MAT 221 Sections 200
Elementary Probability and Statistics I
Spring Semester 2014

MWF 11:40 am - 12:35 pm   Grant Auditorium

Instructor: Professor Suanne Au   **Phone:** 443-1498

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Office Hours: MWF 10:30 - 11:30 am and 1:00 - 2:00 pm

Mathematics Prerequisite: Algebra competency

Course Description: This course is the first course in the Quantitative Skills sequence MAT 221-222. The primary objective of MAT 221 is to provide students with knowledge of elementary probability and statistics. Students will learn the basic concepts of descriptive statistics, design of experiments, probability theory, sampling distributions, and estimation of parameters. Students continuing to MAT 222 will learn how to use statistics to make various decisions.

Textbooks: *Introduction to the Practice of Statistics* by D. S. Moore, G. P. McCabe, and B.A. Craig, 7th edition. Chapters 1-6 will be covered in MAT 221.

Homework/Quiz: Homework assignments for practice are given on the last page of this syllabus. Homework will not be collected. You are encouraged to attempt all the problems and bring questions to the recitations. Starting from the second week of classes, there will be a quiz in the recitation similar to the homework problems. The specific sections each quiz will cover will be announced in lecture.

Exams: All exams (including the final exam) are closed book and closed notes. Students may use any type of calculators they wish except that they may not use calculators capable of wireless communication. Cell phones or any other devices capable of wireless communication are not allowed. Student ID's will be checked at the exams. There will be no make-up exams. In the case of an excused absence and otherwise at the discretion of the instructor, the final exam will be counted extra to make up for missed exams.

Exam 1	February 14 (Friday)
Exam 2	March 21 (Friday)
Exam 3	April 18 (Friday)

Final Exam: All students must take the final exam at the scheduled time which will be a 2-hour block between 8 am and 2:30 pm on Monday, May 5, 2014. There will be no exceptions, and so you should not plan to leave campus before 2:30 pm on Monday, May 5, 2014.

Calculator: You will need a calculator to do the computations that will arise throughout the course. No specific calculator is required, but TI 84 or TI 83 graphing calculator is highly recommended. Calculators are not to be shared during exams and quizzes.

Cell Phones: All electronic devises other than calculators should be turned off and put away during class. Calculators on cell phones are not to be used on tests or quizzes.

Grading: Your final grade will be based on three midterm exams (20% each), a cumulative final exam (25%), and weekly quizzes (15%). Final letter grades will be given according to the following scale:

Raw Grade x	Letter Grade	Raw Grade x	Letter Grade
$93 \leq x \leq 100$	A	$77 \leq x < 80$	C+
$90 \leq x < 93$	A-	$73 \leq x < 77$	C
$87 \leq x < 90$	B+	$70 \leq x < 73$	C-
$83 \leq x < 87$	B	$60 \leq x < 70$	D
$80 \leq x < 83$	B-	$0 \leq x < 60$	F

Available Student Assistance: Your recitation instructor will hold regular office hours and will make appointments with students having class conflicts with their scheduled office hours. Your lecture instructor will also have office hours. In addition, the Mathematics Department offers regular math clinics which will be set up by the second week of the semester. A schedule of the clinics will be posted outside the math office and will be available online at math.syr.edu.

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS) at

<center>http://disabilityservices.syr.edu</center>

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 for 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. Making arrangements with ODS takes time. Do not wait until just before the first exam.

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://academic integrity.syr.edu. For this course in particular, the use of any notes during quizzes and exams is considered to be a violation of the academic integrity policy.

Faith Tradition Observances: You must notify your instructor by the end of the second week of classes when you will be observing your religious holidays. Then, appropriate accommodation will be made according to the guideline that can be found at

`http://supolicies.syr.edu/studs/religious_observance.htm`

Learning Goal: Students will be expected to

1. use and understand basic mathematical notations;

2. select and apply an appropriate mathematical model for certain elementary probability problems;

3. do basic hand calculations with accuracy;

4. use appropriate hardware and software related to certain probability distributions.

Suggested Homework Problems

You should work these problems as the corresponding section is covered in class.

SECTION	PROBLEMS
1.1	14ab, 21, 27, 33
1.2	65-77 odd, 93-97 odd
1.3	111-118, 122-123, 126-129, 132-140, 145-148
2.1	13, 14, 21-31 odd
2.2	42, 48-50, 53
2.3	77, 84, 87
2.4	95, 101, 102
2.6	136, 139, 141
3.1	17, 19, 23, 31, 36a
3.2	52, 53, 59, 68
3.3	82-85, 88
4.1	2,4,7
4.2	19, 21, 23, 25, 28, 31, 33, 34, 35, 37, 42-45
4.3	49-57, 61-63
4.4	72-78, 82a, 83, 85, 86, 88, 92, 93
4.5	102-113, 115, 117, 118-121, 128, 131
5.1	7-16, 18, 21-26
5.2	41-48, 55, 57, 62, 67
6.1	10-15, 18, 21, 22, 25-28, 31, 34
6.2	50-59, 68-71, 73
6.3	89, 92-95, 100