

Syracuse University
Department of Mathematics
MAT 525: Mathematical Statistics
Summer Term 2 2017-18

Instructor: William Volterman
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Lectures: MTWH 12:00 pm - 1:45 pm CARN 120
Office Hours: MTWH 2:00 - 3:00 pm CARN 316A or by appointment
Text Book: Probability and Statistics (4th Edition)
Morris H. DeGroot and Mark J. Schervish
ISBN-10: 0321500466
ISBN-13: 978-0321500465

Prerequisite:

Calculus and MAT 521 or equivalent. A good understanding of calculus will be necessary to perform well in this course.

Goals:

The course will discuss statistical estimation and hypothesis testing. Point estimation will be taught with discussion on efficiency. Interval estimation and hypothesis testing will be discussed focusing on the likelihood ratio test. Goals of this course would be to understand basic ideas of statistical inference (estimation and testing), to learn theoretical basis of fundamental inferential procedure, and to apply them in real data analysis.

The learning outcomes as stated in the catalogue are as follows.

Estimation and confidence intervals, normal distribution and central limit theorem, testing hypotheses, chi-square, t, and F distributions, least squares, regression, and correlation.

Academic Integrity:

The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see http://supolicies.syr.edu/ethics/acad_integrity.htm

Software:

You will need a calculator for the course. No specific calculator is required.

Cell Phones:

All electronic devices other than the calculator should be turned off and put away during class. Calculators on cell phones are not to be used on tests or quizzes.

Attendance:

Attendance in classes is expected in all courses at Syracuse University. It is a federal requirement that students who do not attend or cease to attend a class to be reported at the time of determination by the faculty that the student never attended or stopped attending the class. Faculty should use Early-Semester Progress Reports and Mid-Semester Progress Reports in Orange SUccess to alert the Registrar and Financial Aid Office. For more information visit: <http://registrar.syr.edu/faculty-staff/non-attendance/>

Important Message

The instructor(s) and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their email and course website during the term and to note any changes.

I.e., everything in this outline (or posted online) is subject to change.

Grading Scheme:

The grading scheme is tentatively as below. Dates will be announced later.

Alternative grading schemes may be considered. There are no make ups. If something is missed with legitimate reason and proof, the marking scheme will be adjusted accordingly.

- Assignments: 30%
- Midterm Tests: 40%
- Exam 30%

Grade Conversion Chart: Note that the following grade conversion chart is used for this course. This may be different from your other courses.

Grade	Score	Grade	Score
F	0-59	B-	80-82
D	60-69	B	83-86
C-	70-72	B+	87-89
C	73-76	A-	90-92
C+	77-79	A	93-100

Students with Disabilities:

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

Religious observances policy:

SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services > Enrollment > My Religious Observances) from the first day of class until the end of the second week of class.

Key dates:

See the Academic Calendar for important dates during the term

- First day of classes: July 2
- Last Day of classes: June 27th

You will need to check MySlice for drop dates, go to

- MySlice > Finances > View Financial Deadlines
- MySlice > Enrollment > View My Class Schedule

Excuses for class absences for medical reasons will be given only if such absences are advised by a health care provider at the Health Center, based on clinical findings and prescribed treatment recommendations. Excused notes will not be given solely to confirm a visit to the Health Center. For complete details on excuse notes, visit: <http://health.syr.edu/faqs/index.html>

Getting Help:

Your instructor will be holding regular office hours and will make appointments with students having class conflicts with their scheduled office hours. In addition, the Mathematics Department offers regular math clinics. These will be set up by the second day of classes and will be posted outside the math office.