

FLORIDA STATE UNIVERSITY DEPARTMENT OF STATISTICS



LIBERAL STUDIES QUANTITATIVE AND LOGICAL THINKING STA2122 INTRODUCTION TO APPLIED STATISTICS SYLLABUS SPRING 2019 SECTIONS 0032/0023

Instructor: Shaokang Ren	Class time: 0032: 8:00-8:50 AM MWF		
Email: <u>sr17k@my.fsu.edu</u>	0023: 9:09-9:55 AM MWF		
Office location: OSB Room 201A	Final Exam : TUE Apr 30 th , 3 PM- 5 PM.		
Office Hours: Tuesday 2:00 -3:00 PM	Location: HCB 0312(0023)		
	OSB 0110(0032)		

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.

Course Description

Prerequisite: A grade of "C-" or better in MAC 1105 College Algebra (or equivalent). **Credit Hours:** 3

Special Note: No credit given for STA 2122 if a grade of "C-" or better is earned in STA 2171, STA 3032 or QMB 3200.

The course covers Normal distributions, sampling variation, confidence intervals, hypothesis testing, one-way and two-way analysis of variance, correlation, simple and multiple regression, contingency tables and chi-square tests, non-parametric statistics.

The purpose of this course is to prepare students for further study and job preparation in the field of Natural Sciences. 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.

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.

(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) Select the appropriate statistical tools to analyze a particular problem.

(6) Describe the goals of various statistical methodologies conceptually.

(7) Develop a healthy skepticism toward statistical studies and their results based on a sensible consideration of the techniques employed.

Required Materials

A textbook is not required for this class; however, you will need to read each set of completely filled in class notes carefully after we cover them in lecture and before the quiz/LSQA that follows.

We will fill in the class notes during lectures.

Class notes: You will need to print out class notes from our Canvas STA2122 FA18 DOCS course site and bring them to class on a regular basis, so please budget some money for printing. The current estimate of your printing costs for the entire term is \$80.00 (about 400 pages @ 20 cents/page).

Writing materials: Notepaper and sharpened pencils.

Calculator: TI-84 Plus or equivalent.

Email & Communication

~ please check your @my.fsu.edu email every day for emails from me

~ if you email me, please send from your @my.fsu.edu account

 \sim send assessment-related questions at least 24 hours before the assessment is due to begin

 \sim be aware that email sent from outside the FSU domain may not get through to me, so if you send an email and you don't get a response within two working days, please try to meet me in person before class or after class or during office hours

 \sim in general, if you email me and you don't get a response within two working days, and if you are still attending classes and are not confined off-campus, please talk to me in person before class or after class or during office hours

Pacing Schedule:

In the other file.

Guidelines	Quizzes (50%)	Liberal Studies Quantitative Assessment (LSQA) (10%)	Final Exam (30%)	Activity (10%)	1
Time	50mins	50mins	120mins	1	1

ASSESSMENT AND GRADING

*Final exam covers all the materials this semester.

*Students must sign on the roster for each test and for attendance to receive the grades.

*No communication is allowed during quizzes, LSQA and final exam.

*In all tests, you can bring a calculator, but may not share calculator with others or use the phone as calculator.

*Please keep the phone away from you during the test.

* you may use ONE self-planned self-handwritten back-and-front 8¹/₂"x11" original sheet of notes

for the LSQA and each quiz

* you may use TWO self-planned self-handwritten back-and-front 8¹/₂"x11" original sheets of notes for the final exam

*There will be group activities or one-question test during the class to check the attendance. The activity or test themselves will not be counted.

*The lowest quiz score gets dropped.

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 question disclosures reduce the worth of the degree that 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.

Overall Course Grade

We do not do grade calculations on Canvas at all, we only use the Canvas grade center to store and display individual assessment grades. Please ignore the grade totals or averages that you may see there. All grades will be recorded as percentages stated above.

Letter	Num.Grade	Letter	Num.Grade	Letter	Num.Grade	Letter	Num.Grade	Letter	Num.Grade
FSU do	not award A+	B+	(86,89]	C+	(76,79]	D+	(67,69]		
А	>92	В	(82,86]	С	(72,76]	D	(62,66]	F	<=59
A-	(89,92]	B-	(79,82]	C-	(69,72]	D-	(59,63]		

For the letter grade you will received in the end:

Receiving a grade of "Incomplete"

A request for a grade of "Incomplete" will

~ NOT be granted if you have completed all of the coursework, including the final exam.

- ~ be granted only if both of the following conditions are satisfied:
- (1) you have completed the LSQA and all of the quizzes and activities, and

(2) your overall average excluding the final exam is a passing grade.

Make Up Policy and Penalty for missed-assessment, activity, absence

1. If you must miss a quiz or LSQA, you can make it up by attending the quiz-making up class which are on the last two Fridays of this semester. One cannot miss the test more than 3 times without formal excuse. If you miss the class more than three times, please

send me the documentation that proves your absence. If you are encountered with some emergency just before the class, please let me know within 48 hours after the class and provide a documentation if possible.

More Details:

ASSESSMENTS THAT ARE NOT TAKEN, OR NOT MADE UP, WILL RECEIVE A ZERO GRADE.

ABSOLUTELY NO MAKE-UPS ARE ALLOWED AFTER THE LAST DAY OF CLASS; MAKE-UPS ARE NOT ALLOWED DURING FINALS WEEK.

ABSOLUTELY NO DOCUMENTATION WILL BE ACCEPTED AFTER THE LAST DAY OF CLASS. PLEASE SUBMIT ANY DOCUMENTATION BY THE DEADLINES MENTIONED IN THE TABLE BELOW.

ABSENCES TYPE	Activities	Quizzes & LSQAzes— –first 3 absences	Quizzes & LSQAzes—— 4th and subsequent absences
Contact me	Within two weeks.	No need	Within one week.
Submit documentation	Within two weeks.	No need —but keep your documentation in case I need it later.	Within one week. At the time of the 4th absence, you will need to submit documentation for ALL absences up to and including the 4th, within one week of the 4th absence.
Make up the missed assessment	Within two weeks. In my office hours or by any appointment.	You'll make up two of them in recitation on the two make-up days and one will be dropped.	Three of them will be covered by the two make-ups and one will be dropped.

*If you miss one class, please read the material yourself or come to my office hours.

* Excused absences are listed in the University Attendance Policy on the next page.

Grading appeal policy: During the course of the term, if you believe that a paper was improperly graded, please come to my office hours to see your paper and discuss with me.

Sexual Misconduct and Title IX Reporting

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

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 <u>https://artsandsciences.fsu.edu/students/undergraduate/forms-requiring-deans-approval/rescheduling-final-examination</u> 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.

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.

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/academic-resources/academic-integrity-and-grievances/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.
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) 644-8504 (TDD)
sdrc@admin.fsu.edu

http://www.disabilitycenter.fsu.edu/