

Syllabus for ECON 3406: Statistics for Business II

Instructor: Dr. Michael Sinkey

Class Time and Location: Tuesdays and Thursdays, 3:30 - 6:10 PM, Miller Hall room 1309

Contact Information: Please e-mail me directly at msinkey@westga.edu should you need me. I do not guarantee to check D2L e-mail with any regularity. I expect you to check your UWG e-mail daily. Phone: 678.839.5166

Office and Office Hours: Miller Hall, room 1313. I will hold office hours on Wednesday morning, Wednesday afternoon, and Thursday morning. I will also likely be available before class on Tuesday and Thursday and after class on Tuesday.

Materials for Class: All slides, data files, and supplementary materials will be on CourseDen. You do not absolutely need to buy the book but it may be helpful.

Class Description: This is the second course in our quantitative sequence. We will cover hypothesis testing as a review from ECON 3402, regression and multiple regression, forecasting methods, basic analytics and a little bit of project design, and other selected topics. Students who have not taken ECON 3402 in some time will need to go back over hypothesis testing, confidence intervals, standard deviation, correlation coefficient, and the basics of forming a trend line as I will only devote a limited amount of time for these topics. Course learning objectives can be found on the Economics website, see <http://westga.edu/econ>

Class Requirements: You are not required to come to class. However, this class is highly accelerated and it is likely that you will get lost if you do not stay engaged with the material. From time to time I will ask you to bring a laptop to class because we will have in-class demonstrations of how to make a forecast and you will get lost doing forecasts at home if you're not engaged in class. It is my goal to have you gain a working understanding of how to use Excel to do some very basic statistical work as a part of this class.

Expectations, Grades, Late Work: There will be four problem sets, three midterms, a final, and a project. Each problem set is worth five percent of your grade. The first midterm is largely a review of ECON 3402 and is worth fifteen percent of your grade. The next two midterms will be worth twenty percent each. The project is worth ten percent, and the final is worth fifteen percent (more on this later). The class is out of 300 points. No late work. I post answers online after the deadline.

I will use a standard ten-point scale. Anybody who makes a *reasonable effort* will receive at least a D. I define a reasonable effort as missing two or fewer classes, turning in all the problem sets, making at least a fifty percent on one test, and completing a project.

Cheating: As juniors and seniors, I expect you to know what cheating is, but I will pursue whatever action is necessary should I catch you cheating, which will include a zero on the item in question and may include failing the class.

Extra Credit: Everyone is required to take a cumulative, non-optional final. The final counts for fifteen percent of your grade. However, I will replace your lowest test grade with the final **provided your lowest score is above forty percent**. If your lowest score is the final, then I will not replace your lowest test grade with the final. In my mind this is extra credit. Other opportunities for extra credit are not planned as of today.

Class Policies: Act professionally. No cell phones as calculators. Do not show up late to my exams and expect extra time. If you need to make up an exam, you must have a valid documented excuse and must take the exam the next calendar day. You will receive a different version of the exam distributed in class, which may be more difficult, although I will not intentionally make an exam more difficult. Any adjustments to the makeup policy are case-by-case and are solely my discretion. **I am perfectly willing to let somebody take a zero on an exam.**

Common Language for Course Syllabi: This class abides by the common language for course syllabi, available online at:
http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf. Read it.

Disabilities: Students with disabilities will be accommodated. Bring your paperwork to me in time for me to be able to accommodate you. This means at least one week before your exams. Contact 123 Row Hall, phone 678.839.6428 if necessary.

Tentative Schedule: subject to change:

Date	Topics Covered (a * by a class date indicates that I would like you to bring your laptop on this date)
1/6	Review of ECON 3402, part one: standard deviation, correlation coefficient, use z-table, etc.
1/8	Review of ECON 3402, part two: confidence intervals, hypothesis testing
1/13*	Review of ECON 3402, part three: hypothesis testing start of ECON 3406: chi-square tests, 1-way ANOVA PS 1 due
1/15	Review, PS1 Excel due, midterm 1
1/20*	Single variable regression, introduction to data manipulation
1/22*	Single variable regression, introduction to multiple regression
1/27*	Multiple variable regression, F-tests PS 2 due
1/29	Review, PS2 Excel due, midterm 2
2/3*	Introduction to forecasting: naïve model, modified naïve model, moving averages
2/5*	Introduction to forecasting: single and double exponential smoothing, Winters model
2/10*	Introduction to forecasting: Winters model, introduction to autoregressive models PS 3 due
2/12	Review, PS3 Excel due, midterm 3
2/17*	TBA
2/19*	TBA
2/24*	TBA
2/26	PS4 due, optional project due, final