

Syracuse University
Department of Mathematics
MAT 525: Mathematical Statistics
Term 2 2015–16

Instructor	William Volterman
Office	Carn 316A
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Lectures	TH 9:30 am – 11:00 am CARN 219
Office Hours	W 1:00 pm – 4:00 pm CARN 316A or by appointment
Text Book	Probability and Statistics (4th Edition) <i>Morris H. DeGroot and Mark J. Schervish</i> 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.

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

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://academicintegrity.syr.edu>

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: 25%
- Midterm Tests: 30%
- Exam 45%

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

Grade	F	D	C-	C	C+	B-	B	B+	A-	A
Score	0-49	50-59	60-62	63-66	67-69	70-72	73-76	77-79	80-89	90-100

Attendance: You are expected to attend every class. If you miss a class, it is your responsibility to obtain a copy of the lecture notes for that class from another student. You are also responsible for any announcements about changes to the schedule/requirements/policies.

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 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.

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 <http://syracuse.edu/registrar/acadcalendars/acadd12015-16.pdf>

- First day of classes: **January 19th**
- Financial deadline to drop class: **February 9th**
- Academic drop deadline: **March 22nd**
- Withdrawal deadline: **April 19th**
- Last day of classes: **May 3rd**