

STA3024 Introduction to Statistics II

Syllabus – Fall 2024

Class Number: 16253

Class Time: M, W, F | Period 4 (10:40 AM - 11:30 AM)

Location: CSE A101

Instructor: Yuhua Zhang

Email: yuhua.zhang@ufl.edu

Office: FLO 101D

Office Hours: Thursday 1:00 PM – 2:00 PM (in person) or by appointment through email

Zoom Link: <https://ufl.zoom.us/j/7346912034>

Phone Number: 352-392-1941

Note: Email is the preferred method of communication and make sure the subject of the email contains “STA 3024”.

Teaching Assistants:

Natalia Casteleti

Email: ncasteleti@ufl.edu

Office hours: Monday 3:00PM – 4:00PM (in person) **Office:** FLO 230

Tuesday 1:55PM - 3:55PM (online)

Zoom Link: <https://ufl.zoom.us/j/2344920115?omn=94624600098>

Tamara Faoor

Email: tfaoor@ufl.edu

Office hours: Thursday 12:00PM - 1:00PM (in person) **Office:** Saw Library

Friday 11:45PM – 12:45PM (in person) **Office:** Saw Library

Alexia Mercado Cordova

Email: alexia.mercadoco@ufl.edu

Office hours: Tuesday, Thursday 10:40AM – 11:30AM (online)

Zoom Link: <https://ufl.zoom.us/j/3425895940>

Course Website in CANVAS: <https://ufl.instructure.com/>

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 Objective

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, and you can also purchase them at Target Copy. 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. This *optional* textbook is 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.

Online Quizzes

There will be eleven online quizzes, administered through Canvas, with the lowest score dropped. 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. More details will be announced in class and on the course website.

Exams

There will be three exams given during the semester, each worth 100 points and 25% of your grade. They will take place in person during our regular class period.

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 schedule (temporary):

Exam 1	9.27	Exam 2	11.1	Exam 3	12.9
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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 70% to 64%
B+ 84% to 86%	D 60% to 63%
B 80% to 83%	E 59% and below
B- 77% to 79%	(No C-, D+ or D- given)

UF Grading Policies:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies.

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Weekly Schedule (Subject to change if needed)		STA3024 Fall 2024
Monday	Wednesday	Friday
		Intro / Start Review Stats 1 8.23
Review Ch 7-10 Stats 1 8.26	Continue Review Stats 1 8.28	Review Ch 4 – Design of Experiments 8.30
Holiday 9.2	Ch 10 – ANOVA Formulas 9.4	One-Way ANOVA examples 9.6
Multiple Comparisons 9.9	Bonferroni 9.11	More One-Way ANOVA examples 9.13
More One-Way ANOVA examples 9.16	Two-Way ANOVA 9.18	Two-Way ANOVA 9.20
Two-Way ANOVA 9.23	Review 9.25	EXAM 1 9.27
Review Ch 3 – Simple Linear Regression Basics 9.30	Ch 12- Regression Analysis 10.2	Continue Inference Reg 10.4
Continue Inference Reg 10.7	CI, PI, Residuals 10.9	Ch 13 Multiple Regression Basics 10.11
Quadratic Regression 10.14	Reg. with Dummy Vars 10.16	Holiday 10.18
More Reg. with Dummy Vars 10.21	More Reg. with Dummy Vars 10.23	Choosing Best Model 10.25
More Regression Examples 10.28	Review 10.30	EXAM 2 11.1
Sec 13.6 Logistic Regression 11.4	Ch 11 Contingency Tables 11.6	Contingency Tables 11.8
Holiday 11.11	Contingency Tables 11.13	Ch 14 Nonparametric Methods 11.15
Nonparametric Methods 11.18	Nonparametric Methods 11.20	Nonparametric Methods 11.22
Review 12.2		
EXAM 3 12.9		

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.

Privacy in Zoom Office Hours: The TA’s office hours are open to all students to discuss course material. Any student who joins can listen in on your questions, as they would in the in-person tutoring room. However, the instructor’s office hours will only admit one student at a time, with any others being placed in a waiting room. Students can discuss any personal issues or problems with the instructor during office hours with the guarantee of confidentiality. None of the office hours will be recorded.

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 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 (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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 can be found at <https://umatter.ufl.edu/>. Information on how to Drop a class can be found in UF’s Academic Catalog <https://catalog.ufl.edu/>

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 can complete evaluations through the email they receive from GatorEvals or in their Canvas course menu under GatorEvals.

Other University Services

U Matter, We Care: If you or someone you know is in distress, or needs information on services offered at UF, please contact them: 352-392-1575 umatter@ufl.edu <https://umatter.ufl.edu/>

Counseling and Wellness Center: visit <https://counseling.ufl.edu> or call 352-392-1575 for information on crisis services as well as non-crisis services.

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 Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; <https://ufhealth.org/locations/uf-health-shands-emergency-room-trauma-center/>

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit <https://gatorwell.ufsa.ufl.edu> or call 352-273 4450.

Academic Resources:

E-learning technical support – contact the UF Computing Help Desk: <http://helpdesk.ufl.edu/> phone: 352-392-4357 e-mail: helpdesk@ufl.edu.

Career Connections Center: <https://career.ufl.edu> Reitz Union Suite 1300, 352-392 1601. Career assistance and counseling services.

Library Support: <https://uflib.ufl.edu> Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email ask@ufl.libanswers.com for more information.

Teaching Center: <https://umatter.ufl.edu/office/teaching-center/> 1317 Turlington Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: <https://writing.ufl.edu/writing-studio/> Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.

Academic Complaints: <https://www.ombuds.ufl.edu/complaint-portal/> Office of the Ombuds; Visit the Complaint Portal webpage for more information.

Enrollment Management Complaints (Registrar, Financial Aid, Admissions): View the Student Complaint Procedure webpage for more information <https://em.ufl.edu/complaint>.