

ECON 502**Economic Statistics**

Section M1(64708), TR 9:30 am-10:50 am

Section M2(64709), TR 11:00 am -12:20 pm

Department of Economics • UIUC

Course Syllabus Fall 2021

Compass site login page: <https://compass2g.illinois.edu/>

Instructor: Ali Toossi

Office: 205C DKH

Phone: 217-333-6777

E-mail: toossi@illinois.edu

Office hours: MW 11:00 am-noon. I can consider other times if these dates/times is not good for you.

Attendance in the in-person lectures is mandatory. If you are not able to attend, you must contact me for permission not to attend.

Assistant Instructor (AI):

This course has two assistant instructors (AI). The AI's will hold a review session on Fridays. In these sessions, the AI will review the material covered in class, go over more examples, and answer your questions. The attendance in the review sessions is mandatory. If for any reason you are not able to attend, you must contact the AI and get her permission not to attend. The assistant instructors will also hold daily office hours. You can also request individual appointments as needed.

Lucas Chagas (section M1):

Office: 110 DKH

E-mail: chagas2@illinois.edu

Daily Office hours: MTWR 11:30 am-12:30 pm. You can also set up individual appointments.

Weekly Review Session: Friday 2:00 pm- 3:20 pm, 1090 Lincoln Hall

Prakrati Thakur (section M2):

Office: 110 DKH

E-mail: pthakur2@illinois.edu

Daily Office hours: MTWR 2:00-3:00 pm. You can also set up individual appointments.

Weekly Review Session: Friday 3:30 pm- 4:50 pm, 1090 Lincoln Hall

*The first meeting of Friday sessions will be on **Friday August 27.***

Compass site: You can access the course syllabus, course outline, lecture notes, recorded lectures, assignments, sample exams, and your grades via the compass site created for this course. To login go to this link: <https://compass2g.illinois.edu/> I also have created a discussion board on the Compass site. You can post your questions there and either me, Prakrati or Lucas will answer you as soon as possible.

Text:

Required: *Mathematical Statistics with Applications* (7th ed.), by Dennis Wackerly, William Mendenhall III, Richard Scheaffer. Cengage Learning.

Note that *eBook* and *rent print book* options are available. Go to:

<https://www.cengage.com/c/mathematical-statistics-with-applications-7e-wackerly/9780495110811/>

Recommended: *Probability & Statistical Inference* (9th ed.), by Hogg / Tanis / Zimmerman.

<https://www.pearson.com/us/higher-education/program/Hogg-Probability-and-Statistical-Inference-9th-Edition/PGM91556.html>

Software: You have to do some assignments using Excel and R. You can download the software R at this site: <https://cran.r-project.org/>. I will post a brief instruction on coding in R on Compass site.

Prerequisite: Having passed an undergraduate course in probability and statistics will help. You should also know *set theory* and be able to do simple *differentiation* and *integration*.

Learning outcomes: After completing this course, you should be able to:

- Demonstrate knowledge and use of probability theory
- Derive estimators for unknown parameters, and compare and evaluate estimators
- Test hypothesis and confidence intervals for unknown parameters
- Demonstrate a basic understanding of computer simulation
- Apply concepts to practical problems and relate them to other coursework and experiences you've had in statistics

Grading: The course grade will be determined as follows:

<i>Homework</i>	20%
<i>Midterm 1</i>	20%
<i>Midterm 2</i>	25%
<i>Final</i>	35%

I will adjust the average determined above to take into consideration the trend of your performance and grades.

Assignments: There will be a required homework assignment approximately every two weeks (7 homeworks). Each assignment consists of some problems and an Excel or R project. There will also be some *optional* problems assigned from the textbook. You do not need to turn in the optional problems, but I strongly recommend that you do them.

I will post the assignments on the course Compass site. I will also distribute a printed copy in class.

The assignments must be completed neatly, professionally, and legibly. Solution to the assignments should contain the following information on the **right-hand corner** of the first page: your name, assignment number, and the date.

For each assignment a deadline will be announced. Any solutions submitted after the deadline will not be graded.

The way you submit your solution will be described in the assignment. Your solution to the assignments will be either collected at the **beginning** of the lecture at the due date or you must put them in the mailbox of your AI. The mailboxes are located in the MSPE office at 205 DKH.

Exams: The class will have two *midterm exams* and a *final exam*. The midterm exams are for one hour 20 minutes (during the class time) and final exam three hours.

The dates of the exams are as follows:

Midterm 1: Thursday, **September 30,**

Midterm 2: Thursday, **November 4**

Final exam:

Regular: Monday **December 13,** 8:00-11:00 am (Combined exam)

Conflict: Wednesday **December 15,** 8:00-11:00 am

All exams are cumulative. If an extreme circumstance occurs (e.g., illness), notify me prior to the exam and provide appropriate documentation. Otherwise, there will be no make-up exams.

Academic Integrity

According to the Student Code, 'It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions.' Please know that it is my responsibility as an instructor to uphold the academic integrity policy of the University, which can be found here: <https://studentcode.illinois.edu/article1/part4/1-401/>

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policies. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Read the full Student Code at <https://studentcode.illinois.edu/>

Students with Disabilities

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@illinois.edu. DRES Website: www.disability.illinois.edu/

Community of Care

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and

safe. Further, we understand the impact that struggles with mental health can have on your experience at Illinois. Significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. We encourage all students to reach out to talk with someone, and we want to make sure you are aware that you can access mental health support at the Counseling Center (<https://counselingcenter.illinois.edu/>) or McKinley Health Center (<https://mckinley.illinois.edu/>).

For mental health emergencies, you can call 911 or walk into the Counseling Center, no appointment needed.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution for disciplinary action.

Emergency Response Recommendations

Emergency response recommendations can be found at the following website:

<http://police.illinois.edu/emergency-preparedness/>. I encourage you to review this website and the campus building floor plans website within the first 10 days of class. <http://police.illinois.edu/emergency-preparedness/building-emergency-actionplans/>.

Religious Observances

The Religious Observance Accommodation Request form is available at <https://odos.illinois.edu/community-of-care/resources/students/religious-observances/>. Submit the form to the instructor and to the Office of the Dean of Students (helpdean@illinois.edu) by the end of the second week of the course; in the case of exams or assignments scheduled after this period, students should submit the form to the instructor and to the Office of the Dean of Students as soon as possible.

Family Educational Rights and Privacy Act (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <http://registrar.illinois.edu/ferpa> for more information on FERPA. Student information and records will not be released to anyone other than the student unless the student has provided written approval or as required by law.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options. A list of the designated

University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <http://www.wecare.illinois.edu/resources/students/#confidential>. Other information about resources and reporting is available here: <http://wecare.illinois.edu/>.

Student Support

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. Please visit their website to find valuable resources and services: <https://counselingcenter.illinois.edu/>.

Counseling Center Information: 217-333-3704

Location: Room 206, Student Services Building (610 East John Street, Champaign IL)

McKinley Mental Health Information: 217-333-2705

Location: 3rd Floor McKinley Health Center 1109 South Lincoln, Urbana, IL

Emergency Dean: The Emergency Dean may be reached at (217) 333-0050 and supports students who are experiencing an emergency situation after 5 pm, in which an immediate University response is needed and which cannot wait until the next business day. The Emergency Dean is not a substitute for trained emergency personnel such as 911, Police or Fire. If you are experiencing a life threatening emergency, call 911. Please review the Emergency Dean procedures: <http://odos.illinois.edu/emergency/>