

Florida State University, Department of Statistics
Statistics Through Example (STA1013)
3 credit hours
Fall 2019

Instructor: Lexi René

Instructor Email: LRene@fsu.edu

Lecture: Section 19 and Section 20

Office Hours: Wednesday 12pm - 1pm, or by appointment

Office Location: 210E Oceanography/Statistics Building (OSB)

Online Mentor: Yang Chen (ychen12@fsu.edu) [office hours are by appointment]

Prerequisites: None

Class Location: This is an online course, you will need access to a computer and a **stable** internet connection.

Course Description

This course provides students with a background in applied statistical reasoning. Fundamental topics are covered including graphical and numerical description of data, understanding randomness, central tendency, correlation versus causation, line of best fit, estimation of proportions, and statistical testing.

Statistical thinking, relevant ideas, themes, and concepts are emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting data, organizing it, summarizing it, and drawing conclusions from it.

Course Objectives

This course has been approved to meet FSU's Liberal Studies **Quantitative and Logical Thinking** requirements and is designed to help you become a critical analyst 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.

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

(1) Select and apply appropriate methods (i.e., mathematical, statistical, logical, and/or computational models or principles) to solve real-world problems.

(2) Use a variety of forms to represent problems and their solutions.

The above two competencies will be assessed in the Liberal Studies Quantitative Assessment for STA1013, which includes a written summary of results.

(3) Apply sound concepts of sample selection and experimental design in producing data.

(4) Use statistical thinking in the context of work processes, academic endeavors, and everyday life.

(5) Describe how inferential statistical methods are used to make valid judgments based on the data.

(6) Evaluate the validity of statistical results with skepticism based on sensible considerations.

Required Materials:

- MyStatLab. See last page of the syllabus. This is the textbook requirement for the course. No other (textbook) materials are required.

- ProctorU, which requires the following:
 - **stable** high-speed internet connection
 - webcam (internal or external)
 - Windows or Mac Operating System

- Chrome browser and extension installed
- government issued photo ID
- Graphing Calculator. Preferred models are: TI-83, TI-83+, TI-84, TI-84+

Grade Composition

| | |
|------------------|-----|
| Homework | 15% |
| Quizzes | 50% |
| Cumulative Final | 35% |

There is **no** extra credit in this course

Fees associated to this course

MyStatLab with eText : \$99.95 USD (one- time fee)

ProctorU Integration within MyStatLab: \$ 12.00 USD (one- time fee)

- Students will be required to pay this fee when they connect to take their first proctored quiz/exam. This fee will cover all other exams/quizzes in STA1013 for the rest of the semester
- There is additional documentation at the end of the syllabus regarding ProctorU

Note: ProctorU is a proctoring company. Because proctored testing fees are considered an educationally related expense, students may use financial aid toward their proctored testing fees, just as they would toward books and supplies

Note on Technology-dependent Assessments (Technical Issues)

This course is heavily technology-dependent. While we will do our best to work with you on technology issues, please be aware that if you take an assessment but we can find absolutely no record of the fact, then we will **not** be able to give you credit for it.

*If you are experiencing issues with a quiz/exam on MyStatLab and ProctorU is running in the background please reach out to ProctorU support. Save any interactions that you have with them (screenshots, etc), if your problem remains unresolved please reach out to me via email **ASAP** at LRene@fsu.edu with the subject as : STA1013_F19, Issue with MyStatLab.*

*If you are locked out of a quiz and need access, please reach out to me via email **ASAP** at LRene@fsu.edu with the subject as : STA1013_F19, MyStatLab Locked Out.*

Types of Assignments

- Homework
 - Assigned on MyStatLab **are mostly due on Friday's** at 8:00PM ET
 - Homework is used to practice problems for each topic and reinforce lessons from the topic and therefore there are unlimited attempts on each homework question
 - There are a lot of questions per homework assignments; you may dedicate at minimum 40 mins to each homework assignment
- Quizzes
 - **Quizzes must be taken individually and can only be taken once.**
 - You will be allowed unlimited **handwritten** notes on each quiz

- You are **not allowed** to use any search engines while taking a quiz; the only tab that should be open on your browser is the tab for the quiz
- Allot a minimum of 60 mins per quiz, you will have a timer present at the top of the screen
- You will not be allowed to access the chapter within the MyStatLab site during the quiz
- Assignments on MyStatLab **will mostly be due on Friday** at 8:00PM ET
- Quizzes open on the Monday of the week that the quiz is due at 12:00AM ET
- Quizzes are meant to demonstrate your understanding of the topics in each chapter.
 - Upon immediate completion of the quiz you will only be able to see your score
 - You will be able to review and print your results for each quiz after the due date passes (typically that Friday after 8PM). If there are any issues or questions regarding the grading/ solutions of an assignment, please contact the instructor within 7 days of the due date for that quiz; If I am not made aware of errors, I cannot add points back.
 - Practice quizzes open a week before that quiz is due. You will have 2 attempts. You can only view your results immediately after you submit the quiz, once you leave the page you will not be able to access those results. **Practice quizzes are optional and do not count towards your final grade.**
- Common Assessment: **The common assessment is the quiz for Chapter 5 and Chapter 8.1.** The common assessment will be taken between October 7th and October 11th. The quiz will cover normal distributions and the central limit theorem.
- You are typically given 1 hour to complete a quiz, one or more quizzes may allot for more time, however there will be a timer at the top of the screen
- Final
 - The final will be cumulative
 - You will be allowed an unlimited amount of notes on the final as well as your calculator
 - You are given 2 hours to complete the final

Optional Material Available:

- Supplementary Lecture Videos & Material (posted on Canvas)
 - There will be supplementary videos and additional material posted on Canvas. The information covered in these videos will cover in-depth topics from the textbook.
 - Videos will be posted under Class Media tab and additional material can be found in the Files tab

How Grades Are Posted

- Pearson / MyStatLab
 - **Grades posted here will be the grades used for your final grade calculation**
 - MyStatLab will assume your final grade based on your current grades, please be aware that these grades are estimating your homework and quiz grades that are not yet taken. To calculate your grade accurately, please pay attention to the grade composition in the sections above.
- Canvas
 - **"Grades" posted here will NOT be used for final grade calculation**
 - Canvas "grades" will be used only for the purpose of showing assignment completion from Pearson
 - The completion grades will be updated as the due date for the assignments are approaching and once again after the due date for the assignments have past
 - Completion Grades Scoring:

- For the homework
 - 1 means that the homework on Mystatlab has 100%
 - 0 can mean that the homework on Mystatlab is less than 100% **OR** that the homework on Mystatlab is incomplete
 - If you have 100% on the Mystatlab homework but your “grade” on Canvas is a “0” **and** two *business* days have passed please send the grader an email at ychen12@fsu.edu with the subject as: STA1013_F19, Update Canvas HW Grade
- For the quiz
 - 1 means the quiz was taken, regardless of the grade received
 - 0 means that the quiz was not taken

Important Dates

- First Day Attendance: Due Thursday, August 29th, 2019 by **11:00 PM ET**
 - “First Day Attendance” assignment on MyStatLab. Complete this to be marked as present so that I am able to ensure you have been able to gain access to MyStatLab. If you do not complete this assignment, **you will be dropped from the course.**
- Common Assessment (*This is counted in the quiz section (same weight as all other quizzes) of your grade composition*): Due Friday, October 11th, 2019
 - You will need to go to a testing center between October 4th and October 11th to take this quiz.
- Last day to withdraw from this course without a grade: Friday, October 11th, 2019
- No classes:
 - Homecoming: October 25th, 2019
 - Veteran’s Day: November 11th, 2019
 - Thanksgiving Break: November 27th – 29th, 2019
- Final Exam: **Due** December 13th, 2019 at **4:30PM ET** (Exam must be **finished** by this time)
 - You will complete this exam on MyStatLab

Grading

Grade cutoffs will be established at the end of the course, but will not be stricter than the following cutoffs.

| | |
|-----------|------------------|
| ≥ 94%: A | ≥ 73%: C |
| ≥ 90%: A- | ≥ 70%: C- |
| ≥ 87%: B+ | ≥ 67%: D+ |
| ≥ 84%: B | ≥ 63%: D |
| ≥ 80%: B- | ≥ 60%: D |
| ≥ 77%: C+ | < 60%: F |

Errors in Solutions to Quizzes/Homeworks:

This class depends on Pearson (MyStatLab). If you run into any errors in the solution, yes, they might exist, please inform the instructor ASAP (email me at LRene@fsu.edu , subject: STA1013_F19, Incorrect Solution OR subject: STA1013_F19, Grade Appeal). I will review the question and the solution, if the solution is incorrect I will remove the question from the test bank. I do go through the problems that are

assigned, however incorrect solutions may appear as questions are randomly generated per student. If nothing is brought to my attention I am under the assumption that the solutions are correct.

Missing/Late Quizzes and Homeworks:

Make-ups and late work will **not** be allowed unless the student has official documentation for an excused absence; see the **University Attendance Policy** below for more information on excused absences. It is up to the discretion of the instructor as to how to handle excused absences. No documentation will be accepted any later than **one week after the absence**. *The make-up must be completed within one week of the date that the assignment was due, unless special circumstances apply, the absence should be accompanied by the proof of documentation.* All documentation will be emailed to me, the instructor, please see below for steps on emailing me.

Students with Disabilities:

It is not appropriate for an instructor or a grader/online mentor to disclose a student's disability information to each other. The student must therefore self-identify to both the instructor and the grader/online mentor, and must do so in such a way that each is aware that the other knows. Therefore, students should provide an **unexpired** academic accommodations letter from the Student Disability Resource Center (SDRC) to **both** me, the instructor (LRene@fsu.edu), and the grader/online mentor (YChen12@fsu.edu) in the same email. Please note that instructors are not allowed to provide accommodations to a student until appropriate verification from the Student Disability Resource Center has been provided and accommodation can not be used for work submitted prior to providing the instructor with the documentation.

If you would like to use the SDRC facilities for any quizzes or exams, you will need to access Pearson (MyStatLab) on their computer and it must have access to a camera to utilize ProctorU. If you plan to use these services, please give me a minimum of 1 week's notice to coordinate with the SDRC testing center.

Grade Appeals:

Errors in grades must be reported **within one week of the due date** of the assignment in question. If you get an answer wrong on a quiz and believe that you may be right, you are able to send an email to the instructor (LRene@fsu.edu , subject: STA1013_F19, Grade Appeal). You must provide your justification for the answer that you selected. The problem will be reviewed and if you are correct, you will receive points back for that question. If no appeals are made within the one week time frame, it is assumed that the grade is accepted and will not be changed.

No homework or quiz grades will be adjusted after *December 6th, 2019 8:00pm ET.*

Final Exam Rescheduling Policy:

You may not take the final exam before final exams week. Individual students who need to reschedule the final exam for a different time during final exams week will need to

- (i) talk to me about it first and get my permission to reschedule,
- (ii) fill out the "Request to Reschedule Final Examination" form at

<https://artsandsciences.fsu.edu/students/undergraduate/forms-requiring-deans-approval/rescheduling-final-examination> and take it to the Dean of Arts and Sciences office at 010 LON to get it approved, and

- (iii) bring the approved form back to me by the last day of classes.

If you experience a documented emergency that prevents you from observing the above deadline, contact me as soon as you are able to, and we'll take it from there.

Course Website:

All pertinent information for this class will be posted on the course website at <http://fsu.instructure.com> (Canvas) and MyStatLab (www.pearson.com/mylab). Go to Canvas for class announcements, important dates, etc. **You are responsible for all information sent by email, included in this syllabus, and posted on the course website (Canvas) and posted on MyStatLab (Pearson).**

On the MyStatLab website you have access to a Multimedia Library where you can view Powerpoints or each chapter (provided by Pearson).

Contacting the instructor or grader outside of class:

You are encouraged to ask questions and come to my office during office hours for additional help. If your schedule conflicts with my office hours, you can make an appointment. You may also ask me questions by e-mail, but questions are, usually, better answered in person. Please note it may take 24-72 hours, or even longer if there is a delay in the system, for me to respond to your email. When you send e-mails outside of Canvas please remember the following:

Steps to email me, the instructor, Lexi René (Instructor René):

Preferred Email: LRene@fsu.edu
Subject: STA1013_F19, "Topic of Email"

Steps to email the grader/online mentor, Yang Chen:

Preferred Email: YChen12@fsu.edu
Subject: STA1013_F19, "Topic of Email"

Course Topics:

- Statistical study process
- Types of Data: population, sample, parameter, statistic, categorical, quantitative
- Sampling: simple random sample, systematic, stratified, cluster, convenience
- Visual Displays of data: histograms, stemplots, bar charts, pie charts, boxplots
- Summary Statistics
- Empirical Rule
- Normal Distribution
- Central Limit Theorem
- Probability
- Expected Values
- One Sample Hypothesis Tests
- Correlation
- Simple Linear Regression

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Sexual Misconduct and Title IX Reporting

As an instructor, I am obliged to report all instances of sexual misconduct that I become aware of to the University's Title IX Director; I cannot hold such information confidential. If you would like to discuss your situation in confidence, you may contact the Victim Advocate Program (<https://dos.fsu.edu/vap/>), the University Counseling Center (<https://counseling.fsu.edu/>), the Employee Assistance Program (<https://eap.fsu.edu/>), or University Health Services (<https://uhs.fsu.edu/>).

Final Exam Rescheduling Policy

You may not take the final exam before final exams week. Individual students who need to reschedule the final exam for a different time during final exams week will need to:

- (i) talk to me about it first and get my permission to reschedule,
- (ii) fill out the "Request to Reschedule Final Examination" form at <https://artsandsciences.fsu.edu/students/undergraduate/forms-requiring-deans-approval/rescheduling-final-examination> and take it to the Dean of Arts and Sciences office at 010 LON to get it approved, and
- (iii) bring the approved form back to me *by the last day of classes*.

If you experience a documented emergency that prevents you from observing the above deadline, contact me as soon as you are able to, and we'll take it from there.

(1) 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.

(2) Religious Holiday Attendance Policy:

Per Section 1006.53, Florida Statutes, the Florida State University policy on observance of religious work-restricted holy days provides that students shall, upon notifying their instructor, be excused from class to observe a religious work-restricted holy day of their faith. While students will be held responsible for the material covered in their absence, each student shall be permitted a reasonable amount of time to make up the work missed. (<http://registrar.fsu.edu/bulletin/undergraduate/information/integrity/>)

**** Students should submit a self-written-and-signed letter, via email, at least one week before the holiday informing the instructor that they will be absent due to their religious holiday. (Subject: STA1013_F19, Religious Observance)****

(3) 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>)

(4) 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.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

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/>

Tentative Pacing Schedule

ALL ASSIGNMENTS ARE DUE BY 8:00PM ET unless noted otherwise.

Each chapter has homework and a quiz.

You are welcome to work ahead on homework in MyStatLab if you wish however all **quizzes**, except for chapters: 1, 2, & 9, will **open the Monday of the week that they are due**.

| Week | HW/Quiz # | Chapter Due | Due Date |
|--|-----------|---|---|
| 1 | | "First Day" Attendance | Thursday August 29th, 2019 11:00 PM ET |
| 1 & 2 <i>Both quizzes open Aug 30</i> | 1 | Speaking of Statistics Ch 1 | Friday September 6th, 2019 |
| | 2 | Measurement in Statistics Ch 2 | Friday September 6th, 2019 |
| 3 | 3 | Visual Displays of Data Ch 3 | Friday September 13th, 2019 |
| 4 <i>Quiz ~75mins</i> | 4 | Describing Data Ch 4 | Friday September 20th, 2019 |
| 5 | 5 | Probability in Statistics Ch 6 | Friday September 27th, 2019 |
| 6 | 6 | A Normal World: Ch 5 & From Samples to Populations: Ch 8.1 | Friday October 11th, 2019 |
| 7 | | | |
| 8 | 7 | From Samples to Populations Ch 8 (Confidence Intervals for Means and Proportions) | Friday October 25th, 2019 |
| 9 | | | |
| 10 | 8 | Correlation and Causality Ch 7 | Friday November 8th, 2019 |
| 11 | | | |
| 13 & 14 <i>Quiz opens Nov 18</i> | 9 | Hypothesis Testing Ch 9 | Tuesday November 26th, 2019 |
| 15 | | Study Week | |
| 16 | | Final Exam | Friday December 13th, 2019 Completed by: 4:30PM ET |



MYSTATLAB Instructions

MyStatLab provides access to the textbook within their website. You do NOT need to purchase a digital version of the textbook for any reason.

To register for STA 1013 Online :

1. Go to www.pearson.com/mylab
2. Under Register, select **Student** .
3. Confirm you have the information needed, then select **OK! Register now** .
4. Enter your instructor's course ID: **rene93727** , and **Continue** .
5. Enter your existing Pearson account **username** and **password** to **Sign In** .
 - » You have an account if you have ever used a MyLab or Mastering product.
 - » If you don't have an account, select Create and complete the required fields.
6. Select an access option.
 - » Enter the access code that came with your textbook or that you purchased separately from the bookstore. **** **you do NOT need to purchase a physical copy of the textbook as the digital version is provided within the site at no additional cost******
 - » If available for your course,
 - Buy access using a credit card or PayPal.
 - Get temporary access.
7. From the You're Done! page, select **Go To My Courses** .
8. On the My Courses page, select the course name **STA 1013 - Fall 2019** to start your work.

To sign in later:

1. Go to www.pearson.com/mylab
2. Select **Sign In** .
3. Enter your Pearson account **username** and **password**, and **Sign In** .
4. Select the course name **STA 1013 - Fall 2019** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearson.com/mylab
2. Select **Sign In** .
3. Enter your Pearson account **username** and **password**, and **Sign In** .
4. Select Upgrade access for **STA 1013 - Fall 2019** .
5. Enter an access code or buy access with a credit card or PayPal.



ProctorU is an online proctoring service, integrated in Pearson/MyStatLab, that allows you to take your exam from the comfort of your home. ProctorU's Automated service is available 24/7 and does not require scheduling.

A walkthrough of how the service works: <https://www.youtube.com/watch?v=FJTsk7z598s>

You will need a ProctorU account **and** the ProctorU Chrome extension installed for the program to work properly.

Creating a ProctorU account is easy. Simply visit go.proctoru.com to create your account. Additionally, you may install the extension by visiting the link below:

<https://chrome.google.com/webstore/detail/proctoru/goobgennebinldhonaajgafidboenkl/related>

Pearson/Proctoru Auto support: <https://lc.chat/nw/5534391/18>

In order to use ProctorU you will need **all** of the following:

- high-speed internet connection
- webcam (internal or external)
- Windows or Mac Operating System
- Chrome browser and extension installed
- government issued photo ID

Visit the test taker [resource center](#) to learn more!