

Florida State University  
Statistics Department  
Spring 2016  
STA 2023 Section 0014

Collin Dougher  
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OSB Room 210 E  
Monday 4pm-5pm

Fundamental Business Statistics  
3 Credit Hours  
M W 5:15pm – 6:15pm  
OSB 110

### **SYLLABUS POLICY**

Except for changes that substantially affect implementation of the evaluation (grading), this syllabus is a guide for the course and is subject to change with advance notice. The syllabus is intended to be an agreement between you (student) and us (instructor). The presence of your name on your section roster after drop/add ends indicates that you have read and understood all of the documents posted under Syllabus on our Main Website on Blackboard, you have had your questions about them answered, and you accept and will abide by our policies. Please understand that this course is offered to hundreds of students each semester, and in the interests of fairness, we will not do for one student what we cannot do for all students who are likely to request the same. Bear in mind that the opportunities presented in this class are made equally available to all students in the class and it is up to each individual to make the best of them.

### **GENERAL EXPECTATIONS**

Be respectful in class. Pay attention to the instructor. Raise your hand with any questions. You may ask quick questions to your neighbor but don't speak loudly or for extended periods of time. Check your email and Blackboard frequently. Announcements may be sent out by Blackboard and/or email but you are responsible for watching Blackboard to keep track of due dates and upcoming assessments.

### **COURSE PREREQUISITE**

None, but we recommend two years of high school algebra.

Special Note: High school students who earn a "3" or better on the AP Statistics exam will be given credit for STA 2023. The course covers statistical applications in business, involving graphical and numerical descriptions of data, data collection, correlation and simple linear regression, elementary probability, random variables, Binomial and Normal distributions, sampling distributions, and confidence intervals and hypothesis tests for a single sample. The purpose of this course is to prepare students for further study and job preparation in the field of Business. It will emphasize understanding of data and interpretation of statistical analyses. It will require students to think of data, and report the results of their analyses, in context.

### **REQUIRED MATERIALS**

Please bring your calculator to class and some way to take notes, whether it be a computer or notebook. Homework will be distributed through Blackboard. Notes will also be distributed through BlackBoard. You will need to either look at or print out the notes which at 20 cents per page could come out to near \$80 so be aware of this cost in lieu of a text book. There is a textbook that you can purchase if you'd like to have that as an additional resource. That book is The Practice of Statistics for Business and Economics, 3rd ed. by Moore McCabe Alwan Craig Duckworth and published by W.H.Freeman. The textbook is not necessary. A TI-83 (or more advanced) calculator will be required for some topics.

## **COURSE OBJECTIVES**

By the end of the course, students will demonstrate the ability to:

- (1) Analyze and address problems drawn from real world scenarios by applying appropriate mathematical, statistical, logical, and/or computational models or principles.
- (2) Interpret and evaluate data and information as presented in a variety of modes (such as tables, graphs, and charts), using appropriate technology. They will also be able to clearly communicate a summary of their findings to peers. The above two competencies will be assessed in the L.S. Quantitative Assessment for STA 2023, which includes a written summary of results.
- (3) Use descriptive statistics and graphical methods to summarize data accurately.
- (4) Use inferential statistics to make valid judgments based on the data available.
- (5) Describe the goals of various statistical methodologies conceptually.
- (6) Apply statistical techniques in the context of business processes, everyday life, and further studies in their discipline.
- (7) Develop a healthy skepticism toward statistical studies and their results based on a sensible consideration of the techniques employed.

## **GRADING AND ASSIGNMENTS**

The class will be graded based on homework, participation, exams, and the Liberal Studies assessment. The percentage of the grade coming from each area will be decided during the first class session. The voted on grade distribution is as follows

5% attendance, 5% participation, 40% homework, 15% Exam 1, 15% Exam 2, 20% Final

Please be aware there is a Liberal Studies requirement from this course and in accordance with this you will be assessed. This assessment is required to be 10% of the overall course grade and for our class will cover Simple Linear Regression.

Letter grades will be assigned based on coursework and the following percentages out of 100. Note grades on BlackBoard are just for illustrative purposes and weighted averages will be calculated at the end of the term.

A +	N/A	B +	87 - 89	C +	77 - 79	D +	67 - 69
A	93+	B	83 - 86	C	73 - 76	D	63 - 66
A -	90 - 92	B -	80 - 82	C -	70 - 72	D -	60 - 62

## **FINAL EXAM**

Our final exam for STA 2023 is a block exam. All sections of 2023 will be administered their exams on **Wednesday April 27<sup>th</sup> from 10am-12pm with location TBD**. I will create the exam for this period but the time and date have been set by the university. Please mark this time in your planner of choice so that you are free during your final exam time. In order to take your final exam at a different time you need special permissions so please keep this time free.

### **LATE ASSIGNMENTS**

Homework assignments will be turned in at the start of the class period during which it is due. There will be no late homework accepted unless due to an excused absence. Homeworks will only be accepted if the .pdf or .docx is printed and filled out, looseleaf paper will not be accepted.

### **MISSING GRADES**

Check your Blackboard section website every week to make sure your latest grade has been posted, please do this even if you already know your grade. If a grade is not posted, alert me immediately via email. It is important that you alert us via email so that there will be a record of the fact that you reported the matter. If you report a missing grade within two weeks after the assessment took place, we will do our best to locate your missing grade. If you report a missing grade more than two weeks after the assessment took place, we will not be able to help you and the missing grade will have to remain as a zero grade.

### **GRADING APPEALS**

During the course of the term, if you believe that a paper was improperly graded email me and make an appointment to go to my office to see your paper and discuss it with me. If the matter is not resolved after that discussion, then we can contact another professor.

### **TEST QUESTION SECURITY**

The following pledge will be printed on every quiz and on the final exam (wording may vary slightly). We regret to say that if you do not sign the pledge, we will not grade your paper and your grade will be zero. Please bear in mind that occurrences such as quiz or final exam question disclosures reduce the worth of the degree you are working toward.

I pledge that I will never disclose the questions herein to anyone, and I will not discuss them with anyone other than my course instructor or my recitation TA. I understand that if I break this pledge at any time, the grade that I earn on this paper will be reduced to zero and my overall numerical course grade will be calculated, or re-calculated, accordingly, and my course letter grade will be demoted if necessary.

We reserve the right to impose a penalty on your assessment grade if you violate any of the above guidelines. Please read this entire policy again and understand it well, as exceptions will not be allowed.

### **ATTENDANCE, ABSENCE AND DROP/WITHDRAWAL**

First day attendance is mandatory per university regulations. Thereafter, we fully expect to see you at every class meeting. Drop and Withdrawal deadlines are given in the University's academic calendar at [http://registrar.fsu.edu/dir\\_class/fall/acad\\_cal.htm](http://registrar.fsu.edu/dir_class/fall/acad_cal.htm). If you miss class, we expect you to keep up-to-date with the lessons, activities and announcements by getting in touch with a classmate or with us. We will not re-teach entire lessons, but after you have studied the material that you copied down and attempted the relevant practice problems, we will help you with specific questions you may have. University Attendance Policy University Attendance Policy Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **UNIVERSITY ATTENDANCE POLICY**

Excused absences include documented illness, deaths in the family and other documented crises, call to

active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **STUDENTS COMPLETING AN INCOMPLETE OR AUDITING**

If you are auditing this course or attending it to complete an "Incomplete" earned in a previous term, make yourself known to me so that I may let you have access to our current Blackboard websites. If you are completing an "Incomplete", let me know who your former instructor was so that I may inform them of your grade at the end of the term.

### **EMAIL**

Please check your @my.fsu.edu email every day for emails from us and if you email us, please send from your @my.fsu.edu account. Send exam-related questions at least 24 hours before the assessment is due to begin. Be aware that email sent from outside the FSU domain may not get through to us, so if you send an email and you don't get a response within two working days, please try to meet us in person before class, or after class, or during office hours.

### **ACADEMIC HONOR POLICY:**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>.)

### **AMERICANS WITH DISABILITIES ACT:**

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center  
874 Traditions Way  
108 Student Services Building  
Florida State University  
Tallahassee, FL 32306-4167  
(850) 644-9566 (voice)  
(850) 644-8504 (TDD)  
sdrc@admin.fsu.edu  
<http://www.disabilitycenter.fsu.edu/>

### **FREE TUTORING FROM FSU**

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list

of on-campus tutoring options - see <http://ace.fsu.edu/tutoring> or contact [tutor@fsu.edu](mailto:tutor@fsu.edu). High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

**LIBERAL STUDIES FOR THE 21st CENTURY:**

**Quantitative and Logical Claims**

The Liberal Studies for the 21 st Century Program at Florida State University builds an educational foundation that will enable FSU graduates to thrive both intellectually and materially and to support themselves, their families, and their communities through a broad and critical engagement with the world in which they live and work. Liberal Studies offers a transformative experience; this course has been approved as meeting the Liberal Studies requirements and thus is designed to help you become a critical analyzer of quantitative and logical claims. In order to fulfill the State of Florida's College mathematics and computation requirement the student must earn a "C" or better in the course.

	Week including:	Monday	Wednesday
Week 1	1/4 & 1/6	<b>NO CLASS</b>	Introduction
Week 2	1/11 & 1/13	Summary Stats & Graphs	Simple Random Sample
Week 3	1/18 & 1/20	<b>NO CLASS</b>	Random Variables
Week 4	1/25 & 1/27	Probability	Probability
Week 5	2/1 & 2/3	Binomial Dist	Binomial Dist
Week 6	2/8 & 2/10	Review**	Test 1
Week 7	2/15 & 2/17	Simple Linear Regression	Simple Linear Regression
Week 8	2/22 & 2/24	SLR	SLR
Week 9	2/29 & 3/2	Review**	<b><u>Lib Arts Assessment</u></b>
Week 10	3/7 & 3/9	<b>SPRING BREAK</b>	<b>SPRING BREAK</b>
Week 11	3/14 & 3/16	Normal Dist	Normal Dist
Week 12	3/21 & 3/23	Central Limit Theorem	CLT
Week 13	3/28 & 3/30	z, t, & Hypothesis Testing	Hypothesis Testing
Week 14	4/4 & 4/6	Hypothesis Testing	Confidence Intervals
Week 15	4/11 & 4/13	Conf. Int.	Conf. Int.
Week 16	4/18 & 4/20	Review**	Review**
Week 17	4/25 & 4/27	<b>NO CLASS</b>	<b><u>FINAL @ 10am-12pm</u></b>
NOTE 1: This is a tentative schedule which may change as the semester goes on or if I decide to teach in a different order.			
NOTE 2: The review periods are intended to be for test preparation but they will be used to teach new topics if topics from earlier in the semester take longer to get through than expected.			