

Instructor: Dr. Wei-Choun (William) Yu

Lecture: MWF 11:00-11:50 am at Somsen 306

Office: Somsen 319E

Office Hours: TTh 9:30-11:30; MWF 9:00-10:00 and 1:00-2:00 or appointment by email

Office Phone Number: (507) 457-2982

Email: [wyu@winona.edu](mailto:wyu@winona.edu)

Website: (1) WSU Desire to Learn / D2L (<https://winona.ims.mnscu.edu/>)

(2) Course Website (<http://course1.winona.edu/wyu/teaching/09SFin335.html>)

(3) William Yu's Blog (<http://weichounyu.blogspot.com/>)

Textbooks: *Elements of Forecasting*, 4th Edition, 2007, F. X. Diebold, Thomson.

*Introduction to Econometrics*, 2<sup>nd</sup> Edition, Stock and Watson, Pearson (Optional)

*Business Forecasting*, 9<sup>th</sup> Edition, Hanke and Wichern (Optional)

**Prerequisites: (1) MATH 140 or its equivalent and (2) BUSA 220 or its equivalent.**

### **Course Objectives:**

Each student in the course will (1) review and learn basic concepts and skills of regression and econometrics, (2) gain a rudimentary knowledge of several common forecasting techniques in the fields of business, finance, and macroeconomics, (3) learn how to evaluate the accuracy of a forecasting model, and (4) encounter and handle some of the common problems in building a forecasting model.

### **Suggestions for This Course:**

- 1) Class participation is strongly encouraged. We will use laptops through whole semester, so bring your laptop to class every time. Class discussion and practice are the most efficient ways to learn the concepts and skills of the course.
- 2) There are three websites related to this course. (1) *D2L*: I will make announcements, post handouts, and post your grades here. Go to D2L frequently; (2) *Course Website*: This website provide assignments, data, programs, and some useful links for this course; (3) *My Blog*: I will post some related news, articles on my blog from time to time.
- 3) The class practices, homework assignments will prepare you to really use the data, run the model and do the forecasting and analysis. To obtain the skill, you need to actually *get your hands dirty* through many practices.
- 4) In this course, we will mainly use Excel Spreadsheet and SAS to do the analysis. Both are very popular and useful programs in the real finance and business world.
- 5) Read the textbooks for better understanding of the lectures and handouts.
- 6) I also recommend you to get into the habit of browsing the daily newspaper *The Wall Street Journal* or *The Financial Times*. They both offer good, well-written, and interesting

coverage of financial events and forecasting analysis.

- 7) The following blogs maintained by famous economists provide various interesting thoughts or related articles on current economic and financial issues. I also provide these blogs hyperlinks in the D2L, course website and my blog. They are very good complementary sources for learning Economics, i.e. [Calculated Risk](#), [NYU Stern on Finance](#), [Econbrowser](#), [Economist's View](#), [WSJ Blog](#), [Financial Times' Blog](#), [Greg Mankiw](#), and [Brad Setser](#).

### **Grading System:**

- 6 Assignments: **300** points (each assignment is 50 points)
- Comprehensive Project: **140** points (read the project [guideline](#))
  - Project will be an integrated exercise for all the skills you learn.
- Midterm: **180** points
- Final: **350** points
- Class Participation: **30** points
  - Including raising and answering questions, actively discussing in the class.
- Bonus: Up to **30** points based on class attendance record.

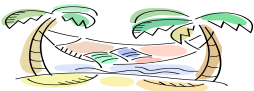
Total is 1000 points and letter grades will be assigned as follows.

- A** if 900-1000 points (90% - 100%)
- B** if 750-899 points (75% - 90%)
- C** if 600-749 points (60% - 75%)
- D** if 450-599 points (45% - 60%)
- F** if less than 450 points (less than 45%)

### **Others:**

1. The exams will be taken in a highly practical form. For example, you will be given a set of data in the classroom and asked to use the Excel and SAS to analyze it by your laptop. To do well on the exams, you have to attend lectures and practice with me as well as do the assignment with your own hands.
2. I would email you for some important announcements or course supplements occasionally, so you should check your WSU email.
3. You can discuss with your classmates about the assignments but you need to do your assignment by your own hands.
4. In the classroom, it will be a huge distraction of leaning for you and your classmates that you use your laptop to do other irrelevant things (IM, surfing Internet etc.). Be attentive and stay focus are the key to academic success!
5. All students are required to adhere to the University's standards of academic integrity. You should read the policy here: [http://www.winona.edu/studentaffairs/integrity\\_policy.htm](http://www.winona.edu/studentaffairs/integrity_policy.htm).

## Tentative Schedule

Week	Lecture Date	Class Content	Note
1	1/12, 1/14, 1/16	Ch1,2 Introduction	N/A
2	1/21, 1/23	Ch2 Review of Statistics and Regression	N/A
3	1/26, 1/28, 1/30	Ch2 Review of Statistics and Regression	N/A
4	2/2, 2/4, 2/6	Ch2 Review of Statistics and Regression	2/6 Assignment 1 Due
5	2/9, 2/11, 2/13	Ch3,4 Basics to Forecasting and Graph	2/13 Assignment 2 Due
6	2/16, 2/18, 2/20	Ch5 Model and Forecast Trend	2/20 Assignment 3 Due
7	2/23, 2/25	Ch5 Model and Forecast Trend	2/25 Review for Midterm
7	2/27	<b>Midterm</b>	<b>2/27</b>
8	2/28 ~ 3/8	Spring Break	
9	3/9, 3/11, 3/13	Ch6 Model and Forecast Seasonality	N/A
10	3/16, 3/18, 3/20	Ch7 Characterizing Cycles	3/20 Assignment 4 Due
11	3/23, 3/25, 3/27	Ch8 Model Cycles	3/27 Assignment 5 Due
12	3/30, 4/1, 4/3	Ch9 Forecast Cycles	4/3 Assignment 6 Due
13	4/6, 4/8	Ch10 Put It All Together	N/A
14	4/13, 4/15, 4/17	Ch11 Forecast with Regression	4/17 Project Due
15	4/20, 4/22, 4/24	Ch12 Evaluate Forecasts	4/24 Review for Final
16	4/27, 4/29, 5/1	Ch13 Stochastic Trends	5/1 Review for Final
17	Final Exam Week	<b>Final Exam</b>	<b>5/7 (Th) 8:00-10:00 am</b>