

	<p style="text-align: center;">DEPARTMENT OF STATISTICS STA 2122 INTRODUCTION TO APPLIED STATISTICS SECTIONS 0020 and 0025 3 credit hours</p>	 <p style="text-align: center;">QUANTITATIVE AND LOGICAL THINKING</p>
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<p>Instructor: Hunter Melton Email: hjm19d@my.fsu.edu Room: OSB 110 Class time: MWF 8:00-8:50am (0020) MWF 9:20-10:10am (0025)</p>	<p>Office Location: OSB 424 Office Hours: Monday: 10:15-11:15am Wednesday: 10:15am- 11:15am January 5th to April 29th Course website: canvas.fsu.edu</p>
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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 MAC1105 College Algebra (or equivalent).

Special Note: Subsequent credit for STA 5126 is not permitted. 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.

This course will, assuming no further restrictions occur during the semester, be taught entirely in person. We will have online assessments, but we will not use honorlock.

REQUIRED MATERIALS

Class notes: A textbook is not required for this class. However, you may want to print out class notes from the course website and have them available to fill in during class on a regular basis. We will fill in the class notes during lectures. If you are able to write on an electronic version of the notes (as opposed to a paper version), you may wish to do so.

Writing materials: Notepaper and sharpened pencils.

Calculator: TI-84 Plus or equivalent. I will help you to learn how to use a TI-84 series calculator. I cannot promise to be able to help with any other type of calculator. You can also buy a TI-84 emulator, like I use on my computer, for slightly cheaper than an actual calculator.

NOT REQUIRED MATERIALS

The following free online textbook is an additional resource that you might find useful: Introductory Statistics from OpenStax, Print ISBN 1938168208, Digital ISBN 1947172050,

[https://urldefense.com/v3/http://www.openstax.org/details/introductory-statistics ;!!Epnw_ITfSMW4!4AKvOjcx2JyvhBDsGiZ5UGe6zLmenjgBHdYIrr7nxt-RI0M307vMNB3tkrvGg_aFIxA\\$](https://urldefense.com/v3/http://www.openstax.org/details/introductory-statistics;!!Epnw_ITfSMW4!4AKvOjcx2JyvhBDsGiZ5UGe6zLmenjgBHdYIrr7nxt-RI0M307vMNB3tkrvGg_aFIxA$)

LEARNING 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 STA2122, 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) 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.

EMAIL & COMMUNICATION

~ Please **turn on the course notifications on Canvas** by going to Account / Notifications / and checking the *Notify me right away* option for all of the items under Course Activities.

~ Apart from conversation in lecture and during office hours, I will communicate with you by sending emails to your @my.fsu.edu account and posting announcements on the course website. **Please check your email and the announcements every day.**

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

~ If you email me and you don't get a response within two business days, please talk to me in person during office hours or send another email.

- ~ Please send assessment-related enquiries at least 24 hours before the assessment will start.
- ~ If you email me with an inquiry that was previously addressed in the syllabus, in a class email or in a course announcement, you may not get a response.
- ~ Always **include your name** when you email me. If we need to know this information in order to answer your query and you have not provided it, you may not get a response

ACADEMIC SUCCESS

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers (there isn't a statistics tutoring center, but I'm required to put this statement on the syllabus as it is), computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Dean of Students office to learn more.

LECTURES

According to my current plan, we will have lectures on Mondays and Wednesdays, and we will do practice problems or work on homework on Fridays. Hopefully we can maintain this schedule, but it may need to be adjusted if we get off pace. It is expected that you attend each and every lecture. If you miss a lecture, I will post old lecture videos that cover roughly the same material for you to watch and stay caught up.

If I get sick or otherwise cannot make it to class, I will post a video lecture to Canvas. Recorded lectures are FSU properties and only available to students enrolled in your class. Students are not allowed to share the recorded lectures to any other people outside the class. Copyright of the recorded lectures are reserved by the instructors and FSU.

TENTATIVE PACING SCHEDULE

The tentative pacing schedule is posted on Canvas. I'll do my best to follow it, but note that it is tentative.

NOTE ON TECHNOLOGY DEPENDENT ASSESSMENTS

This course is heavily technology dependent. While I will do my 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. Please DO NOT USE SAFARI when you take assessments on Canvas - please use Chrome or Firefox.

ASSESSMENT AND GRADING

There will be **absolutely no make-ups, no extra credit assignments, and in general, no opportunities for grade improvement, after the Last Day of Class**, so please do your best during the term. Assessments that are not taken, and assignments that are not submitted, will receive a grade of zero. When a missed assessment/assignment is made up, the zero will be replaced with the earned grade.

Your overall course grade will consist of the following:

Assessment	Quantity	Weight
Online Homeworks (OH)	6 drop 1 = 5 counted	15%
LSQA	1	10%
Online Exams (OE)	5 drop 1 = 4 counted	50%
Final Exam	1	25%
Total		100%

Online Homeworks (15%)

These homeworks will be on Canvas and will be designed to see if you are engaged in the course and up-to-date with what is being taught. They will be testing both knowledge gained and effort put in. Multiple attempts will be allowed over a week or two. They will be typically be assigned Monday morning and due approximately two weeks later. They are in the form of Canvas quizzes but there are unlimited attempts. There will be no make-ups and no extensions, but I will drop your lowest grade. These are homeworks, so, if you need help, feel free to ask me via email or during office hours. Also, I encourage you guys to collaborate with your classmates on the homeworks.

CLASSROOM ASSESSMENTS	
LSQA (10%)	Online Exams (50%)
Mandatory; not dropped; not substituted	Lowest grade dropped.
Will be available on Canvas from classtime Friday until 11:59pm Sunday.	
60 minutes (1 hour) allowed, two attempts allowed.	
Will generally not be cumulative, except in the sense that the material is naturally cumulative.	
The questions will include a few question types that were <u>not</u> previously presented in the class notes or exercises, but these question types will cover material that was definitely previously presented. This means that you should aim to learn the concepts and not just learn how to answer specific types of questions.	
Each assessment is open note, but collaboration is NOT ALLOWED.	
You will want to use a TI-84 Plus or equivalent calculator.	
Solutions to exams will not be posted, but you may discuss them with me in office hours.	

DO NOT COMMIT ACADEMIC DISHONESTY. **Collaboration is not allowed for the online exams.** I understand that, given the online class format, there are numerous temptations. Please do not take them.

I reserve the right to impose a penalty on your grade if you violate any of the guidelines above.

To prepare for the online exams:

- ~ the topics/class notes covered will be announced on the course website prior to each assessment;
- ~ study thoroughly the information and examples in the class notes that are specified in the announcements, your notes should have all of the examples that we did in lecture filled in, the notes are incomplete without the filled-in examples;
- ~ do all of the try-on-your-own exercises in the notes;
- ~ do all of the extra/investigative exercises posted with the notes;
- ~ study the solutions even if you get the answers right because the solutions can provide insights to the problems;
- ~ make sure you know how to use your calculator appropriately; and
- ~ come to office hours for additional help if necessary
- ~ There will be a few review days throughout the semester where I will hold Q&A sessions with anyone who can attend during regular class time.

Final Exam (25%)

- ~Cumulative
- ~You'll be given 2 hours to take it, and two attempts.
- ~It will be on Canvas available for you to take from 8:00am Monday to 11:59pm Friday of final exam week

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 [here](#) and get it approved by the Dean of Arts and Sciences office, and

(iii) let me have the approved form 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.

Test Question Security & Academic Honesty

The following pledge and affirmations will be printed on most classroom assessments (wording may vary slightly). I regret to say that if you do not sign the pledge and affirmations, I will not grade your paper and your grade will be zero. Please bear in mind that academic dishonesty and question disclosures reduce the worth of the academic qualification that you are working toward. Since the assessments are on Canvas, this will take the form of a multiple choice question. Be sure you mark the selection saying you have read and agree to the academic honesty pledge.

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. 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 recalculated, accordingly, and my course letter grade will be demoted if necessary.

I affirm that I did not receive help with this assessment and I affirm that I did not help anyone with this assessment.

Overall Course Grade

Please ignore the grade totals or averages that you may see on Canvas; they are not correct. In this class, we only store and display individual assessment grades on Canvas, we do not do grade calculations there. All grades will be recorded as percentages, and these percentages (not points) will be used in your overall course grade calculation as described in the following steps:

(i) Online Homework Average = average of all the Online Homework percentages (omitting the lowest one);

(ii) Online Exam Average = average of all the Online Exam percentages (omitting the lowest one);

(iii) Overall numerical course grade = $0.15 \times \text{Online Homework Average} + 0.10 \times \text{LSQA percentage} + 0.50 \times \text{Online Exam Average} + 0.25 \times \text{Final Exam percentage}$;

(iv) Your letter grade will be selected from the table below after rounding the above number grade UP to the next highest whole number.

Number	Letter	Number	Letter	Number	Letter	Number	Letter	Number	Letter
≤59	F	67–69	D+	77–79	C+	87–89	B+	FSU does not award A+	
		63–66	D	73–76	C	83–86	B	≥93	A
		60–62	D-	70–72	C-	80–82	B-	90–92	A-

See the final grade calculator posted on the course website to get a correct idea of your current grade.

Missing Grades

~ be sure to take the Online Exams and Online Homeworks before they are due
 ~ check your grades on the course 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 me 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, I will do my best to locate the missing grade

~ if you report a missing grade more than two weeks after the assessment took place, I may 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 an assignment was improperly graded, come to my office hours to see your assignment and discuss it.

Receiving a grade of "Incomplete"

A request for a grade of "Incomplete" will

~ NOT be granted if you have completed the coursework

~ be granted only if both of the following conditions are satisfied:

(1) the only assessment that you have yet to take is the final Online Exam, and

(2) your overall average excluding the final online exam is a passing grade (70% or above).

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>)

ATTENDANCE, ABSENCE AND DROP/WITHDRAWAL

~ Drop and Withdrawal deadlines are given in the University's academic calendar at <https://registrar.fsu.edu/calendar/>.

~ You are expected to attend every lecture. First-day attendance will be taken electronically via the course website.

- ~ Lack of future planning, or mismanagement of time and other resources, are not acceptable reasons for not completing work (this includes watching lecture).
- ~ 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 most of these opportunities.
- ~ 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.
- ~ If you are unable to take an Online Exam, you must let me know ahead of time (if you know) in order to be guaranteed an accommodation.

~ **If you miss an Online Exam:**

First absence

You do not need to contact me and you do not need to submit documentation. However, if you have documentation then save it in case you incur further absences. **The first absence will be covered by the Online Exam drop regardless of the reasons for your absences and regardless of whether you have documentation or not.** Please save this absence for emergencies and do not use them for reasons that can be avoided. I do not promise any further help with low quiz grades.

Second and subsequent absences

At the time of the second absence, inform me (Hunter, hjm19d@my.fsu.edu) within one week. **You will need to provide documentation for the first absence in addition to** the second and any subsequent absences before I allow any make-ups (also within the one week from the exam time window). Additional make-ups will be assigned on Canvas as needed, and any make-ups must be completed by the Last Day of Class. Also, please note that **the drop will be the first thing we utilize** when dealing with two or more absences, so if you have a total of n absences, you will be allowed to make up at most $n-1$ of them.

~ If you miss the LSQA:

The LSQA cannot be dropped, so **you will need to provide documentation (within one week)** for you to be allowed to make it up. **If you fail to do so, you will receive a 0% for the LSQA.**

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.

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 (<https://dos.fsu.edu/vap/>), Counseling and Psychological Services (formerly the University Counseling Center) (<https://counseling.fsu.edu/>), the Employee Assistance Program (<https://eap.fsu.edu/>), or University Health Services (<https://uhs.fsu.edu/>).

AMERICANS WITH DISABILITIES ACT

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Office of Accessibility Services; and
 - (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and
 - (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations.
- This syllabus and other class materials are available in alternative format upon

request.

For the latest version of this statement and more information about services available to FSU students with disabilities, contact the:

Office of Accessibility Services

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

oas@fsu.edu

<https://dsst.fsu.edu/oas/>

CONFIDENTIAL CAMPUS RESOURCES

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program

University Center A, Rm. 4100

(850) 644-7161

Available 24/7/365

Office Hours: M-F 8-5

<https://dsst.fsu.edu/vap>

Counseling and Psychological Services

Askew Student Life Center, 2nd floor

942 Learning Way

(850) 644-8255

<https://counseling.fsu.edu/>

University Health Services

Health and Wellness Center

(850) 644-6230

<https://uhs.fsu.edu/>