

## ECON 3406, section N01 – BUSINESS STATISTICS II – Spring 2020.

CRN: 11997. Meets: M, W at 9:30 am.

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Office Hours: M, W: 8:00 – 9:00 am, 11 am – 1:30 pm, T: 9 am – 12 pm. RCOB 1317.

**VERY IMPORTANT:** After reading this syllabus, you should register and login to the course (and textbook) website using the McGraw-Hill, “MH Campus” link found in CourseDen (inside “start here”). After you click on the MH Campus, select “Connect” and then the textbook: “Statistical Techniques in Business & Economics, 17<sup>th</sup> Edition. Author: Lind.” You may access the course by paying immediately or later during a fourteen-day grace period. If you took Econ 3402 and used the same website for assignments, you do not need to pay again. Just use your assigned id and password.

Last day to sign up: end of second week of classes, Wednesday January 15<sup>th</sup>, 2020. This is also the day to take the syllabus quiz. If you do not sign up by January 15<sup>th</sup>, 2020, you will be reported as “not attending” and will be dropped from the course by the Registrar.

**COURSE INFORMATION:** This is a 95-99% online course. However, it is not a “work-at-your-own-pace” type of course. There are specific dates to take quizzes and complete assignments. If you anticipate having problems submitting work on time and/or taking quizzes on the specific dates provided, you should not take this course. There will not be a change to those dates to either earlier or later dates.

**REQUIRED TEXT:** Statistical Techniques in Business & Economics, 17<sup>th</sup> Edition. Authors: Lind, Marchal, Wathen. Access the textbook using the “MH Campus” link, inside the “start here” module in D2L. All assignments, except the quizzes, are available at this website.

### COURSE DESCRIPTION: Course emphasis is on applications of statistics in business. Topics include:

- Review of important statistics concepts such as mean, median, variance, standard deviation, scatter plots, normal probability distribution, standard normal probability distribution, Z scores and Z table reading, sampling distribution of the mean, the central limit theorem, estimation and confidence intervals.
- Review and in-depth coverage of hypothesis testing.
- Two-sample tests of hypothesis, analysis of variance.
- Review and in-depth coverage of correlation and linear regression.
- Multiple regression analysis.

**PREREQUISITES:** MATH 1111 or MATH 1113, CISM 2201 and a 2.0 minimum GPA.

## EXPECTED LEARNING OBJECTIVES

Students will:

- Use continuous probability distributions and sampling distributions in a variety of business applications. (LG2, LG3, LG6, LG12)
- Construct and interpret interval estimates (LG2)
- Perform hypothesis testing for one and two samples
- Estimate regression models, evaluate the results of regression models, and use the results for prediction and forecasting. (LG2, LG3, LG12)
- Use Microsoft Excel to generate descriptive statistics and perform regression and correlation analysis (LG2, LG3, LG12).

Note: A complete list of expected learning goals (LG) for the Economics Department can be found at the department web site (<http://www.westga.edu/econ/1718.php>).

**ATTENDANCE AND CLICKERS:** Attendance is not required. However, there will be in-class questions in every session, which will be used to evaluate class participation. If you get involved in “disruptive and disrespectful” behavior (read below) while in class, you will be considered absent and will receive a “0” grade for that day. You will receive an email letting you know about it.

At the beginning of every class, you will pick up the specific (numbered) clicker assigned to you and will be required to replace it with your own cell phone, which should be turned off or on silent mode. In other words, you are NOT expected to use any electronic device to chat, text, or access the internet while in class.

Clicker grading: One point for any incorrect answer. Two points for every correct answer.  
Grade weight: 10%.

Important: after class starts (9:30 am), the instructor may either post a sign outside the door indicating that entering is not allowed or lock the classroom door. You are expected to respect this policy by not knocking on the door, or not entering the classroom if the sign is being displayed.

## “CONNECT” ASSIGNMENTS

Homework Assignments: A homework is assigned per chapter and it contains a set of questions based on exercises found in the textbook. It has no time limit and you can always save your answers and continue later. As you respond each question, you have the “check my work” option to verify whether it is correct or not. After a homework is submitted, answers to exercises will not be provided. If you want to review similar exercises, study the slides and odd-numbered exercises found in Appendix D of the textbook. Homework assignments are available at the Connect (MH) website. Advice: submit this assignment until you have studied the corresponding material and have solved a few exercises from each section.

Weight of assignment: 15%.

Excel Assignments: For a selected number of chapters, you need to solve exercises using Excel. This assignment has no time restriction. Excel assignments are available at the Connect (MH)

website. “Check my work” is not available. Advice: submit this assignment until you have studied the corresponding material and have solved a few exercises from each section. Chapters included: 3, 9-14. Weight of assignment: 15%.

Solved Exercises: I strongly advise you to study the material by solving the odd-numbered exercises found in Appendix D of the textbook. Answers are included. Steps to access the Appendix: click the ebook “Lind, Statistics Techniques in Business and Economics, 17e (eBook)”, “table of contents (three horizontal lines on top left of screen)”, scroll down and click on “Appendix D.”

**Important**: a significant number of exercises found in both the homework and Excel assignments must be solved using Excel. You need to have Excel 2013 or later version installed in your computer.

Both assignments are due by 8 am on the day of the corresponding quizzes. Advice: complete assignments ahead of time. The deadlines will not be changed.

**Quizzes and final exam**: During the semester, you will be required to take a syllabus quiz and one quiz per chapter. Module I: chapters 3, 7 & 8, module II: chapters 9 & 10, module III: chapters 11 & 12, and module IV: chapters 13 & 14. All quizzes will be given in class. Final exam must be taken on Wednesday, April 29<sup>th</sup>. 8am – 10am. Please notice that the time is not the same as the regular class. Chapters covered: 7-14. Format is the same as the quizzes.

Test-taking rules:

1. For quizzes, you can use a one-sided cheat sheet. However, you are expected to work individually.
2. For the final exam, you should bring a No. 2 pencil, calculator, and tables. You are allowed to bring a cheat sheet with notes only on one side. Tables used must be clean with no additional notes.

Maximum time allowed for each quiz: an average of 1.5 minutes per question. Maximum time allowed for the syllabus quiz: five minutes.

Assigned weight to quizzes: 33%.

**CHEATING**: Academic dishonesty on any exam will result in a zero on that exam, a note recording the incident on the student's permanent record and the student reported to Student Services for appropriate disciplinary action by the University. Students not familiar with what constitutes academic dishonesty or those unfamiliar with the appeal procedure regarding academic dishonesty should refer to the UWG Undergraduate Catalog.

## GRADE DISTRIBUTION BY ACTIVITY

ACTIVITY/MATERIAL	DATE	WEIGHT
Syllabus quiz (5 min.)	1/13	2%
Clicker average	Every class meeting	10%
Homework	Online (due by 8am the day of each quiz)	15%
Excel	Online (due by 8am the day of each quiz)	15%
Quizzes		33%
Module I		
Quiz chapter 3	1/13	
Quiz chapter 7	1/27	
Quiz chapter 8	2/5	
Module II		
Quiz chapter 9	2/19	
Quiz chapter 10	3/4	
Module III		
Quiz chapter 11	3/25	
Quiz chapter 12	4/6	
Module IV		
Quiz chapter 13	4/15	
Quiz chapter 14	4/27	
Final Exam	4/29    Wednesday, 8-10am.	25%

### Final Letter-Grade Assignment (strictly enforced):

0 – 59.99: F

60 – 69.99: D

70 – 79.99: C

80 – 89.99: B

90 – 100: A

**After assignments listed in the syllabus are completed and past due, no extra assignments, bonus questions or extra test will be given. Your letter grade will be assigned according to the scale shown above and will not be changed. I will not respond to emails requesting further adjustment or extra assignments.**

### TABLE OF SECTIONS INCLUDED AND EXCLUDED PER CHAPTER

CHAPTER	SECTIONS (LO) INCLUDED	SECTIONS (LO) EXCLUDED
3	1, 2, 4, 5	3, 6
7	1-3	4, 5
8	2 – 5	1
9	1-4	5
10	All Sections except last	Last section (calculation type II error)
11	All sections (1-4)	None
12	1 – 4	5
13	1 – 5	6, 7
14	1 – 7	8

### Quiz Schedule and activities

Week	Class	Dates	Event
1	1	1/6	
1	2	1/8	
2	3	1/13	Syllabus quiz, Quiz Chapter 3 (HW and Excel Chapter 3 due by 8 am)
2	4	1/15	
3		1/20	MLK Holiday (no classes)
3	5	1/22	
4	6	1/27	Quiz Chapter 7 (HW Chapter 7 due by 8 am)
4	7	1/29	
5	8	2/3	
5	9	2/5	Quiz Chapter 8 (HW Chapter 8 due by 8 am)
6	10	2/10	
6	11	2/12	
7	12	2/17	
7	13	2/19	Quiz Chapter 9 (HW and Excel Chapter 9 due by 8 am)
8	14	2/24	
8	15	2/26	
9	16	3/2	
9	17	3/4	Quiz Chapter 10 (HW and Excel Chapter 10 due by 8 am)
10	18	3/9	
10	19	3/11	
11		3/16	Spring Break (no classes)
11		3/18	Spring Break (no classes)

Week	Class	Dates	Event
12	20	3/23	
12	21	3/25	Quiz Chapter 11 (HW and Excel Chapter 11 due by 8 am)
13	22	3/30	
13	23	4/1	
14	24	4/6	Quiz Chapter 12 (HW and Excel Chapter 12 due by 8 am)
14	25	4/8	
15	26	4/13	
15	27	4/15	Quiz Chapter 13 (HW and Excel Chapter 13 due by 8 am)
16	28	4/20	
16	29	4/22	
17	30	4/27	Quiz Chapter 14 (HW and Excel Chapter 14 due by 8 am)

## REGISTRAR'S FALL 2019 CALENDAR

Date	Event
Aug 14	Classes begin
Aug 14-20	Open Drop and Add period.
Aug 20	Open Drop and Add period ends at 11:59 pm
Aug 21	Withdrawal "W" period begins for Full Term (non-eCore) 16 week courses. Students who withdraw from a Full Term (non-eCore) class between August 21st and October 9th will receive a grade of W. Reminder there is no refund associated with withdrawing from a course.
Aug 21	Fee Payment Deadline. Please see the Bursar's website for additional information.
Aug 21	Last day to apply for Tuition Differential Waivers for Fall 2019. The waiver application and all supporting documents must be received in the Registrar's Office by 5:00 pm.
Aug 23-27	FACULTY ONLY - Roster Verification; opens at noon on Aug 23
Aug 31	No Saturday Classes
Sep 1	Last day to Petition for In-State Tuition Status for Fall Semester
Sep 2	Labor Day Holiday, no classes, offices closed
Oct 1	Last day to apply for Spring Graduation
Oct 3-4	Fall Break, no classes, offices open
Oct 5	No Saturday Classes
Oct 9	Last day to withdraw with a grade of W from Full Term (non-eCore) 16 week Courses. Students who withdraw from a Full Term (non-eCore) class between August 21st and October 9th will receive a grade of W. Reminder there is no refund associated with withdrawing from a course.
Oct 28	Registration for Spring Semester 2020 begins for currently enrolled students.

Nov 18 Open Registration begins.  
Nov 23 Saturday classes end; exams December 7th  
Nov 25-27 Thanksgiving recess, no classes, offices open  
Nov 28-29 Thanksgiving holiday, no classes, offices closed  
Nov 30 No Saturday Classes  
Dec 6 Fall classes end  
Dec 7-13 Final Examinations. See Exam Schedule for details  
Sat., Dec 14 Fall Graduation (time & details to be announced)  
Dec 16 Grades due by 12:00 (noon)