

## Math 343 – Mathematical Statistics – Fall 2024

**Instructor:** Dr. Marc Ordower  
**Office:** Martin 326  
**Phone:** 8526  
**e-mail:** mordower@randolphcollege.edu  
**Web Address:** <http://faculty.randolphcollege.edu/mordower>  
**Office hours:** Monday 1:45 - 2:15  
Tuesday 10:00 - 10:30  
Thursday 10:00 - 10:30  
Friday 1:45 - 2:15

### And by appointment

**Text:** *John E. Freund's Mathematical Statistics with Applications, Seventh Edition*, by Irwin and Marylees Miller,

**Catalog Description:** Probability. Discrete and continuous probability distributions. Sampling and the Central Limit Theorem. Confidence intervals, hypothesis testing, linear regression, and non-parametric tests.

**Course Objectives:** The student will become acquainted with the methods by which statistics aids in decision making based on incomplete information. She will also become familiar with the mathematics which underlies these techniques.

**Help:** I urge you to ask questions in class. In so doing, you will help yourself and your classmates. I also hope to see many of you at office hours over the course of the term. Don't forget that you can make an appointment if you can't make my regularly scheduled office hours.

**Web Page:** Homework assignments, review sheets, and general course information will be posted on my website.

**Grading:** Your grade will be determined according to the following scheme.

Midterm I	Midterm II	Homework	Final Exam
20 %	20 %	30 %	30 %

**Midterms:** The tentative dates for the midterm exams are as follows:

Midterm Exam I - Friday, November 8  
Midterm Exam II - Friday, December 6

**Mandated Reporting:** As instructors, one of our responsibilities is to help create a safe learning environment on our campus. We have a mandatory reporting responsibility related to our role as faculty members. It is our goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. We will seek to keep information you share private to the greatest extent possible. However, we are required to share information regarding sexual misconduct or information about a crime that may have occurred on Randolphs campus with the Colleges Title IX Coordinator, Jaclyn Beard ([jbeard@randolphcollege.edu](mailto:jbeard@randolphcollege.edu), 434-947-8031). We do this to make sure that you are able to get all the information and support you may need.

The Health Center and Counseling Center staff are not mandated reporters ([counselingcenter@randolphcollege.edu](mailto:counselingcenter@randolphcollege.edu)). As such they are not required to share information about sexual misconduct with the College and will keep your information private and confidential.

**Academic Honesty:** The honor code protects our academic community and the value of a degree from Randolph College. An instance of cheating not only reflects the perpetrator's failure to complete work honestly, but also damages the reputation of every other student at the College. Please uphold both sides of dual responsibility. Approaching a classmate about suspicion of cheating is never easy, but it is an essential part of the system. If you keep silence in the knowledge that rules have been broken, you are guilty of an honor code violation.

It goes without saying that you should never pass off someone else's work as your own. During midterm and final exams, make certain that your work is unassisted and keep your work confidential. For homework pledge problems, using someone else's solution (whether that solution is from a classmate, a solution manual, or any other source) is prohibited. Past or current copies of final exams are intended to be confidential. If you find that they are not, please report it to me right away. They should never be photographed, recorded or transmitted in any way.

I encourage you to work and study together. It can be an effective way to learn mathematics. The admonition to work alone covers homework pledge problems and exam problems only. Feel free to discuss any other problems from any other sources. If you are not certain whether or not something is allowed, please ask.

**Homework:** Homework is an integral part of this course and will be assigned on a regular basis. Assignments may include practice problems and pledge problems. Assignments may include multiple choice and/or full-answer problems. I encourage you to work together on practice problems. You may ask assistance from me, or anyone else. Pledge problems must be done alone unless I specifically state otherwise. Only the pledge problems will be submitted and graded. *You will be penalized 10% for a late assignment.* Please make sure all assignments are neat and well organized.

**Tentative Schedule:**

Week of	Sections
October 21	1.2, 1.3, 2.2, 2.3, 2.4, 2.5, 2.6
October 28	2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6
November 4	3.7, 4.2, 4.3, 4.4, 4.5, Midterm I
November 11	4.6, 4.7, 5.2, 5.3, 5.4, 5.5, 5.6
November 18	5.7, 6.2, 6.3, 6.4, 6.5, 6.6, 8.2
November 25	8.3, 8.4, 8.5, 8.6
December 2	11.2, 11.3, 11.4, 11.5, 13.2, Midterm II
December 9	13.3, 13.4, Review