MAT 525: Mathematical Statistics (Spring 2017) Course Information (MW 12:45-2:05)

<u>Instructor</u>: Professor H. Hyune-Ju Kim Carnegie 304E

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Office Hours: M 11 a.m.-noon, T 11 a.m.-noon, and by appointment

<u>Text</u>: Probability and Statistics, 4th Edition, DeGroot and Schervish

<u>Course Description:</u> Contents in Chapters 7-11 of DeGroot and Schervish will be covered.

The course will cover statistical inference: statistical estimation and hypothesis testing. Point estimation will be taught with discussion on accuracy and efficiency, and concepts and applications of confidence intervals will be covered. For hypothesis testing, the course will introduce basic testing procedures, covering underlying theory and methods of statistical testing. Analysis of categorical data and linear models will be covered using a statistical package.

Learning Goals: Goals of this course would be to understand basic ideas of statistical inference, to learn theoretical basis of fundamental inferential procedures, and to apply them in real data analysis.

Prerequisite: Calculus and MAT 521 or equivalent.

<u>Calculator</u>: You will need a calculator for the course. No specific calculator is required.

Grading Policy: Homework/Quizzes/Class participation (20 %)

Midterm Exams (45 %) Final Exam (35 %)

There will be no make-ups for any reason. If you miss a test for a valid reason

with supporting documents, the final will count correspondingly more.

Exams: Exam 1 (February 20, Monday)

Exam 2 (April 10, Monday)

Final (May 9, Tuesday, 12:45 p.m.-2:45 p.m.)

Homework: Homework will be assigned and collected in class. You are encouraged to discuss homework problems with your classmates, but each of you are expected to write up your solutions independently. Based on the availability of the grader, all or some of the problems will be graded by a part-time grader.

<u>Attendance</u>: You are expected to attend every class, every in-class exam/quizzes and the final exam. If you miss a class, it is your responsibility to obtain a copy of the lecture notes from another student. You are also responsible for any announcements about changes to the course schedule, the exam schedule, or the course requirements made during that class.

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 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.

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.

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.

MAT 525 Tentative Schedule

	Tuesday		Thursday	
January	16	No Class	18	Intro/7.1
	23	7.5	25	7.5
January/February	30	7.5/7.6	1	Quiz/7.7
	6	7.7/7.8	8	7.9
	13	8.1/8.2	15	Review
	20	Exam 1	22	8.3
February/March	27	8.4	1	8.5
	6	8.7	8	Quiz/8.8
	20	9.1	22	9.1/9.2
	27	9.2	29	9.3/9.4
April	3	9.5	5	Review
	10	Exam 2	12	9.6
	17	9.7	19	10.1
	24	10.2	26	10.3/10.4
May	1	Review		
	Final Exam (May 9 (Tuesday) 12:45 p.m2:45 p.m.)			