## STA 3024 Intro to Statistics 2 Summer A 2023

If you or a friend is in distress, please do not hesitate and contact umatter@ufl.edu for assistance. Your wellness is our priority and we are here for you. You can also find more resources at https://www.ufl.edu/student-life/health-safety/.

**Instructor:** Heejun Shin

Office: FLO 103C or Zoom (933 8747 5655) Email: hshin1@ufl.edu

Office Hours: MWF 10:00-11:00

**Teaching Assistant:** There will be no TA for this course.

**Lectures:** M-F 11:00-12:15 in TUR L011 [Live-streamed via Zoom (954 0597 4529)]. This course is designed to meet **in person**. Lectures may not be live-streamed occasionally. In such cases, <u>I cannot be held responsible for any missed lectures</u>, so it's best to attend lectures in person whenever possible.

Course Description: 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 1-10 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.

**Prerequisites:** STA 2023 or equivalent.

**Textbook and Lecture Notes:** There is no required textbook and lecture notes will be posted on the course website.

Recommended Textbook: Statistics: The Art and Science of Learning from Data, by Agresti, Franklin and Klingenberg, 5th edition, Pearson.

The book is available in an electronic version via Canvas. See details. Older editions of the book contain basically the same information and can be found used in hardcover.

## Grades

Quizzes(40%)

Homework(10%) Following each exam, you'll be required to submit a summary of the topics covered. The format and length of the report are entirely up to you as long as the key concepts are clearly presented. Collaboration is permitted, but the final submission must be your own work. The purpose of this assignment is to ensure that you are properly prepared for the exam.

There will be around five online quizzes, administered through Canvas, with the lowest score dropped. You will have three tries for each quiz over a period of several days. As long as you pay attention to the examples covered in class, these quizzes should not be challenging. Therefore, neither the instructor nor the TA will be available to assist you with quiz questions.

Exams(25%+25%) There will be two exams each worth 25% of your grade. They will take place during our regular class time, in person. (Tentatively, June 2nd and 23rd)

The numeric scores will be rounded to the nearest tenth. Letter grades will be assigned as follows (subject to change if needed):

$$\begin{array}{c|cccc} & A \geq 90 & A- \geq 87 \\ B+ \geq 84 & B \geq 80 & B- \geq 77 \\ C+ \geq 74 & C \geq 70 & C- \geq 67 \\ D+ \geq 64 & D \geq 60 & D- \geq 57 > F \end{array}$$

Grades will be changed only when an error has been made; No negotiation.

Incompletes are only assigned when extraordinary circumstances (such as an accident, or extended hospitalization), 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. Information on Medical Withdrawal or how to Drop a class can be found on UF's website.

Students with Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://disability.ufl.edu/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which will be sent to the instructor. Students with disabilities should follow this procedure as early as possible in the semester, and need to do this every semester. Accommodations will not be made retroactively, but only forward from the day that the letter was received. Special circumstances should be discussed with the instructor.

## Weekly Schedule (subject to change)

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Week 1	Review Stat 1	
Week 2	Regression Analysis	Quiz 1
Week 3	Multiple Regression and Review	Exam 1 & HW 1 & Quiz 2
Week 4	ANOVA	Quiz 3 Quiz 4
Week 5	Categorical data analysis	Quiz 4
Week 6	Nonparametric Statistics and Review	Exam 2 & HW 2 & Quiz 5