SYRACUSE UNIVERSITY MAT 521, INTRODUCTION TO PROBABILITY AND STATISTICS Spring Semester 2011 SYLLABUS

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 quizzes, two mid-term exams and the final examination. The two mid-term exams will each count 25%, the quizzes 20% and the final exam 30% toward your grade. The dates for the exams are given below. There will be absolutely no make-ups exams. If you miss an exam for a valid reason, the corresponding portion of the final will be used to make up the missing score. There are no make-ups for missed quizzes. You may miss up to two quizzes. If you take more than the minimum number of quizzes, your lowest score(s) will be dropped.

Exams: First Exam: Wednesday, February 23rd

Second Exam: Friday, April 15th

Final Exam: Announced in Class (Depends on Class Time.)

Homework: In order to learn this material it is vital that you do problems. Time will be allotted at the beginning of each class period to discuss the homework assignments. In addition, the quizzes and exams will have a very large overlap with homework, although it is also important to have also studied the material covered in 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.

Course Supervisor: Prof. D. Quinn, 229D Physics Building. Office Hours: Monday 11.45am – 12.40pm, Tuesday 10am – 11am, Wednesday 1.30pm – 2.30pm.

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 contact the Office of Disability Services.

Office of Disability Services: Office of Disability Services, 804 University Avenue Room 309, Syracuse, New York 13244-2330 (315) 443-4498 TDD: (315) 443-1371

e-mail: odssched@syr.edu

Homework Assignments: (Attempt the relevant homework as soon as section is covered in class.)

SECT. PROBLEMS

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