Test #1 will be given on January 29; Test #2, on February 26; Test #3, on March 26; and Test #4, on April 16. The comprehensive final examination will be given at 8:00 a.m. on May 7 (the examination 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**
Students are required to abide by the UNC Charlotte Code of Student Academic Integrity. Violations of the Code will result in disciplinary action as provided 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 26, and the last day to withdraw from all classes with grades of W is April 15.

There will be no class meeting on January 20 (Martin Luther King Day).

Spring break will be the week of March 3-8.

On any given class day, 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. You should therefore check your 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. Forecast Implementation  
    Wilson and Keating, Chapter 10