

# STOR 155-002

## Introduction to Data Models and Inference

*Data analysis; correlation and regression; sampling and experimental design; basic probability (random variables, expected values, normal and binomial distributions); hypothesis testing and confidence intervals for means, proportions, and regression parameters; use of spreadsheet software.*

### Course Goals and Learning Objectives

*This course will enable you to:*

- explore data by describing patterns and departures from patterns;
- consider the roles of sampling and experimentation in study design and implementation;
- explore random phenomena using probability and simulation; and
- estimate population parameters and testing hypotheses through methods of statistical inference.

### Course Structure

Instructor	Dr. Mario Giacomazzo Phone: 480-489-1398 Email: <a href="mailto:mgiacoma@email.unc.edu">mgiacoma@email.unc.edu</a> Office Hours: Mondays, 12:30PM to 4:30PM in Hanes 134
Teaching Assistant	Srivatsa Balaji Email: <a href="mailto:sri02@unc.edu">sri02@unc.edu</a> Office Hours: Fridays, 9:30AM to 11:30AM in Hanes B-44
Course Website	Main: <a href="https://supermariogiacomazzo.github.io/STOR155_WEBSITE/">https://supermariogiacomazzo.github.io/STOR155_WEBSITE/</a> Canvas (Grades): <a href="https://edtech.unc.edu/service/canvas/">https://edtech.unc.edu/service/canvas/</a>
Lectures	TTh, 3:30PM to 4:45PM in Hanes 120
Open Tutorial Sessions	Sunday to Thursday from 7PM to 8PM
Course Texts	OpenIntro Statistics, 4 <sup>th</sup> Edition by Diez, Barr, and Rundel.
Course Format	The course format will include two weekly lectures.
Credit hours	3
Prerequisites	Math 110 or exemption
Target Audience	This course is designed for Statistics and Analytics majors and students from other majors who require experience with statistical skills for data analysis

## Course Grading

Assessments	Date	Percent	A	93 or above	C+	77 to 79.99
Attendance	Weekly	5%	A-	90 to 92.99	C	73 to 76.99
Homework	Weekly	10%	B+	87 to 89.99	C-	70 to 72.99
Midterm 1	2-Oct	25%	B	83 to 86.99	D+	67 to 69.99
Midterm 2	13-Nov	25%	B-	80 to 82.99	D	60 to 66.99
Final Exam	11-Dec (4PM-7PM)	35%			F	Below 60

## Course Assessments

Attendance	<p>If you are not in attendance for <b>at least 70%</b> of the lectures, you will get a 0% for your attendance grade. Otherwise, you will receive a 100%. We will be using the UNC Check-in App to take attendance. Information about this can be found here: <a href="https://unccheckin.unc.edu/#studentFAQ">https://unccheckin.unc.edu/#studentFAQ</a></p>
Homework	<p>All sections of STOR 155 will be using WebAssign for homework. You will need to log onto <a href="http://www.webassign.net">www.webassign.net</a> and enter the class key <b>unc 6373 3995</b> to be added to my class. If you need assistance with your first login, ask your Instructor or IA. This needs to be done by <b>August 21, 2025</b>.</p> <p>Homework will be assigned almost every week. Due dates will be announced in class and always be due at 11:59PM. To receive credit, you must have completed the homework in WebAssign by the due date. No extensions will be given ever. Homework assignments will vary in weight. The average number of points across all assignments will be added twice to the total number of earned points.</p> <p>Any dispute on the grading of a homework assignment should be brought to either your instructor or IA within 1 week after the due date of an assignment. Questions on individual problems should be asked via Webassign's messaging capabilities.</p>
Exams:	<p>Midterms and the final exam are required and there are no make-up exams unless your absence is approved by the university or by me. If you request that I approve your absence, I will require documentation. Failure to get a university approved absence or provide documentation to me, could result in a 0%. <b>Please notify Dr. Mario as soon as you become aware of an exam conflict so that a make-up exam can be scheduled in a timely matter.</b></p> <p>You cannot have three finals within a 24 hour period, and therefore you will need to be excused from the regularly scheduled final exam. In this scenario, you must obtain a Dean's excuse and discuss the situation with me at least two weeks before the regularly scheduled final exam so that an alternative arrangement can be made.</p>

## Course Policies and Resources

Technology	<p>Problem-solving in this class will often require the use of Microsoft Excel and/or a calculator. We will sometimes be working with data in Excel spreadsheets during class, so I encourage you to bring your laptop to class so you can follow along with me and get some hands-on experience in Excel.</p> <p>AI statement: Use of generative AI tools of any kind is not permitted in this course. Any use of these tools to complete homework or exam problems will be considered an instance of academic dishonesty and will be referred to the Honor System.</p>
Tutorial Sessions	<p>Every Sunday through Thursday evening on Zoom from 7:00PM - 8:00 PM, starting August 19. You can access these meetings at: <a href="#">tbd</a></p> <p><b>These tutorial sessions are essentially extra office hours run by experienced instructional assistants who enjoy tutoring in statistics. Take advantage of their expertise and willingness to help!</b></p>
Delivery Method	<p>This course is classified as in-person, meaning:</p> <ul style="list-style-type: none"> <li>Students attend class in person; remote students cannot register for this mode. Students will attend classes and take exams on specific dates/times and at a specific physical campus location throughout the semester.</li> </ul>
UNC Attendance Policy	<p><b>University Policy:</b> As stated in the University's <a href="#">Class Attendance Policy</a>, no right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:</p> <ul style="list-style-type: none"> <li>Authorized University activities: <a href="#">University Approved Absence Office (UAAO)</a> website provides information and <a href="#">FAQs for students</a> and <a href="#">FAQs for faculty</a> related to University Approved Absences</li> <li>Disability/religious observance/pregnancy/short-term military service, as required by law and approved by the <a href="#">Equal Opportunity and Compliance Office</a> (EOC), or in the case of short-term military service, the Dean of Students</li> <li>Significant health condition and/or personal/family emergency as approved by the <a href="#">Office of the Dean of Students</a>, <a href="#">Gender Violence Service Coordinators</a>, and/or the <a href="#">Equal Opportunity and Compliance Office</a> (EOC).</li> </ul>
Learning Cooperatively	<ul style="list-style-type: none"> <li>I encourage you to discuss course content with your friends and classmates as you are working on your weekly assignments. No matter what your academic background, you will learn more in this class if you work with others than if you do not. Ask questions, answer questions, and share ideas liberally. These interactions should never be one-way; everyone should bring something to the table when collaborating on homework assignments or in-class examples.</li> </ul>

EOC Accommodation	Equal Opportunity and Compliance Accommodations Team ( <a href="#">Accommodations - UNC Equal Opportunity and Compliance</a> ) receives requests for accommodations for disability, pregnancy and related conditions, and sincerely held religious beliefs and practices through the University's Policy on Accommodations. EOC Accommodations determines eligibility and reasonable accommodations consistent with state and federal laws.
Counseling & Psychological Services	UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The <a href="#">Heels Care Network</a> website is a place to access the many mental health resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to the <a href="#">CAPS website</a> or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more. Students can also call CAPS 24/7 at 919-966-3658 for immediate assistance.
Title IX	Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made <a href="#">online to the EOC</a> or by contacting the <a href="#">University's Title IX Coordinator</a> , Elizabeth Hall, or the <a href="#">Report and Response Managers</a> in the Equal Opportunity and Compliance Office. Please note that I am designated as a Responsible Employee, which means I must report to the EOC any information I receive about the forms of misconduct listed in this paragraph. If you'd like to speak with a confidential resource, those include Counseling and Psychological Services, the University's Ombuds Office, and the <a href="#">Gender Violence Services Coordinators</a> . Additional resources are available at <a href="#">safe.unc.edu</a> .
Honor Code Statement	Students are bound by UNC's <a href="#">honor code</a> in taking exams and in written work, and the submission of said work signifies understanding and acceptance of those requirements.
Legal	Dr. Mario reserves the right to make changes to the syllabus/calendar. Changes will be announced as early as possible so that students can adjust their schedules.