

Introduction to Statistics 2

Summer B 2024

Instructor

Michael O'Connor

Email: oconnor.mw@ufl.edu

OH: TR 7 - 8:30pm on Zoom

Zoom: <https://ufl.zoom.us/j/5917511570>

Department Phone Number

(352)392-1941

Teaching Assistants

Xavier Mak

Email: xaviermak@ufl.edu

OH: TR 2-3:30pm in-person

OH Location: FLO209

Yanxi Liu

Email: liuyanxi@ufl.edu

OH: MW 9-10:30am on Zoom

Zoom: <https://ufl.zoom.us/j/6987991588?pwd=OUFwQTdSbzAxR0k0cDI0aG1PMVRsdz09>

Prerequisites: STA2023 or equivalent

Lectures: Class will be held **in-person** in Fine Arts Building B in Room 0103 Monday through Friday from 12:30 - 1:45pm. In the case that I can't lecture, I'll have somebody else teach the lesson for that day. If you cannot attend a lecture, it's your responsibility learn the material you missed. Lecture notes for each chapter can be found on CANVAS.

Course Description and Objectives: STA2023 covered Chapters 1 through 10 from the recommended textbook, which consists of data gathering and summarization, random variables and probability distributions, sampling distributions and an introduction to inferential statistics, etc. The purpose of this course is to retread some fundamental inferential statistics concepts from STA2023, and to analyze other statistical contexts where in which hypothesis testing is important. Specifically, Chapters 7 through 10 and Chapter 4 will be reviewed, and the new chapters that will be taught are the following:

- Chapter 14: ANOVA to test the equality of three or more means and interaction effects.
- Chapters 12 and 13: Simple and multiple regression to predict the output of a response variable given data on its related predictor variable(s).
- Chapter 11: Chi-squared tests on two-way contingency tables.
- Chapter 15: An introduction to nonparametric statistics, which can enable us to still perform robust hypothesis tests even when the data is not assumed to be normally distributed.

Grades:

Task	Weight	Description
CANVAS Quizzes	30%	You will have 5 attempts on each quiz. Help will not be provided by the instructor or any of the TA's on any specific questions in the quiz. Though, questions about general concepts or problems which are similar can be asked. An online quiz is to be completed every Wednesday and Sunday night. The purpose of these quizzes is to boost your grade and give you insight into how well you'd do on an exam.
Exam 1	35%	In-person exam which will cover Chapters 4, 7 through 10, 12, and 14.
Exam 2	35%	In-person exam which will cover Chapters 13, 11, and 15.

Scores will be rounded up to the nearest tenth of a percent. Final grades will be assigned via the following tentative grading table.

	A	B	C	D
+		(84,87)	(74,77)	(64,67)
	(90,100)	(80,84)	(70,74)	(60,64)
-	(87,90)	(77,80)	(67,70)	(57,60)

Grades might be curved at the end of the semester if doing so creates a healthier grade distribution. **Incompletes** are only granted when students have completed a major portion of the course with a passing grade (D– or higher) and experience documented circumstances that prevent them from completing the rest of the course. Examples of this include extended hospitalization, an accident occurring, or a sudden family emergency. Information on UF’s grading policies can be found at <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Missing Assignments/Exams: CANVAS quizzes will be accepted up to a day after they are due for 80% credit. No credit will be awarded to quizzes completed over a day late. This is in place to help you not fall behind. Exams can only be retaken in the event of an excused absence. Information about UF’s attendance policies can be found at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

Recommended Text: *Statistics: the Art and Science of Learning from Data*, by Agresti, Franklin, and Klingenberg, 5th Edition, Pearson.

Students with Disabilities: Students with disabilities who are in need of accommodations need to register by providing the Disability Resource Center (352-392-8565 or <https://disability.ufl.edu>) with appropriate documentation. Assuming approval, students will receive an accommodation letter which will also be sent to the instructor. Accommodations will only be made after the letter is received. Go to the instructor to discuss special circumstances.

Evaluation Statement: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Tentative Weekly Schedule: A day-to-day schedule can be found on CANVAS.

Week 1	Review of STA2023	Quiz 1 and Quiz 2
Week 2	ANOVA	Quiz 3 and Quiz 4
Week 3	Simple Regression	Quiz 5, Exam 1, and Quiz 6
Week 4	Multiple Regression and Review	Quiz 7 and Quiz 8
Week 5	Categorical Data Analysis	Quiz 9 and Quiz 10
Week 6	Nonparametric Statistics and Review	Quiz 11 and Exam 2