

ECONOMICS 203 (Section 1): Statistics

Instructor: Dr. K. Mundra

Class MW: 10 – 11:20: Conklin 100

Class Website: Canvas

Office: Hill Hall – 8th Floor (room 821)

Office hours: **Over zoom. W 1 – 2 or any other time by appointment**

Email: kmundra@newark.rutgers.edu

Rutgers University, Newark

Fall 2021

Health and Safety @RU-N: Fall 2021

In order to protect the health and wellbeing of all members of the Rutgers-Newark community, masks must be worn by all persons inside campus buildings when in the presence of others, and in buildings in non-private enclosed settings (e.g., common workspaces, workstations, meeting rooms, classrooms, etc.). Masks should conform to CDC guidelines and should securely cover the nose and mouth. Masks must be worn during class meetings. 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 found at: **myRutgers Portal**.

Description: The focus of this course is on understanding the basic concepts and tools of modern statistics and applying these concepts to real world problems. Students will learn to summarize data, learn probability distributions for discrete and continuous random variable, estimate the relevant statistics, and test different hypothesis. In this course students will also get some opportunity to use Excel for datasets when applying the concepts learned in the class.

Pre-requisites: College Algebra (640:113)

Required Text: *Statistics for Management and Economics, 11th Edition, by Gerald Keller, Cengage.*

You can rent a eBook from the following link. If you are enrolled in Cengage Unlimited for your other classes you can chose that option for the textbook for this course.

<https://www.cengage.com/c/statistics-for-management-and-economics-xlstat-bind-in-11e-keller/9781337093453PF/>

Teaching Assistant: Tianhao Liu

Email: theoliu9667@gmail.com

Office Hours: To be announced later

Grading Policy:

Exam 1	25%
Exam 2	25%
Exam 3	25%
Homework Assignments	25%

Ground Rules:

1) **Canvas:** The course site on Canvas will be the web page for the class. All announcements, assignments, answer keys, class handouts, power points and grades will be posted on Canvas.

Canvas Help: <https://canvas.rutgers.edu/canvas-help/>

2) **Teaching Assistant:** The TA will take weekly office hours and will review the concepts and work out problems. Details will be announced later.

3) **Attendance:** While attendance is not explicitly graded it is the most important part of learning in this class. Class attendance is critical for doing well in the exams and in the assignments.

4) **Homework:** Graded Homework will be posted on the class website. **Everybody has to turn in individual Homework through Canvas.**

5) **Practice Problems:** Recommended practice problems from the text and their answers will be posted on the class website. These will not be graded and do not need to be turned in. Answers to the even -numbered problems are provided at the end of the text. You should practice as many problems in the text as necessary to understand the material.

6) **Review before the exams:** There will be brief in class review before every exam.

7) **Deadlines and Makeup Exams:** Deadlines will not be extended (late submission will not be graded) unless you have a serious reason and in such cases notify the instructor asap before the deadline. Makeup Exams will be given only under extraordinary and documentable circumstances.

8) **Tutoring:** The Learning Center, located in Bradley Hall provides tutoring for statistics and other subjects. <https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center>

9) **Academic Dishonesty:** *Academic integrity is essential to the success of the University's educational and research missions, and violations of academic integrity constitute serious offenses against the entire academic community. The entire Academic Integrity Policy can be found here:* <http://academicintegrity.rutgers.edu/academic-integrity-policy/>

Tentative Course Outline (Subject to change)

Topics to be covered in the Class	Calendar
Chs 1-3 Introduction to Statistics (cover 2.1, 2.2 and 3.1)	Week 1 - 2
Ch 4 - 5 Numerical Descriptive Statistics Data Collection and Sampling (cover 4.1 – 4.3)	Weeks 2- 3
Ch 6 Probability (cover 6.1 – 6.3)	Week 4 - 5
Exam 1	Week 6
Ch 7 Random Variable and Discrete Probability Distributions (cover 7.1 and 7.4)	Week 7
Ch8 Continuous Probability Distributions (cover 8.1 and 8.2)	Weeks 8 - 9
Exam 2	Week 10
Ch 9 Sampling Distribution (cover 9.1 and 9.4)	Week 11
Ch 10 Estimation	Week 12
Ch 11 Hypothesis Testing (cover 11.1 and 11.2)	Weeks 13
Ch 12 Inference about a Population (cover 12.1)	Weeks 14 - 15
Exam 3	

□ Academic Integrity:

As an academic community dedicated to the creation, dissemination, and application of knowledge, Rutgers University is committed to fostering an intellectual and ethical environment based on the principles of academic integrity. Academic integrity is essential to the success of the University's educational and research missions, and violations of academic integrity constitute serious offenses against the entire academic community. The entire Academic Integrity Policy can be found here: <http://academicintegrity.rutgers.edu/academic-integrity-policy/>

Your health and well-being matter, and Rutgers has put in place a number of resources that are intended to help students through the challenges that might emerge during these times. Information on many of these resources appears below. Please let me know immediately if you are experiencing circumstances that are negatively impacting your academic performance. I also strongly encourage you to contact your academic advisor.

□ Accommodation and Support Statement:

Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning environment for all students. RU-N has identified the following resources to further the mission of access and support:

- **Absences:** All students are responsible for timely notification of their instructor regarding any expected absences. The Division of Student Affairs can provide assistance for absences related to religious observance, emergency or unavoidable conflict (illness, personal or family emergency, etc.) Students should refer to the University's Course Attendance policy (10.2.7), for complete expectations and responsibilities. The office can be contacted at: (973) 353-5063 or deanofstudents@newark.rutgers.edu.
- **Disabilities:** The Office of Disability Services (ODS) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. Once a student has completed the ODS process (registration, initial appointment, and submitted documentation) and reasonable accommodations are determined to be necessary and appropriate, a Letter of Accommodation (LOA) will be provided. The LOA must be given to each course instructor by the student and follow up with a discussion. This should be completed as early in the semester as possible as accommodations are not retroactive. More information can be found at ods.rutgers.edu. Contact ODS: (973) 353-5375 or ods@newark.rutgers.edu.

- **Temporary Conditions/Injuries:** The Division of Student Affairs can assist students who are experiencing a temporary condition of injury (broken or sprained limbs, concussions, or recovery from surgery). Students experiencing a temporary condition or injury should submit a request for assistance at: <https://temporaryconditions.rutgers.edu>.
- **Pregnancy:** The Office of Title IX and ADA Compliance is available to assist students with any concerns or potential accommodations related to pregnancy. Students may contact the office at (973) 353-1906 or TitleIX@newark.rutgers.edu.
- **Gender or Sex-Based Discrimination or Harassment:** The Office of Title IX and ADA Compliance can assist students experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking. Students can reports an incident to the office at: (973) 353-1906 or TitleIX@newark.rutgers.edu. Incidents may also be reported by using the following link: tinyurl.com/RUNReportingForm. For more information, students should refer to the University's Student Policy Prohibiting Sexual Harassment, Sexual Violence, Relationship Violence, Stalking and Related Misconduct located at: <http://compliance.rutgers.edu/title-ix/about-title-ix/title-ix-policies/>.
- **Interpersonal Violence:** The Office for Violence Prevention and Victim Assistance can provide any student with confidential support. The office is a **confidential resource** and does **not** have a reporting obligation to report information to the University's Title IX Coordinator. Students can contact the office at: (973) 353-1918 or run.vpva@rutgers.edu. There is also a confidential, text-based line students can text for support: (973) 339-0734.
- **Crisis and Concerns:** The Campus Awareness Response and Education (CARE) Team works with students in crisis to develop a support plan to address personal situations that might impact academic performance. Students may contact the CARE Team at: tinyurl.com/RUNCARE or careteam@rutgers.edu.
- **Stress, Worry, or Concerns about Well-Being:** The Counseling Center has confidential therapists available to support students. To schedule an appointment: counseling@newark.rutgers.edu or (973) 353-5805. If a student is not quite ready to make an appointment with a therapist but is interested in self-help, check out *TAO at Rutgers-Newark* for an easy, web-based approach to self-care and support: <https://tinyurl.com/RUN-TAO>.
- **Emergencies:** Call 911 or contact Rutgers University Police Department (RUPD) at (973) 353-5111.

☐ **Learning Resources:**

- Rutgers Learning Center (tutoring services)
(973) 353-5608
<https://sasn.rutgers.edu/student-support/tutoring-academic-support/learning-center>
- Writing Center (tutoring and writing workshops)
(973) 353-5847
nwc@rutgers.edu
<https://sasn.rutgers.edu/student-support/tutoring-academic-support/writing-center>