

Basic Probability and Statistics 01:960:379:02 Index # 19771

Meeting times: Tuesday, Thursday 3:50 – 5:10

Online to begin and then when in-person: Room - SEC 118

<https://rutgers.instructure.com/courses/177961/assignments/syllabus>

Instructor: Harold Sackrowitz Room 563 Hill Center

sackrowi@stat.rutgers.edu I will typically respond by the next day.

Office hours: I will typically be available both before and after class and by appointment. Once we meet and learn of any student constraints times can be finalized.

Prerequisite: One semester of calculus (Math 135 or equivalent).

TEXT: "Probability and Statistics for Engineers and Scientists," by Ronald Walpole, Raymond Myers, Sharon Myers, and Keying Ye, 9th Edition, Prentice Hall, 2011.

Course Learning Goals: Students will be able to apply effective and efficient mathematical or other formal processes related to probability and statistical theory to reason and to solve problems.

Topics to be covered

1. Basic elements of probability theory.
2. Random variables and mathematical expectation.
3. Discrete Probability Distributions
Hypergeometric, Binomial and Poisson
4. Continuous Probability Distributions
Uniform and Normal
5. Bernoulli and Poisson Processes and Related Distributions
Geometric, Negative Binomial, Exponential and Gamma Distribution
6. Statistical methodology for estimation and hypothesis testing.

Course Structure and Grading: (This is subject to change depending on the University's response to COVID).

There will be two mid-term exams each worth 100 points and a final worth 200 points that will be the main basis for the final grade.

The final exam is scheduled for May 6 from 12:00 to 3:00

Homework will be assigned each week based on what we covered that week. It will be due the following week. Homework will not be graded but submission will be recorded. Students on the borderline of grades based on exams will receive the higher grade with a good homework record.

Mask Requirement

Instructors should include explicit statements on their course syllabi and/or LMS sites outlining the mask mandate and all other COVID-19 protocols in place for class meetings and other class activities.

Here is an example syllabus statement:

In order to protect the health and well-being of all members of the University community, masks must be worn by all persons on campus when in the presence of others (within six feet) and in buildings in non-private enclosed settings (e.g., common workspaces, workstations, meeting rooms, classrooms, etc.). Masks must be worn during class meetings; any student not wearing a mask will be asked to leave.

Masks should conform to CDC guidelines and should completely cover the nose and mouth:

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html>

Each day before you arrive on campus or leave your residence hall, you must complete the brief survey on the My Campus Pass symptom checker self-screening app.

Please visit the [Rutgers Student Tech Guide](#) page for resources available to all students. If you do not have the appropriate technology for financial reasons, please email Dean of Students deanofstudents@echo.rutgers.edu for assistance. If you are facing other financial hardships,

please visit the Office of Financial Aid at <https://financialaid.rutgers.edu/>.

Current Academic Integrity Policy:

Summary:

<http://nbacademicintegrity.rutgers.edu/home-2/academic-integrity-policy/>

Resources for Students:

<https://nbprovost.rutgers.edu/academic-integrity-students>

▪ **Honor pledge:**

- Inform students that they will need to sign the Rutgers Honor Pledge on every major exam or assignment as follows:
- The Rutgers honor pledge will be included on all (major) assessments for you to sign: *On my honor, I have neither received nor given any unauthorized assistance on this examination (assignment).*

Recommended by the Office of Student Conduct to promote a culture of academic integrity: Rutgers University takes academic dishonesty very seriously. By enrolling in this course, you assume responsibility for familiarizing yourself with the Academic Integrity Policy and the possible penalties (including suspension and expulsion) for violating the policy. As per the policy, all suspected violations will be reported to the Office of Student Conduct. Academic dishonesty includes (but is not limited to):

- Cheating
- Plagiarism
- Aiding others in committing a violation or allowing others to use your work
- Failure to cite sources correctly
- Fabrication
- Using another person's ideas or words without attribution—re-using a previous assignment
- Unauthorized collaboration
- Sabotaging another student's work

If in doubt, please consult the instructor. Please review the [Academic Integrity Policy](#).

Student-Wellness Services

Report a Bias Incident If you experience or witness an act of bias or hate, report it to someone in authority. You may file a report online and you will be contacted within 24 hours. The bias reporting page is [here](#).
[Click here to report a bias incident](#)

Bias is defined by the University as an act, verbal, written, physical, psychological, that threatens, or harms a person or group on the basis of race, religion, color, sex, age, sexual orientation, gender identity or expression, national origin, ancestry, disability, marital status, civil union status, domestic partnership status, atypical heredity or cellular blood trait, military service or veteran status.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ <http://health.rutgers.edu/medical-counseling-services/counseling/>

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community, and consultation and collaboration with campus partners.

Crisis Intervention : <http://health.rutgers.edu/medical-counseling-services/counseling/crisis-intervention/>

Report a Concern: <http://health.rutgers.edu/do-something-to-help/>

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

University Student