STA 3024 Introduction to Statistics II Summer A 2022

Instructor: Karina Gelis-Cadena
email: kgeliscadena@ufl.edu
office hours: TF 1:00 – 3:00 pm.
office: Griffin Floyd 103 C

Teaching Assistants:
Names and office hours will be posted in Canvas

Course Website in CANVAS: https://elearning.ufl.edu/
This is the portal for UF's E-learning website. You log on using your gatorlink username and password to access the course materials, announcements, grades, online quizzes etc.

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 1-10 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.

Materials:

1. Required Lecture Notes: will be posted in Canvas for you to print or use electronically. They have an outline of the material, plus the computer output for the examples we will do together in class, so it is essentially your class notebook.

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, 5th edition, Pearson. The *optional* textbook is only available in an electronic version that is purchased through UF All Access (inside of Canvas) and includes MyLab and Mastering to do the suggested homework electronically – details available in Canvas. Older editions of the book contain basically the same information and can be found used in hardcover.

Lectures: MTWRF 3rd pd (11:00 – 12:15 pm) PUGH 170
Students can attend the live lecture. They may also join the live lectures through Zoom using the link and passcode posted in Canvas.

Online Quizzes:
There will be online quizzes, administered through Canvas. You will have three tries for each quiz (with questions randomly generated) over a period of several days. Each quiz will be worth 10 points, and all together will count for 25% of your grade, or as much as one exam. 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.

Suggested Homework Problems:
The list of suggested homework problems from the textbook will be posted in Canvas. These problems will help you master the material but will not count towards your grade. You can get the text as an ebook (using UF All Access inside of Canvas) and do the suggested homework through the MyLab and Mastering link on the course Canvas website.

Exams:
There will be three exams given during the semester, each worth 100 points and 25% of your grade. They will take place during our regular class time, in person.
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 1	Tuesday May 24	In class	Ch 10 and 14 Comparing Groups
Exam 2	Tuesday June 7	In class	Ch 12 and 13 Regression
Exam 3	Wednesday June15	In class	Ch11 and 15 Chi Squared, Logistic Regression and Nonparametric Methods

Grades:

Grade Structure:
Exam 1 25%
Exam 2 25%
Exam 3 25%
Quizzes 25%

Grading Scale:

A	90% to 100%	C+	74% to 76%
A-	87% to 89%	C	67% to 73%
B+	84% to 86%	C-	64% to 66%
B	80% to 83%	D	60% to 63%
B-	77% to 79%	E	59% and below

(No D+ or D- given)

UF Grading Policies:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

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 office hours) since they often require pictures and formulas that make it very hard to communicate through email.

Classroom Safety Policies:
Please follow the universities policies regarding Covid-19 protocol. If you visit office hours in person, please wear a mask. If you have been exposed to the coronavirus or any other contagious disease, please join the lectures through zoom instead of coming in person.

Privacy Policy:
Student records are confidential. Only information designated "UF directory information" may be released without your written consent.

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.

University's Honesty Policy:
UF students are bound by The Honor Pledge: "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 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. If you have any questions or
concerns, please consult with the instructor.

Grading:
Grades will be changed only when an error has been made; negotiation is not appropriate.

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 in UF's website.

Instructor / Course Evaluations:
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens and instructions given on how to access them.

Other University Services:

U Matter, We Care: Information on services offered at UF for students in distress: https://umatter.ufl.edu/

Student Health Care Center: 352-392-1161 https://shcc.ufl.edu/

University Police Department, 352-392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu

UF Computing Help Desk (including problems with e-learning): http://helpdesk.ufl.edu/

Weekly Schedule (subject to change if needed)

Monday	Tuesday	Wednesday	Thursday	Friday
5/09 Syllabus Start Review Stats1	5/10 Review Stats1	5/11 Review Stats1	5/12 Review Ch 4 Design of Experiments Ch 10 – ANOVA	5/13 ANOVA Formulas
5/16 One-Way ANOVA examples	5/17 Multiple Comparisons	5/18 Bonferroni More One-Way ANOVA examples	5/20 Two-Way ANOVA	5/21 Two-Way ANOVA
5/23 Review	5/24 Exam 1	5/25 Review Ch 3 – SLRegression	5/26 Ch 12- Regression Analysis	5/27 Continue Inference Reg
5/30 Holiday	5/31 Ch 13 Multiple Regression Basics	6/01 Regression with Dummy Variables	6/02 Quadratic Regression	6/03 More Regression Examples
6/06 Review	6/07 Exam 2	6/08 Ch 11 Contingency Tables	6/09 Contingency Tables Sec 13.6 Logistic Regression	6/10 Ch 14 Nonparametric Methods
6/13 Nonparametric Methods	6/14 Review	6/15 Exam 3		