

**STA 4321 - Introduction to Probability**  
**Section 1055 (3 credit hours)**  
**Class 13624**  
**Summer A 2022 Syllabus**

May 6, 2022

**Course Information and Policies**

**Instructor:**

Sourav Mukherjee

Email: [souravmukherjee@ufl.edu](mailto:souravmukherjee@ufl.edu) (Preferred way of communication)

Phone: +1 (352) 888 1271 (ONLY in case of urgency)

**Teaching Assistant (TA):**

Zhuochao Huang

Email: [zhuochao.huang@ufl.edu](mailto:zhuochao.huang@ufl.edu)

**Objectives:**

The sequence of courses STA 4321-4322 provides a formal and systematic introduction to mathematical statistics for students who have passed three semesters of standard undergraduate level calculus. STA 4321 introduces the background in probability that is necessary to understand the classical statistical theory introduced in STA 4322. Major topics in this course include the basic formal elements of probability, discrete and continuous random variables, their distributions, multivariate distributions, distributions of functions of random variables, and fundamental limit theorems.

**Prerequisite:**

MAC 2313 (or equivalent third semester calculus course). A well prepared student should have taken an introductory statistics course, such as STA 2023 or STA 3032.

**Course Website:**

<https://elearning.ufl.edu/>

Please check the above mentioned course's canvas site regularly. Most course documents and important information, including homework exercises and suggested readings, exam assignments, course schedule, Zoom recorded lecture links and special announcements, will be posted there.

**Lecture:** M,T,W,R,F | **Period 2 (9:30 AM - 10:45 AM)**

**Room:** FLO 0100 (along with Zoom LIVE Conference)

**Please Note:** Though the class will have an online live Zoom option, students are highly encouraged to attend the class in person.

**Recurring Zoom Link for Classes:**

<https://ufl.zoom.us/j/8471229887?pwd=Ynk4Y0VTeTZ1NWFiQaFRrc1gyZ2RvUT09>

(Passcode: UF847)

**Online Office Hours:** Office Hours are going to be held online through Zoom.

**TA Office Hours:** Zhuochao Huang

Timings: Monday & Wednesday (12 noon - 1:30 pm)

Recurring Zoom link: <https://ufl.zoom.us/j/94257484329>

**Instructor Office Hours:** Sourav Mukherjee

Timings: Tuesday & Thursday (12 noon - 1 pm)

Recurring Zoom link: <https://ufl.zoom.us/j/8471229887?pwd=Ynk4Y0VTeTZ1NWFiQaFRrc1gyZ2RvUT09>

**Required Textbook:** Mathematical Statistics with Applications; Author: Wackerly, Mendenhall & Scheaffer; 7th Edition; Cengage.

**Homework (Graded):**

Appropriate textbook readings and suggested textbook exercises will be posted as the course progresses. **There will be 4 Homework Assignments. You will need to submit your answers on Canvas by the corresponding deadlines.** Brief answers to selected exercises can be found near the end of the textbook. However, you need to provide detailed explanations in your solutions to receive full credits. Naturally, you will learn best if you solve the exercises by yourself. Copying solutions from your classmates or any online resources is strictly prohibited. The detailed solutions to each Homework Assignment will be posted on Canvas after its

submission deadlines.

**Homework Assignments will carry 40% of your entire grades. All HWs have equal weight for grading, and no make-up Homework will be offered.** The tentative dates of assigning the Homework are as follows:

Friday, May 13 - HW 1 (Due by May 20)

Friday, May 20 - HW 2 (Due by May 27)

Friday, May 27 - HW 3 (Due by June 3)

Friday, June 3 - HW 4 (Due by June 10)

### **Exams (Graded):**

**Two within-term exams are tentatively scheduled on:**

**Friday, May 27 - Exam 1 (In person exam)**

**Friday, June 10 - Exam 2 (Take-home exam, Due by June 17)**

Policies, coverage details and exam instructions will be announced in detail on Canvas prior to the date of each exam. **Each exam will carry 30% of your entire grades. Exam 2 is compulsory. No make-up exam will be offered for Exam 2.** The exams are not going to be cumulative, but concepts and theories from the previous exam syllabus might be needed.

### **Makeup Exam Policy:**

**Every effort should be made to take the Exam 1 on the scheduled date. Only extreme situations will warrant a makeup exam for Exam 1, in which case, it needs to be taken in person within the same week. Contact the instructor prior to the exam - as soon as you realize you will be unable to take the test at the scheduled time.** Each case will be reviewed individually. Valid and detailed documentation is a prerequisite for scheduling a makeup exam under such extenuating circumstances. There are no retakes on the exam, even if you were not feeling well during the exam.

To make arrangements for a makeup exam: Contact the instructor at [souravmukherjee@ufl.edu](mailto:souravmukherjee@ufl.edu). Makeup exams will cover the same material as the regular exam. However, the questions and the level of difficulty may differ.

### **Course Grade:**

Grading will be based on a composite score: 40% **Homework**, 60% **within-term exams (each carrying 30%)**. Final letter grades will be assigned following the University's newly-instituted

grading scale that includes minus-grades. Please familiarize yourself with the new policy related to this scale and the resulting changes in the grade point equivalences of letter grades.

Details may be found on the following web page:

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

A grade of incomplete (I) is assigned only in rare cases, such as if you are absent with extenuating circumstances from the Final exam. **Extenuating circumstances require specific, official documentation (e.g., a signed excuse note from the Student Health Care Center).** **You are eligible for a grade of Incomplete only if you have completed 3/4<sup>th</sup> amount of the graded course work and taken the first exam and you are currently passing based on that work, as determined by the instructor.** If you find that you cannot continue the semester before this point is reached, you should instead seek an administrative withdrawal. The deadlines can be found at:

<https://catalog.ufl.edu/UGRD/dates-deadlines/2021-2022/#summerac22text>

As part of receiving a grade on Incomplete, University policy requires you to sign a contract with the instructor that specifies a plan and deadline for completing the course.

### **Lecture Attendance:**

The classes will have an online live zoom option, and the students are encouraged to attend the class in person. However, they can attend the class online if they need it. Online and In-Class lecture attendance is fully expected, even if not strictly enforced. You are responsible for learning all material presented during lecture, and any topic covered in lecture is a potential exam topic (unless otherwise stated).

### **Zoom Presence Policy:**

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

### **Academic Integrity:**

Please familiarize yourself with the Student Honor Code and Academic Honesty Guidelines outlined in your University of Florida Student Guide and at:

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

**Reasonable Accommodations:**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center (DRC) by visiting:

<https://disability.ufl.edu/students/get-started/>

It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.