#### MAT 221: Elementary Probability and Statistics I (TTh Sections) Spring 2009

**Course Description:** 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, probability and random variables. Students continuing in MAT 222 will learn how to use statistics in many areas to make various decisions.

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

Prerequisites: Algebra competency.

**Liberal Arts Core:** This course is the first course in the Quantitative Skills sequence MAT 221-222.

<u>Calculators</u>: You will need a calculator to do the computations that will arise throughout the course. No specific calculator is required, but the TI 84 or the TI 83 graphing calculator is highly recommended.

<u>Cell Phones</u>: All electronic devices other than the calculator 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 tests counting 20% each, homework, quizzes and class participation for 15%, and the final exam counting 25%. There will be no make-up tests. A test score missing due to an excused absence will be replaced by the appropriate part of the final exam. Final grade will be given according to the following scale:

A (93-100)	A- (90-92)	B+ (87-89)	B (83-86)	B- (80-82)
C+(77-79)	C (73-76)	C- (70-72)	D (60-69)	F (0-59)

**Special Note on the 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 4**. There will be no exceptions, and so you should not plan to leave campus before 2:30 pm on May 4.

**Homework:** Homework assignments are given on an attached page. The homework/quiz policy for each section will be announced by the instructor of that section.

<u>Course Supervisor</u>: Please inform your instructor of any problems you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor (listed below).

Professor Terry McConnell, Carnegie 317F, 443-1499, trmcconn@math.syr.edu

**Academic Integrity:** All cases of academic dishonesty will be reported to the Office of the Dean. There is no tolerance of cheating and other immature and dishonest behavior.

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

### **Students with Disabilities**

Students who may need academic accommodation due to a disability are encouraged to discuss their needs with instructor at the beginning of the semester. In order to obtain authorized accommodations, students must 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 email: odssched@syr.edu

## Learning Goals

Students will be expected to

- 1. use and understand basic mathematical notation;
- 2. select and apply an appropriate mathematical model for certain elementary probabilistic problems;
- 3. do basic hand calculations with accuracy;
- 4. use appropriate hardware and software related to certain probability distributions.

		Tuesday		Thursday	
January	13	1.1	15	1.2	
	20	1.3	22	1.3/2.1	
	27	2.2	29	2.3	
February	3	2.4/2.6	5	Review	
	10	Test 1	12	3.1/3.2	
	17	3.2/3.3	19	3.3/3.4	
	24	4.1/4.2	26	4.2	
March	3	4.3	5	4.4	
	10	Spring Break	12	Spring Break	
	17	4.5	19	Review	
	24	Test 2	26	5.1	
March/Apr	31	5.1/5.2	2	5.2	
	7	6.1	9	6.1	
	14	6.2	16	6.3	
	21	Review	23	Test 3	
	28	Review (Last day of classes)	30		
		Final Exam ( M	<b>Iay 4, N</b>	Ionday)	

# MAT 221 Tentative Schedule (TTh Sections Spring 2009)

# **Important Dates**:

Add Deadline	Tuesda
Academic Drop Deadline	Tuesda
Withdrawal Deadline	Tuesda
Final Exam	Monda

Tuesday, Jan. 20 Tuesday, Mar. 17 Tuesday, Apr. 14 Monday, May 4.

#### MAT 221 Homework Problems (Spring 2009)

Note that exercises are consecutively numbered in each chapter. These are assigned along with sections of the book. You should work these problems as the corresponding section is covered in class. The problems marked with \* are recommended to be done with software or TI 84 (TI 83).

Section	Problems	
1.1	1.10, 1.12, 1.18, 1.19, 1.20, 1.24, 1.28*, 1.36*, 1.40, 1.41, 1.42	
1.2	1.61*, 1.63*, 1.65, 1.70, 1.72, 1.73*, 1.74*, 1.80, 1.89, 1.90*, 1.94	
1.3	1.108, 1.111, 1.115, 1.119, 1.121, 1.123, 1.126-1.135, 1.136, 1.139, 1.143, 1.149	
2.1	2.9, 2.16*, 2.17, 2.22	
2.2	2.29, 2.41, 2.44, 2.45, 2.50	
2.3	2.65, 2.68*, 2.78, 2.81	
2.4	2.87, 2.88, 2.95, 2.98	
2.6	2.123, 2.125, 2.129, 2.131	
******************************* Test I ***********************************		
3.1	3.7, 3.9, 3.17, 3.23, 3.28, 3.30, 3.39	
3.2	3.57, 3.64, 3.73, 3.74	
3.3	3.83, 3.84, 3.85, 3.88, 3.91	
3.4	3.103, 3.105	
4.1	4.5, 4.8	
4.2	4.21, 4.23, 4.28, 4.32, 4.33, 4.42-4.45	
4.3	4.51, 4.56, 4.60, 4.63	
4.4	4.74, 4.78, 4.79, 4.83, 4.87, 4.88	
4.5	4.108, 4.112, 4.118, 4.119, 4.120, 4.125, 4.126	
***************************** Test 2 ***********************************		
5.1	5.11, 5.13, 5.15, 5.19, 5.21, 5.23, 5.28, 5.33	
5.2	5.42, 5.45, 5.46, 5.49, 5.51, 5.54, 5.55, 5.58	
6.1	6.10, 6.11, 6.13, 6.14, 6.15, 6.17, 6.18, 6.25, 6.26, 6.31, 6.32, 6.35	
6.2	6.53, 6.56, 6.57, 6.58, 6.59, 6.68, 6.70, 6.73, 6.77, 6.78	
6.3	6.90, 6.91, 6.95, 6.96	
***************************** Test 3 ***********************************		
******************** Final (May 4, Monday)************************************		