ECON 3402, SECTION 01, STATISTICS FOR BUSINESS 1

Fall 2018, 3 Hours, 8/15-12/10
Wolf Pact

Protecting the integrity of a degree from the Richards College of Business at the University of West Georgia is the responsibility of the administration, faculty, staff, and students of the college. Our mission is “To become a globally recognized college of business preparing forward-thinking, responsible leaders.” Responsible leaders are ethical leaders, and this behavior begins in the classroom. One of our Strategic Goals is to demonstrate “...commitment to the principles of honesty and integrity in interactions and undertakings, [and] accountability for personal behavior...”. As such, we have developed the Wolf Pact in an effort to promote and maintain the highest standards of integrity, professional behavior, ethical actions, and personal conduct.

The purpose of this pact is to maintain that a degree from the Richards College of Business at the University of West Georgia is held in high regard by all internal and external constituents, and that a degree from the University of West Georgia is as meaningful in the future as it is today.

I have reviewed the information in this syllabus, and I agree to abide by the policies stated. I will conduct myself in accordance with the RCOB Wolf Pact to protect the integrity of my degree and all those others who receive a degree from the Richards College.

Signature: __________________________________________

917#: __________________________________________

Date: __________________________________________
ECON 3402: Statistics for Business I

DESCRIPTION
In this class we will learn what data are, how they are generated, and how they should be analyzed.

PREREQUISITES
College Algebra (MATH 1111) and CISM 2201

CLASS REQUIREMENTS
This class is mostly face-to-face. Two or three classes will be moved online early on. You are not required to come to class, but in all likelihood you will not perform well if you miss too many classes. It has been my experience that strong performance and attendance are highly positively correlated and I expect you to be here. Additionally, there may be material from class on exams that may not be covered in the readings, homework, or online modules. Nonetheless, if you miss class, you need to either get notes from a classmate or from me.

INSTRUCTOR INFORMATION

NAME:
Michael Sinkey, Ph.D.

OFFICE LOCATION:
Miller Hall 1313

CLASS TIME AND LOCATION:
Miller Hall 2202, MW 11-1215.

OFFICE HOURS:
Monday and Wednesday mornings, 9:00-10:30 AM. Other days and times may be available via appointment. I am also available for a phone call or online session if needed.

CONTACT INFORMATION:
Phone: 678-839-5166

Email: msinkey@westga.edu

Communication Preference: The most consistent way to get in touch with me is through your westga.edu e-mail. I don’t promise to respond to e-mail within a certain timeframe though I normally am fairly fast.

LEARNING GOALS
We will build on the following learning goals throughout the term:
• Construct and interpret tabular and graphical methods of presenting qualitative and quantitative data (LG2, LG3, LG 10)
• Construct and interpret summary and numerical methods of location, variability and association for the sample and the population (LG2, LG3, LG10)
• Apply basic probability concepts, expected value and variance to a variety of different business applications (LG2, LG6, LG10)
• Use discrete and continuous probability distributions and sampling distributions in a variety of business applications (LG2, LG3, LG6, LG10)
• Construct and interpret interval estimates and hypothesis tests (LG2)
• Estimate regression models, evaluate the results of regression models, and use the results for prediction and forecasting (LG2, LG3, LG6, LG10)

BOOKS AND MATERIALS

LIND/MARCHAL, 17TH EDITION, STATISTICAL TECHNIQUES IN BUSINESS AND ECONOMICS
We will Connect software and you can purchase it through McGraw Hill or from the bookstore, though the bookstore is more expensive.

COURSE POLICIES

• Do not misbehave in class (think excessive talking and disrespect). There is no attendance requirement for this class so if you do not want to be in a classroom, don’t come.
• Do not insult, belittle, or make fun of other students in a class.
• Makeups are my sole discretion, but all makeup exams must be taken at 9 AM the next class period. If you cannot make the exam makeup, you will receive a zero unless you are hospitalized or a close family member is hospitalized or has passed away. Requests to take exams ahead of time can normally be accommodated.
• No smartphones as calculators. Academic dishonesty, such as communicating during a test, using external materials for assistance on a test, or copying someone else’s assignment, will receive a zero.

GRADING

There will be three midterms, a final, three problem sets, and a series of Connect homework assignments. Each midterm will be worth twenty percent of your grade. The final will be worth fifteen percent of your grade. The problem sets are worth fifteen percent of your grade. Connect assignments are completion and are worth ten percent of your grade.

I will eventually post your grades on CourseDen but you are responsible for coming to class and picking up your graded work. Please do not e-mail me regarding the grade on a particular assignment if you haven’t been to class to pick it up.
COURSE CALENDAR

WEEK 1, 8/15
- Topics covered: Brief introduction to stats, mean, standard deviation, median, five number summary
- Sign up for Connect, use instructions online
- Complete Assignment #2 on Connect
- Readings from Lind/Marchal: 50-67, 70-73, 76-79, 103-114

WEEK 2, 8/20, 8/22
- All classes for this week will be ONLINE!
- Topics covered: Examining distributions using graphs and data visualization
- Work on problem set questions. Complete Assignment #1 on Connect
- Make sure to sign up for Connect, instructions will be online
- Readings from Lind/Marchal: 1-14, 18-34, 38-40

WEEK 3, 8/27, 8/29
- Topics covered: Normal distribution, z-scores, etc.
- Complete Assignment #3 on Connect
- Work on problem set questions associated with normal distribution
- Readings from Lind/Marchal: 215-229

WEEK 4, 9/5
- Topics covered: Correlation coefficient and regression
- Complete Assignment #4 on Connect
- Work on regression problem set questions
- Readings from Lind/Marchal: 437-447, 452-459

WEEK 5, 9/10, 9/12
- Topics covered: regression on 9/10 with some review.
- EXAM 1 is September 12.
- PROBLEM SET 2 is due September 10 by 5 PM.
- CONNECT SET 1 is due September 11 by midnight.

WEEK 6, 9/17, 9/19
- Topics covered: probability and probability rules
- Complete Assignment #5 on Connect
- Work on discrete probability and counting probability problem set questions
- Readings from Lind/Marchal: 132-147, 148-156, 162-167
WEEK 7, 9/24, 9/26
- Topics covered: random variables and mean/variance; conditional probability
- Complete Assignments #6 and #7 on Connect
- Work on probability-themed problem set questions
- Readings from Lind/Marchal: 176-184, 185-193

WEEK 8, 10/1, 10/3
- Topics covered: Binomial, Poisson, Uniform, Exponential distributions
- Complete Assignment #8 on Connect
- PROBLEM SET #3 is due by 5 PM on 10/3.
- Readings from Lind/Marchal: 198-202, 211-214, 234-238

WEEK 9, 10/8, 10/10
- Topics covered: introduction to confidence intervals on 10/10.
- EXAM 2 is October 8. If needed, exam will be graded by midnight.
- CONNECT SET #2 is due on October 7 by midnight.
- Readings from Lind/Marchal: 250-272

WEEK 10, 10/15, 10/17
- Topics covered: sampling, introduction to hypothesis testing.
- Complete Assignments #9 and #10 on Connect
- Work on one-sample hypothesis tests.
- Readings from Lind/Marchal: 282-288, 289-298, 308, 320-331, 332-343

WEEK 11, 10/22, 10/24
- Topics covered: constructing a test statistic, using a t-table
- Complete Assignments #11 and #12 on Connect
- Work on one-sample, matched pairs, and paired differences hypothesis tests
- Readings from Lind/Marchal: 344-348, 370-372, 350-360, 361-369

WEEK 12, 10/29, 10/31 (HALLOWEEN)
- Topics covered: matched pairs, two-population, and pooled test statistics
- Complete Assignment #15 on Connect
- Work on two-population and pooled hypothesis tests.

WEEK 13, 11/5, 11/7
- Topics covered: regression hypothesis testing
- Assignment #15 on Connect
- Work on regression hypothesis test question for problem set #3
- Readings from Lind/Marchal: 440-462
WEEK 14, 11/12, 11/14
- Topics covered: regression hypothesis testing and review
- EXAM 3 is November 14.
- Problem Set #3 is due November 12 by 5 PM.
- Connect Set #3 (9-12, 15) is due on November 13 by midnight.

WEEK 15, 11/26, 11/28
- Topics covered: proportions and Chi-square
- Complete Connect Assignments #13 and #14.
- Work on reviewing old exams for final exam.
- Readings from Lind/Marchal: 546-550, 556-564

WEEK 16, 12/3, 12/6
- Topics covered: Chi-square, final exam review

FINAL EXAM: WEDNESDAY, DECEMBER 12, 11 AM.

AMERICANS WITH DISABILITIES ACT:
Students with a documented disability may work with UWG Accessibility Services to receive essential services specific to their disability. All entitlements to accommodations are based on documentation and USG Board of Regents standards. If a student needs course adaptations or accommodations because of a disability or chronic illness, or if he/she needs to make special arrangements in case the building must be evacuated, the student should notify his/her instructor in writing and provide a copy of his/her Student Accommodations Report (SAR), which is available only from Accessibility Services. Faculty cannot offer accommodations without timely receipt of the SAR (defined as within two days of class start); further, no retroactive accommodations will be given. Accessibility Services is located in 123 Row Hall at the Student Development Center, telephone 678-839-6428

UNIVERSITY-WIDE SYLLABUS INFORMATION:
Please review the “Common Language for Course Syllabi” for university-wide updates. Even if you have read it before, the most current information is maintained at this site.