SYRACUSE UNIVERSITY MAT 521, INTRODUCTION TO PROBABILITY AND STATISTICS FALL, 2011 SYLLABUS SECTION 3

Instructor Professor Jack Ucci Physics 229B 443-1492 jjucci@syr.edu

Office Hours T TH 1:30-3:30

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*, Third Edition, by Morris H. DeGroot and Mark J. Schervish.

Mathematics Requirements MAT 397.

Grading Grades for the course will be based on the total number of points accumulated on homework, three tests and the final. Borderline cases will be determined by in class participation. The three tests will each count 16%, the homework 20% and the final 32% toward your grade. There will be absolutely no make-ups for any reason. If you miss a test for a valid reason, the final will count correspondingly more.

Exams The dates for the exams are; Test 1: Thurs, Sept 22 Test 2: Thurs, Oct 20 Test 3: Tues, Nov 29 Final: Fri, Dec 16, 5:15 pm-7:15 pm

The final will only be given at this time, so do not make plans to leave town before 7:15 pm on Friday, Dec 16.

Homework Attached is a list of assigned homework problems for the course. Unless otherwise indicated, on Wednesday of each week you will be expected to turn in the problems from this list for the sections covered during the previous week. Some of these problems will be graded by a part-time grader. Be sure to show your work (reasoning). You may discuss these problems among yourselves, but each of you is expected to write up your own solutions independently. The **best** way to learn this material is to do problems. Homework turned in late cannot be graded, and you will not receive credit for it. If you are unable to attend class, you may turn in your homework by putting it in my mailbox in Carnegie 215 before Wednesday's class begins.

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, see Office of Disability Services

Syracuse University Office of Disability Services 804 University Avenue Room 309 Syracuse, New York 13244-2330 Phone: Voice: (315) 443-4498 TDD: (315) 443-1371 E-Mail: odssched@syr.edu

HOMEWORK ASSIGNMENTS

SECTION PROBLEMS

1.4	6, 7
1.5	1, 2, 3, 4, 5, 6, 7, 8
1.6	1, 2, 3, 4, 5, 6, 8
1.7	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
1.8	1, 4, 9, 10, 11, 12, 13, 16, 17, 18
1.9	1, 2, 3, 4, 6, 7, 8, 9, 10
1.10	2, 3, 4, 6, 7, 8, 10, 11
2.1	1, 2, 3, 4, 6, 7, 8, 9
2.2	1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18
2.3	1, 3, 4, 6, 7, 8, 9
3.1	1, 2, 3, 4, 5, 6, 7, 8
3.2	1, 2, 3, 4, 7, 8
3.3	1, 2, 4, 5, 6, 7, 8
3.4	1, 2, 3, 4, 5, 6, 8
3.5	1, 2, 3, 4, 5, 6, 7, 8, 10, 11
3.6	1, 2, 4, 6, 7, 8
3.7	1, 5, 6, 7
3.8	1, 2, 4, 6, 7, 8
3.9	1, 2, 3, 4, 5, 6, 7
4.1	1, 2, 3, 4, 5, 6, 7, 8, 9
4.2	2, 3, 4, 6, 8, 9
4.3	1, 2, 3, 4, 6, 7
4.4	1, 2, 3, 6, 7, 8, 10, 11, 12
4.5	2, 3, 4, 6, 9, 12
4.6	1, 3, 5, 10, 12, 13, 14
4.8	2, 5, 6, 8
5.2	1, 3, 4, 5, 6, 7
5.3	2, 3, 4, 5
5.4	2, 3, 4, 6, 7, 12, 13, 14
5.5	2, 3, 5, 6, 7
5.6	2, 3, 5, 6, 7, 9, 10, 11, 13, 14
5.7	1, 2, 3, 5, 8, 9,