SYRACUSE UNIVERSITY
MAT 521, INTRODUCTION TO PROBABILITY AND STATISTICS
SUMMER 2012 SYLLABUS

SECTION: M001(70473)
Instructor: Thomas John, Ph.D.
Carnegie 219A, 443-1587, thjohn@syr.edu
Class: MoTuWeTh 4:00-5:45 PM in HBC 323
Office Hours*(tentative)*: M&W 3:00-3:45 PM, Tu&Th 5:50-6:30 PM

Course Description: Algebra of sets. Probability in finite sample spaces. Binomial and multinomial coefficients. Random variables. Expected value and standard deviation. Density functions. Statistical applications.

Text: *Probability and Statistics*, 4th Ed, by DeGroot and Schervish, ISBN-13: 9780321500465.

Mathematics Prerequisite: MAT 397.

Grading: Grades for the course will be based on the total number of points accumulated on homework, quizzes, two tests and the final. The two tests will count 25% each, the homework & quizzes 20% and the cumulative final exam 30% toward your grade. There will be absolutely no make-ups for any reason. If you miss a quiz/test for a valid reason (which <u>must</u> be verified by a note from a physician or your dean's office), performance from the corresponding part of a test/final will be used as replacement.

Exams: The dates for the exams are:

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Test 1: Thurs, May 31
Test 2: Thurs, June 14
Final: Thurs, June 28

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The final will only be given at this time, so do not make plans to leave town before 5:45 pm on Thursday, June 28.

Homework: At the end of this syllabus is a list of assigned homework problems for the course. You may discuss these problems among yourselves, but each of you is expected to write up your own solutions independently. The <u>best</u> way to learn this material is to do homework problems. Some of the problems will be asked to be turned in.

Quiz: There will be a quiz almost every other lecture. These quizzes will be one or two problems very similar to the homework problems. The specifics will be announced in lecture ahead of time.

Attendance: You are expected to attend every class, every hour exam, and the final exam. 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 course schedule, the exam schedule, or the course requirements that were made during that class.

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.

Learning Goals and Expectations: Students are expected to master the basic notions of probability and to acquire the skills necessary for the application of these notions to the further study of probability and/or statistics.

Disabilities: Students who may need academic accommodations due to a disability are encouraged to discuss their needs with the instructor at the beginning of the semester. In order to obtain authorized accommodations, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498 and have an updated accommodation letter for the instructor. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance. For more information about services and policy, contact Office of Disability Services, 804 University Avenue Room 309, Syracuse, New York 13244-2330, Phone: (315) 443-4498, TDD: (315) 443-1371, e-mail: odssched@syr.edu

HOMEWORK ASSIGNMENTS:

SECTION	PROBLEMS	SECTION	PROBLEMS
1.4	6, 7	3.6	1, 2, 4, 6–8
1.5	1–8	3.7	1, 5–7
1.6	1–6, 8	3.8	1, 2, 4, 6–8
1.7	1–10	3.9	1–7
1.8	1, 4, 9–13, 16–18	4.1	1–9
1.9	1–4, 6–10	4.2	2–4, 6, 8, 9
1.10	2–4, 6–8, 10, 11	4.3	1–4, 6, 7
2.1	1–4, 6–9	4.4	1–3, 6–8, 10–12
2.2	1, 4–10, 12–18	4.5	2–4, 6, 9, 12
2.3	1, 3, 4, 6–9	4.6	1, 3, 5, 10, 12–14
3.1	1–8	5.2	1, 3–7
3.2	1–4, 7, 8	5.3	2–5
3.3	1, 2, 4–8	5.4	2–4, 6, 7, 12–14
3.4	1–6, 8	5.6	2, 3, 5–7, 9–11, 13, 14
3.5	1–8, 10, 11		