

Introduction to Statistics II

STA 3024

Summer 2020

Instructor: Nilanjana Chakraborty

Email: nchakraborty@ufl.edu

Office Hours: Monday: 11:00 am-12:15 pm

Wednesday: 1:00 pm - 2:15 pm or by appointment

Lectures: Lectures will be pre-recorded and zoom link of the same will be shared each day before the class time, that is, 7th period (5:00-6:15 PM)

Teaching Assistant:

- Partha Sarkar

Office Hours: Monday : 1:00 pm – 4:00 pm

Friday : 1:00 pm – 4:00 pm

Email: sarkarpartha@ufl.edu

- Yanxi Liu

Office Hours: Thursday : 10:00 am – 4:00 pm

Email: liuyanxi@ufl.edu

- Yuhan Tian

Office Hours: Tuesday : 10:00 am – 1:00 pm

Wednesday : 10:00 am – 1:00 pm

Email: yuhan.tian@ufl.edu

Office Hours: All the office hours will be conducted through zoom. The zoom link for the office hours will be shared in canvas.

Course Description and Objectives

In this course, students learn how to summarize data, analyze it, and make appropriate decisions based on it. The sequence of courses STA 2023-3024 provides students with a firm foundation in the basics of applied statistical methods. The prerequisite for this course is STA 2023, which covered chapters 1-9 in the textbook (data collection, graphical and numerical summaries, probability and an introduction to statistical inference). Concepts from STA 2023 will be reviewed as needed.

The course focuses on the following four topics:

1. Analysis of Variance to compare three or more population means.
2. Simple Linear Regression and Multiple Regression to predict a quantitative response.
3. Analysis of Two-Way Tables to study the relationship between two categorical variables.
4. Nonparametric Statistics that do not require a Normal distribution of the response variable.

Materials:

1. **An electronic version of the lecture notes** will be posted in canvas. These will have the computer output for examples done in class and an outline of the lecture notes that we will fill in during the class. The students **MUST** have this course note with them, preferably in printed form or as an electronic version in their devices so that they can fill in the blanks while listening to the lectures.
2. Required Scientific Calculator (around \$10 to \$15) that has some basic statistical functions like mean and standard deviation. Graphing calculators are **not** allowed during the exams.

3. Recommended Textbook: Statistics, The Art and Science of Learning from Data, by Agresti, Franklin and Klingenberg, 4th edition, Prentice Hall.

Course Website in CANVAS: <https://lss.at.ufl.edu/>

This is the portal for UF's E-learning website. You must log on using your gatorlink username and password and access the course webpages from there. Important information about the course will be posted here including this syllabus, announcements, your grades throughout the semester and computer output to supplement the examples done in class. Online quizzes will be administered there.

Online Quizzes - There will be approximately four online quizzes, administered through E-Learning. You will have three tries for each quiz (with questions randomly generated) over a period of several days. Each quiz will be worth 5 points, for a total of 20 points. Hopefully, these quizzes 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. Quiz details will be announced in the course website.

Suggested Homework Problems will appear on the website. They will help you master the material but will not be collected.

Projects - There will be one small data analysis project to be completed during the semester. The project will be worth 20 points. Project details will be given in class and the course website.

Exams - There will be two exams given during the semester, each worth 30 points. Regular exams are in multiple choice format. Students are required to take the exam in the section they are registered for. Exams will be proctored through Honorlock. The details regarding this will be posted in Canvas before each exam. The students must have during the exam: their student ID number, picture ID, a non-graphing calculator, and pencils. In case of conflict or illness, if a

student is unable to take an exam at the scheduled time, they must get in touch with the instructor prior to the exam time for any arrangements to be made for a makeup. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite under such extenuating circumstances. A grade of zero is the minimum punishment of any type of dishonesty on an exam.

Exam Dates

	Date	Time
Exam 1	May 29, FRI	5 pm - 6.30 pm
Exam 2	June 18, THU	5 pm - 6.15 pm

Grade Structure

Exam 1	30
Exam 2	30
Project	20
Quizzes	20
Total	100

Grading Scale:

				D 60% to 63%
			C+ 74% to 76%	
		B+ 84% to 86%	C 70% to 73%	(No D+ or D- given)
		B 80% to 83%	C- 64% to 69%	
A 90% to 100%		B- 77% to 79%		E 59% and below
A- 87% to 89%				

UF Grading Policy: <https://catalog.ufl.edu/ugrad/1617/regulations/info/grades.aspx>

Course Policies:

Email to Instructor – will be answered within one working day in most cases. Please be aware that statistical questions should be answered in person (in class or during office hours) since they often require pictures and formulas that make it very hard to communicate through email.

Privacy Policy - Student records are confidential. Only information designated “UF directory information” may be released without your written consent. This applies to parents or anyone else who contacts me about your grades.

University’s Honesty Policy: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel.

Grading – grades will be changed only when an error has been made. Negotiation is not appropriate.

Incompletes are only assigned when extraordinary circumstances, 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.

Students with Disabilities - Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/dre/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodations. Please see the instructor in person during office hours, as early as possible in the semester, to discuss your accommodation letter confidentially.

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>.