

Syllabus for STA 2023 - Introduction to Statistics

Summer B-2013 -- ONLINE

1. Instructional Team

Instructor: Megan Mocko

Email: mmeece AT ufl.edu

Phone Number: 352-273-2975 (Please use email instead. Phone messages only checked weekly.)

Online Office Hours: M 2 to 3:30pm, T 4 to 5pm W 3 to 4pm R 3 to 4pm

(Monday, August 5th and Tuesday, August 6th's office hours will be handled by a TA.)

Teaching Assistant: Ji Youn Myung

Online Office Hours: Tuesday 9:30 to 11am, R 4 to 5:30pm

Teaching Assistant: Abhishek Saha

Online Office Hours: Wednesday and Thursday 10 to 11:30am

2. General Course Information

THIS COURSE SATISFIES GENERAL EDUCATION CREDITS IN THE MATHEMATICAL SCIENCES. STUDENTS LEARN HOW TO SUMMARIZE DATA AND HOW TO MAKE APPROPRIATE DECISIONS BASED ON DATA. (This course is the general education category of M.)

Course Description

STA 2023 is an introductory course that assumes no prior knowledge of statistics but does assume some knowledge of high school algebra. Basic statistical concepts and methods are presented in a manner that emphasizes understanding the principles of data collection and analysis rather than theory. Much of the course will be devoted to discussions of how statistics is commonly used in the real world. There are two major parts to this course:

I Data – which includes graphical and numerical summaries to describe the distribution of a variable, or the relationship between two variables (chapters 1, 2 and 3), and data production to learn how to design good surveys and experiments, collect data from samples that are representative of the whole population, and avoid common sources of biases (chapter 4.)

II Probability and Inference – using the language of probability and the properties of numerical summaries computed from a random samples (chapters 5, 6 and 7), we learn to draw conclusions about the population of interest, based on our random sample, and attach a measure of reliability to them (chapters 8, 9, 10).

Week	Topics Covered
1	Exploring Data with Graphs; Measures of Center, Spread and Position; Exploring Relationships Between Two Variables
2	Simple Linear Regression; Experimental and Survey Design; Probability Rules; Binomial and Normal Distributions
3	Sampling Distributions of the Sample Mean and Sample Proportion
4	Confidence Interval for the Population Proportion and Population Mean; Significance Test for the Population Proportion
5	Significance Test for the Population Mean; Comparing Two Ind. Means and Two Ind. Means; Comparing Means from Dependent Samples
6	Comparing Proportions from Dependent Samples

Course Objective

The primary goal of the course is to help students understand how the process of posing a question, collecting data relevant to that question, analyzing data, and interpreting data can help them find answers to real problems from their world.

3. Required Materials

1. **Lab Workbook for Statistics: The Art and Science of Learning from Data—3rd edition**
2. **Statistics: The Art and Science of Learning from Data** by Alan Agresti and Christine Franklin 3rd edition, Pearson, 2013 with **MyStatLab Access Code**.
3. **Scientific Calculator** that has some basic statistical functions: mean and standard deviation. Many inexpensive calculators (around \$10 to \$15) have these functions; check the manual or look for the following symbols: \bar{x} and either s or σ_{n-1} . All of the more expensive graphing calculator have them as well, but it is not necessary to buy one of them for this class.
4. **A Reliable Computer**
 - Windows Users: A reliable computer running Windows XP(minimum) Windows 7(recommended) (or higher) with 1024 MB of RAM or higher
 - Macusers: Mac OS X 10.7 Lion
 - A web cam with 640x480 video pixel resolution or higher.
 - Headphones or working speakers connected to the computer.

- A working microphone connected to the computer. We recommend a web cam that has a built in microphone. (Webcam must have 640x480 resolution, 1280by720 preferred.)
- A web browser with Adobe Flash Player installed. We recommend Flash Player 11 and Adobe Shockwave player.
- A reliable, high-speed internet connection (minimum 768 KBPS/384 KPS download upload or higher – recommended 1.5Mbps download and upload speed.) (wired connection preferred)
- The ability to allow video and screen-sharing connections to the computer you will be using to take your exam.
- Authority to allow remote access to your computer and screen one of the test proctors.
- Use this link to test your computer before the Exams.
<http://www.proctoru.com/testitout/>

4. Course Assessment

Assessment	Percent of Grade
Exam 1	30%
Exam 2	30%
Chapter Quizzes (4 in total)	8%
Lesson Quizzes	8%
Team Project	8%
Individual “Island” Project	8%
Homework Problems	8%

To find your grade, use the following formula.

$$\text{Grade} = (\text{Exam1})/100 * 30 + (\text{Exam2})/100 * 30 + (\text{ChapterQuizzes})/100 * 8 + (\text{LessonQuizzes}/100) * 8 + (\text{Team Project})/100 * 8 + (\text{Individual Project})/100 * 8 + (\text{Homework Problems})/100 * 8$$

5. Possible Grades for the Course

Letter Grade	Grade Points	Percentage of Points Needed
A	4.00	90 to 100%
A-	3.67	88.5 to 89.99%

B+	3.33	84.5 to 88.49%
B	3.00	80 to 84.49%
B-	2.67	78.5 to 79.99%
C+	2.33	74.5 to 78.49%
C	2.00	64.5 to 74.49%
D	1.00	60 to 64.49%
E	0.00	Below 60%

6. Course Websites

A. We will be using the new system, E-Learning (Sakai). This system can be accessed using your gatorlink id and password. For more information on E-learning, go to their homepage at: <http://lss.at.ufl.edu/>.

In E-Learning you will be able to:

- complete the lessons in the course.
- check the announcement home page
- find any updates to the Syllabus
- watch the lectures as streaming video as you complete the lessons
- take the online quizzes
- turn in portions of the collaborative assignments using the assignment tool
- ask questions in the “Piazza”
- check your grades

For any technical problems with E-Learning, please contact 392-HELP or learning-support@ufl.edu.

B. We will also be using MyStatLab for homework.

To register for Intro to Statistics 1 ONLINE - Megan Mocko Summer B 2013:

1. Go to pearsonmylabandmastering.com.
2. Under Register, click **Student**.

3. Enter your instructor's course ID: mocko19463, and click **Continue**.
4. Sign in with an existing Pearson account or create an account:
 - If you have used a Pearson website (for example, MyITLab, Mastering, MyMathLab, or MyPsychLab), enter your Pearson username and password. Click **Sign In**.
 - If you do not have a Pearson account, click **Create**. Write down your new Pearson username and password to help you remember them.
5. Select an option to access your instructor's online course:
 - Use the access code that came with your textbook or that you purchased separately from the bookstore.
 - Buy access using a credit card or PayPal.
 - If available, get 17 days of temporary access. (Look for a link near the bottom of the page.)
6. Click **Go To Your Course** on the Confirmation page. Under MyLab / Mastering New Design on the left, click **Intro to Statistics 1 ONLINE - Megan Mocko Summer B 2013** to start your work.

Retaking or continuing a course?

If you are retaking this course or enrolling in another course with the same book, be sure to use your existing Pearson username and password. You will not need to pay again.

To sign in later:

1. Go to pearsonmylabandmastering.com.
2. Click **Sign In**.
3. Enter your Pearson account username and password. Click **Sign In**.
4. Under MyLab / Mastering New Design on the left, click **Intro to Statistics 1 ONLINE - Megan Mocko Summer B 2013** to start your work.

Additional Information

See **Students > Get Started** on the website for detailed instructions on registering with an access code, credit card, PayPal, or temporary access.

7. Lessons

Each day in the course (5 days a week) you are going to be completing a lesson. This lesson will include text and video about the day's assigned material. As you work through the material, you will be filling in the lab workbook. It will also have several activities and short quizzes for you to accomplish. You should expect this lesson and the homework to take you about 2 to 3 hours per day.

- When you open the lesson, it will ask for your userid and a password. Enter your gatorlink id everytime. (For example, my email address at UF is mmeece@ufl.edu. So, I would put in mmeece into that space.) Also enter the class password "GoGators!". You will see a popup box that says that you have successfully connect

to ScoreCenter. After you have finished the quizzes, you will want to submit your scores to a Soft Chalk Score Center by hitting the Finish button at the bottom of the last page. As you complete the assignment, click save in order for the items that you have completed to be sent to the Score Center. As long as you hit save, you can stop the lesson and come back to work on it at a later time. There is an unlimited number of tries for each lesson up until the due date.

- After you finish the assessment, it will ask if you want a receipt of your completion of the lesson. If you want a backup of the grade, send the email receipt to your email account. Please do not send it to me unless you find that your score has not been posted after the due date in Sakai. The SoftChalk Score Center gets the results when you send it. The lesson must be completed by midnight of the third day that it is assigned. It is o.k. to complete lessons early. After the midnight on the third day, I will upload the lesson quiz scores to Sakai. Please check the schedule posted in Sakai for a more up to date list of deadlines. Please check your scores in a timely manner. All corrections to scores must be made by August 7th 5pm EST. To get your grade for this section, total up your points from each lesson and divide by the total number of points. Take this number and multiple by 100 to get your grade for this part.

8. Online Quizzes

Time: We will have 4 online chapter quizzes.

Quiz	Chapters	Dates
1	Chapters 1 - 3	Tuesday, July 9 th 8am to Thursday, July 11 th 11:59pm
2	Chapters 4 - 6	Friday, July 12 th 8am to Tuesday, July 16 th 11:59 pm
3	Chapters 7 – 8	Thursday, July 25 th 8am to Tuesday, July 30 th 11:59pm
4	Chapters 9 – 10	Friday, August 2 nd 8am to Tuesday, August 6 th 11:59 pm

Three attempts: You will be allowed three attempts for each quiz – each randomly generated, so the questions won't be identical. The highest grade is counted. Given all these opportunities, all students should do extremely well on the quizzes. Hopefully they will serve the purpose of improving your grade in the class, as well as be an important tool in learning the material for the course. To see your grade, click on “Gradebook 2”.

No makeups. There will be no makeup quizzes for any reason.

If you have questions, you are allowed to ask teaching assistants and the instructor questions about submitted attempts on the quiz only. Do not post questions about quiz questions on Piazza when the quiz is still running. Email the instructor or the TA. In your email, make sure that you show the work that you did on the problem.

Place: You can take the quiz on any computer that has internet access.

Popup Blockers: If you have a pop-up blocker activated on your machine, you need to allow pop-ups for this page. If you click on the quiz and nothing happens, you need to allow pop-ups for this website. If you need help to do this, contact the CIRCA help desk at 392-HELP.

Technical Problems: If you have problems with E-Learning, please contact the CIRCA help desk at 392-HELP for assistance.

Grade: To get your grade for this part, add up the four quiz scores.

9. Exams

There will be two online proctored exams. The exam will be multiple choice. Exams will cover a larger amount of material than the quizzes and will also place more emphasis in the understanding of concepts and ideas behind the formulas. You will have access to the spreadsheet in StatCrunch for the exam. **Academic dishonesty** on any exam will result in a grade of *zero* on that exam.

Assembly Exam Dates

Exams	Date	Time	Chapters in Book
Exam 1	Wed., July 17 th	Start time b/t 2pm to 5pm EST Exam length: 2 hrs.	Ch. 1 – Ch. 6 Sec. 3
Exam 2	Wed. August 7 th	Start time b/t 2pm to 5pm EST Exam length: 2 hrs.	Ch. 7 Sec. 1 – Chapter 10 Sec. 4

Makeup Exam Policy

- Contact the instructor prior to the exam - as soon as you realize you will be unable to take the test at the scheduled time. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite for scheduling a makeup exam under such extenuating circumstances.
- If you have an emergency on the day of the exam. The instructor must be contacted by midnight of the day of the exam via email.
- **To make arrangements for a makeup exam:** Contact the instructor at mmeece@stat.ufl.edu. Makeup exams will cover the same material as the regularly scheduled exam, but will not necessarily be in multiple choice formats.
- **Additional Note:** Being on vacation is not a valid reason to request a makeup.

Pre-Exam Checklist

- Go to ProctorU's FAQ: <http://proctoru.com/faq.php>

- Test out your equipment: www.proctoru.com/testitout
- Be sure that you are in a well lit room – must be daylight quality.
- Be sure to have your photo id ready.
- Be sure to bring a reflective surface such as a mirror, CD or DVD.

ProctorU information

You will be taking your exam through an online proctoring company. I have posted their information here for your convenience.

What We Do

ProctorU is a revolutionary new service that allows students to complete their assessment at any location while still ensuring the academic integrity of the exam for the institution. Using almost any web cam and computer, you can take exams at home, at work, or anywhere you have internet access.

Preparing for Your Exam

You will be connected to a live person during your exam that will be there to guide you through the process and assist with any technical problems. If you have any questions, please call our proctor line at 205-870-8122.

Appointments

Appointments are required to use ProctorU and all appointments need to be made at least 72 hours

in advance. If you register prior to 72 hours before the exam, there will not be an additional fee.

Reservations made within 72 hours of your exam are subject to a \$5 late reservation fee. There is also a “Take it Now” option that does not require prior reservation. However, it will cost you \$8.75.

To make an appointment, simply create an account at <http://go.proctoru.com>, log in, click on the “new exam” link and select the exam, date, and time you desire. You will receive a confirmation email of your reservations at the email address that you provided to ProctorU.

Procedure

Plan ahead for your session. Make sure you have a quiet, private location in which to take the test.

The area and room around your computer will be scanned using a web cam prior to your exam, so all non-authorized materials should be put away and the area should be clutter-free. If you are using a

public computer lab, you must have a web cam connection and use headphones, so you won't disturb others. You will also be required to show picture identification to your proctor at the time of your exam. Approved forms of identification include, but are not limited to, a driver's license, military identification card, passport, or school-issued identification card. No breaks are allowed during your testing session and cell phones and other devices will not be permitted in the testing area. No other people are allowed in the area in which the test is being taken. Any unauthorized notes or other attempts to cheat will abort the test session and will be reported to your instructor. At the date and time of your appointment, return to <http://go.proctoru.com>, log in, and a message will appear saying, "You have an exam. Click here to begin." Click on this button and it will automatically take you to the proctor page. Fill out your personal information and hit submit. You will then be directed to a screen which will connect you to your proctor. Just follow the steps on the screen and a proctor will be connected with you shortly. Once connected, your designated proctor will walk you through the set up process and you will log into your testing portal. Your proctor will also supply the password for your examination. Your exam time will begin when the proctor enters the examination password on your screen. If you have any problems connecting, please call ProctorU at 205-870-8122. Should you not be able to reach ProctorU via telephone you can email help@proctoru.com If you have scheduled an exam and you are late, your proctor will attempt to call you at the phone number you provided when you scheduled your exam. Should there be any UF login issues at the time of your scheduled exam your proctor will contact the course instructor or course coordinator and you will be able to reschedule your exam if necessary.

10. Lecture Notes

The notes in the Lab Workbook will be used in class. When you are following the lectures, you should always have the lecture notes in front of you. The instructor will go over the definitions and theory, and work out the examples on the spaces provided.

11. Homework Questions

Doing the homework is essential step in succeeding in this class. For every lesson, there will be about 10 to 30 minutes of work for you to complete in MyStatLab. You will have about 3 days to complete each of these homework assignments. The help functions have been turned on, so that you will have guidance as you are working on the problems. You may complete the homework problems as many times as you want. The highest score will be recorded. The homework scores will be kept in MyStatLab. Please view the Grade book in MyStatLab to see your homework scores. If you are having trouble understanding homework problems or course concepts, please post your questions on the Question and Answer Discussion Board. This way everyone will benefit from your question. **WARNING:** Because the help functions have been turned on in the course, homework scores are not always a good judge of how you are learning the material. Carefully, reflect on how often you have to use the help functions and how many times you submit the homework. Each homework is worth 10 points. To get your final homework score, add up all of your homework scores and divide by 220. Take this number and multiply by 100 to get your overall score.

12. StatCrunch

StatCrunch is an online statistical software package that comes with your MyStatLab access code. The data sets from the textbook are automatically entered. We will be using StatCrunch to work out problems throughout the semester. The lessons will include videos on how to do certain tasks and quiz you on these activities. You will also be using StatCrunch as part of your “Island” project and will be used on the test.

13. Projects

In this course, there is a team project and an individual project. The purpose of these assignments is to get a broader view of statistics outside of the classroom. More information and rubrics are provided on a link on the sidebar in Sakai. Each project will be graded out of 100 points and will count as 8% of your grade.

14. Office Hours and Review Sessions

Online Office Hours:

- During the semester there will be 11 hours of online office hours using the Chat function in Sakai. Please see the top of the syllabus for hours.

Live Review Sessions:

- We will also be having Live Review Sessions during the semester. Please email me about what questions you would like to go over in the review sessions. These live review sessions will be held in Adobe Connect. Attendance at the review sessions is not required. Sessions will be recorded and can be viewed at a later time by all. The review sessions will be conducted by the instructor, Megan Mocko. I will stay online for 15 minutes, if no one attends, I will close the session.

Very Tentative Dates of Review Sessions

- Tuesday, July 2nd 8 to 9pm
- Thursday, July 11th 4 to 5pm
- Tuesday, July 16th 8 to 9pm
- Wednesday, July 24th 4 to 5pm
- Thursday, August 1st 8 to 9pm
- Tuesday, August 6th TBD

16. Question and Answer Discussion Board

All students will have access to a Piazza in Sakai. Piazza is a great tool that will allow us to organize questions so that it is easier to find answers. Please try to post questions under the correct chapter or assignment heading. You are able to ask questions about lessons, videos, lesson quizzes, and homework questions. **DO NOT POST QUESTIONS ABOUT SAKAI QUIZZES OR TESTS.** Students who post Sakai quiz answers on the Discussion Board will be penalized. It will be considered an honor violation. Please send an email to the instructor to discuss private matters such as grades, medical excuses and DRC letters.

- <https://piazza.com/ufl/summer2013/sta2023sumb/home>

17. Hurricane Policies

Summer B semester overlaps with the hurricane season.

- **If a hurricane approaches the coast of Florida, but classes are not canceled at the University of Florida.** The course will continue as scheduled. You are required to keep up with the lectures, quizzes and labs. If you believe that your situation requires special consideration, please send an email or call the instructor immediately.
- **If a hurricane approaches the coast of Florida, and classes at the University of Florida are canceled,** the lectures, labs and quizzes will be suspended until the university re-opens. The University will announce this closure on the University of Florida homepage. Any announcements about the course will be posted at the course website.

18. Course Policies

- **Privacy Policies:** Student records are confidential. Only information designated “UF directory information” may be released without your written consent. UF views each student as the primary contact for all communication. If your parents contact me about your grade, attendance or other information that is not “UF directory information”, I will ask them to contact you.
- **Email**
Email relating to information about the class should be sent to your TA emails listed at the top of document or to the instructor at mmeece@stat.ufl.edu. Your message will be answered within one working day, in most cases. However, we ask you to please refer to this Syllabus and the course website to try to find the answers for yourself. Questions regarding the material covered and homework problems should be asked on the Piazza board. Questions about the quiz should be sent to your instructor and it should include the quiz number, attempt number and question number.
- **Instructor's Honor Code**
We the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.
- **Academic Dishonesty**
We adhere to the University of Florida rules and guidelines for handling instances of academic dishonesty. Please refer to the Office for Student Services for detailed information about the current policies.
- **Students with Disabilities**
Students who require special accommodations in class or during exams should follow the procedures outlined by the Disability Resources Program (<http://www.dso.ufl.edu/drc/>)
Please send the course coordinator (Megan Mocko) your letter of accommodations as soon as you receive the information. I must be emailed the form 7 days before the exam date for accommodations to be arranged.
- **Grading**
Grades will be changed only when an error has been made; negotiation is not appropriate.
- **Incompletes**
Incompletes are only assigned when extraordinary circumstances (such as an accident, or extended hospitalization), arising after the date for dropping the course, prevent the student from completing the course requirements. Having a failing grade in the course is not a valid reason for requesting an Incomplete.

19. Where to Get Help for this course:

- During Virtual Office Hours and Live Review Sessions
- Piazza in Sakai
- Via Emails to the instructor at mmeece@stat.ufl.edu

20. How to do well in the course

- Keep up with the lessons. Set a schedule for yourself and stick with it.
- Visit the course website regularly, to read announcements and take the online quizzes.
- Do well on the lesson quizzes, chapter quizzes, collaborative assessments and homework.
- Use the help function in MyStatLab to help you work out homework problems.
- Visit the online office hours and review sessions regularly to get help from the TA and your instructor. Our job is to clarify any questions that you may have, and to help you understand the material and learn to do the problems.
- Get to know other students in the class and get together regularly to work on homework problems, and to study for quizzes and exams. When not in use for official office hours, feel free to use the chat room to discuss material.
- Prepare carefully for exams by going over the lectures, doing your homework and practice questions, studying your quizzes and reading the book. Pay special attention to the understanding of concepts and ideas behind the formulas.

21. How to get the most out of the online lectures

- Set aside time each week to watch the lectures.
- You should watch and read the lessons on a regular schedule.
- Complete the lessons and then do suggested homework assignment.
- Actively involve yourself in the lesson. Be inquisitive. Work out the lesson quizzes and activities. Learning is not a spectator sport. Jump in and work on the problems.
- Watch the lecture videos and complete the lessons in a low disruption environment. In addition, to watching the lecture, you should not be also texting, instant messaging, emailing, reading a website, watching TV, etc. Your attention should be focused on the lecture.
- I have carefully considered what needs to be discussed in the lessons. Make sure that you are paying attention to all of it.

22. Problems

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See <http://distance.ufl.edu/student-complaints> for more details.

- Please contact the instructor first via email at [mmeece AT ufl.edu](mailto:mmeece@ufl.edu) first.
- If necessary after that, please contact the chair of the Statistics department at 392-1941.

23. Instructor Course/Evaluations

- Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu/>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.