ECONOMICS 3402 – 05 (Spring 2020)

Syllabus Version (1/7/2020)

COURSE TITLE:

Statistics for Business I. Updates to the syllabus will be posted on the Course Den site for the course. The class meets TTH 2:00-3:15 pm in Miller 2213.

INSTRUCTOR:

David Boldt dboldt@westga.edu
Office Phone: 678-839-4771
Office: RCOB 1311 (Miller Hall)

Note: Please contact me using my campus email address (dboldt@westga.edu). I do not utilize the email function in CourseDen. If I need to individually contact students in the class, I will do this via your official university email address. However, I may post announcements impacting the entire class in CourseDen.

OFFICE HOURS:

Tuesday and Thursday 8:00-9:00 am; Monday and Wednesday 8:30-11:00 am and other times by arrangement.

TEXTBOOK/OTHER RESOURCES:

1) Introductory Business Statistics (OpenStax, 2018). The necessary chapters from this book will be downloaded into the CourseDen site for the course.

2) You will also be required to watch chapters from the statistics video series titled "Against All Odds."   The videos can be found on the following website (https://www.learner.org/series/against-all-odds-inside-statistics/). In-class quizzes will be based on these videos.

3) Powerpoint lecture notes for the course will be posted on the Course Den site.

COURSE LEARNING OBJECTIVES: Students will:

- construct and interpret tabular and graphical methods of presenting qualitative and quantitative data.

- construct and interpret summary numerical measures of location, variability, and association for the sample and the population.

- apply basic probability concepts, expected value, and variance to a variety of business applications

- use discrete and continuous probability distributions and sampling distributions in a variety of business applications.

- construct and interpret interval estimates and be able to determine the required sample size for constructing interval estimates.

- estimate regression models, evaluate the results of regression models, and use the results for prediction and forecasting.

- use Microsoft Excel to generate descriptive statistics and perform regression and correlation analysis.

PREREQUISITES: The course prerequisites are CISM 2201 and Math 1111 or Math 1113. RCOB majors must have at least a 2.0 overall GPA.

CLASS ATTENDANCE: If you are unable to attend class on a regular basis, please drop this class and sign up for another section of ECON 3402.

EVALUATION: Grading in the course will be based on your performance on the four tests, in-class quizzes and other activities as well as a take home Excel regression assignment. The examinations will be composed of short answer and multiple-choice questions based on class lecture/discussion and on the assigned videos from the *Against All Odds* video series. Each of the tests will be worth 20% of your grade. If you must miss a test, you will need to take the comprehensive final (as the makeup). For students who have completed all four exams, I will allow the final to replace your lowest exam (assuming the grade on the final is better than the grade on at least one of the first four exams). Your class participation grade (20% of total) will be based on performance on the in-class quizzes, other in-class activities and an Excel regression assignment (see below for details). The in-class quizzes will be based on material in the *Against All Odds* videos. There are no makeups for any missed in-class quiz or activity (without an official verified excuse).

REGRESSION ASSIGNMENT: Based on the material learned in Chapter 13, you will be assigned an Excel regression exercise. Completion of this assignment will count as part of your participation grade. The instructions and specific exercise will be provided in early-April (closer to the due date). The regression assignment will be due on Friday, April 24.

ACADEMIC POLICIES:

Please carefully review the information in the link below concerning Academic Support Services, the Honor Code, UWG Email Policy, UWG Credit Hour Policy, Campus Carry, and UWG Mental Health Services.

https://www.westga.edu/UWGSyllabusPolicies/

During the semester, students in this course will generally spend 150 minutes per week of direct faculty instruction in the classroom. As a guide, students should expect to spend about 300 minutes per week outside the classroom on various assignments, reading the textbook, and in studying the course material. Note, if classes are officially canceled by the university, information about any missed assignments, quizzes, tests, etc. will be announced on the Course Den site for the course.

ECON 3402-05 Course Schedule, Topics, and Assignments/Important Dates

Class	Topics	Assignments
1. 1/7/20	Intro to Course/Sampling and Data	Textbook: Chapter 1
2. 1/9/20	Sampling and Data	Textbook: Chapter 1
3. 1/14/20	Sampling and Data/Descriptive Statistics	Textbook: Chapters 1/2
4. 1/16/20	No Class	Watch *Against All Odds* videos (Programs 1-6) https://www.learner.org/series/against-all-odds-inside-statistics/
5. 1/21/20	Descriptive Statistics (**Quiz #1**)	Textbook: Chapter 2 Quiz #1 on *Against All Odds* (Programs 1-3) https://www.learner.org/series/against-all-odds-inside-statistics/
6. 1/23/20	Descriptive Statistics **(Quiz #2)**	Textbook: Chapter 2 Quiz #2: *Against All Odds* (Programs 4-6) https://www.learner.org/series/against-all-odds-inside-statistics/
7. 1/28/20	**Exam #1***	
8. 1/30/20	Probability Topics	Textbook: Chapter 3
9. 2/4/20	Probability Topics	Textbook: Chapter 3
10. 2/6/20	No Class	Watch *Against All Odds* videos (Programs 18-19) https://www.learner.org/series/against-all-odds-inside-statistics/
11. 2/11/20	Discrete Random Variables **(Quiz #3)**	Textbook: Chapter 4 Quiz# 3 *Against All Odds* (Programs 18-19) https://www.learner.org/series/against-all-odds-inside-statistics/
12. 2/13/20	Discrete Random Variables/ Continuous Random Variables	Textbook: Chapter 4-5
13. 2/18/20	Continuous Random Variables **(Quiz #4)**	Textbook: Chapter 5 Quiz #4: *Against All Odds* (Programs 20-21) https://www.learner.org/series/against-all-odds-inside-statistics/
14. 2/20/20	**Exam #2***	
15. 2/25/20	Normal Distribution	Textbook: Chapter 6
16. 2/27/20	Normal Distribution **(Quiz #5)**	Textbook: Chapter 6 Quiz #5: *Against All Odds* (Programs 7-9) https://www.learner.org/series/against-all-odds-inside-statistics/ **Note: Wednesday, February 28 is the last day you can withdraw from the course and earn a grade of W.**

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Class	Topics	Assignments
17. 3/3/20	Central Limit Theorem	Textbook: Chapter 7
18. 3/5/20	Central Limit Theorem **(Quiz #6)**	Textbook: Chapter 7 Quiz #6: *Against All Odds* (Programs 16-17; 22) https://www.learner.org/series/against-all-odds-inside-statistics/
19. 3/10/20	Confidence Intervals	Textbook: Chapter 8
20. 3/12/20	Confidence Intervals	Textbook: Chapter 8
21. 3/24/20	Confidence Intervals **(Quiz #7)**	Textbook: Chapter 8 Quiz #7: *Against All Odds* (Programs 23-24) https://www.learner.org/series/against-all-odds-inside-statistics/
22. 3/26/20	**Exam #3***	
23. 3/31/20	Hypothesis Testing with One Sample	Textbook: Chapter 9
24. 4/2/20	Hypothesis Testing with One Sample	Textbook: Chapter 9
25. 4/7/20	No Class	Watch *Against All Odds* videos (Programs 25-26) and (Programs 10-14) https://www.learner.org/series/against-all-odds-inside-statistics/
26. 4/9/20	Hypothesis Testing with One Sample/Linear Regression and Correlation **(Quiz #8)**	Textbook: Chapters 9/13 Quiz #8: *Against All Odds* (Programs 25-26) https://www.learner.org/series/against-all-odds-inside-statistics/
27. 4/14/20	Linear Regression and Correlation	Textbook: Chapter 13
28. 4/16/20	Linear Regression and Correlation	
29. 4/21/20	Linear Regression/Review for Exam #4/ **Quiz#9**	Textbook: Chapter 13 Quiz #9: *Against All Odds* (Programs 10-14) https://www.learner.org/series/against-all-odds-inside-statistics/
30. 4/23/20	**Exam #4**	
4/24/20	Regression Assignment Due on 4/24/20	
31. 5/5/20 2-4pm	**Final Exam (Makeup/Optional)****	

*The chapters covered on each test are subject to change. The chapters to be covered on each test will be announced the class period before the test. The scheduled test dates will not change unless the university is officially closed on one of those days.

**Students will need to come by my office during office hours on Monday-Wednesday (April 27-29) to get Exam #4. At that time, I will be able to give each student their participation grade and I will also be able to discuss whether or not taking the final exam is necessary (or potentially beneficial to you).