MAT 222 Elementary Probability and Statistics II
Spring 2015

Course Description: This is the second course in the probability and statistics sequence, MAT 221-222, designed for various academic majors. The primary objectives of the course are to understand basic concepts of statistical inference and to learn commonly used statistical methods of inference. The course will cover concepts of estimation and hypothesis testing, inferences involving two populations, Chi-square tests, regression analysis, and analysis of variance.

Text: Introduction to the Practice of Statistics, by David S. Moore, George P. McCabe, and Bruce A. Craig, 8th Edition. Chapters 6 through 13 will be covered.

Prerequisites: MAT 221

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

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

Cell Phones: 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: There will be three tests during the semester and a Final Exam. The three tests will count 50% and the final will count 25% toward your grade. The remaining 25% will be based on the project, homework, quizzes, or class work at the instructor's discretion. There will be no make-up tests. If you miss a test with a valid excuse, the final will count correspondingly more. Final grades 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: The Final exam will be comprehensive. All students must take the Final Exam at the scheduled time which will be a 2-hour block between 8 a.m. and 2:30 p.m. on **Monday**, **May 4, 2015**. There will be no exceptions, and so you should not make plans to leave campus before 2:30 p.m. on Monday, May 4, 2015.

Homework: Homework assignments are given on the attached page.

Computer Labs: There will be computer lab session(s). The time and place of the lab session(s) will be announced in class. MINITAB, a statistical package, will be introduced and computer problems to use MINITAB will be assigned.

Final Project: A data analysis project will be assigned in the middle of the semester and will be due on the last day of classes. The primary objective of the project is to investigate a problem of your interest using statistical methods learned in the course. You are supposed to design an experiment, collect data, analyze your data using MINITAB, and write a report. Detailed information about the project will be given later in the semester.

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 303 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 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 your instructor privately to discuss your academic needs although your instructor cannot arrange for disability-related accommodations.

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://academicintegrity.syr.edu

Religious observances policy: SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.

Course Supervisor: 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).

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> 443-1494
> email: hjkim@syr.edu

MAT 222 Tentative Schedule   (MW Section)

		Monday		Wednesday
January	12	6.1/6.2	14	6.2 /6.3
	19	No Class	21	6.4
	26	7.1	28	7.1
February	2	7.2	4	7.2/7.3
	9	Review	11	Test 1
	16	8.1	18	8.2
	23	8.2/9.1	25	9.1/9.2
March	2	9.2	4	10.1
	16	10.1/10.2	18	10.2
	23	Review	25	Test 2
March/April	30	Chap 11	1	Chap 11
	6	Chap 12	8	Chap 12
	13	Chap 13	15	Chap13
	20	Review	22	Test 3
	27	Final Review		
Final Exam (May 4, Monday)				

Important Dates:

Financial Drop Deadline   Monday, February 2, 2015
Academic Drop Deadline   Tuesday, March 17, 2015
Withdrawal Deadline   Tuesday, April 14, 2015

MAT 222 Suggested Homework Questions (In addition to "Use Your Knowledge" questions):

The problems marked with * are recommended to be done with MINITAB.

Chapter 6

6.1	6.12, 6.13, 6.14, 6.15, 6.16, 6.27, 6.28, 6.30, 6.36
6.2	6.52, 6.53, 6.54, 6.56, 6.58, 6.59, 6.70, 6.71, 6.73, 6.75
6.3	6.95, 6.98, 6.99, 6.100, 6.101, 6.106
6.4	6.118, 6.119, 6.120

Chapter 7

7.1	7.17, 7.18, 7.19, 7.20, 7.21, 7.22, 7.23, 7.24, 7.30, 7.31*, 7.32, 7.34
7.2	7.63, 7.64, 7.67, 7.74, 7.80, 7.84, 7.85*
7.3	7.102, 7.103, 7.107, 7.109, 7.112

Chapter 8

8.1	8.12, 8.15, 8.18, 8.19, 8.20, 8.33, 8.37, 8.39
8.2	8.59, 8.60, 8.61, 8.62, 8.63, 8.64, 8.68, 8.69, 8.71

Chapter 9

9.1-9.2	9.25, 9.26, 9.27, 9.31, 9.33, 9.34, 9.40, 9.42, 9.55

Chapter 10	10.8, 10.9, 10.16*, 10.17*, 10.18*, 10.19*, 10.21*, 10.22*, 10.23*, 10.30*, 10.39*, 10.40*, 10.44, 10.45, 10.46, 10.47, 10.51*, 10.52*
Chapter 11	11.7, 11.8, 11.9, 11.10, 11.11, 11.12, 11.17, 11.23*, 11.24*, 11.25*, 11.27*, 11.28*, 11.33*, 11.34*, 11.35*
Chapter 12	12.9, 12.10, 12.13, 12.15, 12.25, 12.40, 12.41, 12.42, 12.46*, 12.47*, 12.54*, 12.55*, 12.56*, 12.57*
Chapter 13	13.4, 13.4, 13.5, 13.6, 13.7, 13.14, 13.15, 13.18, 13.22, 13.23, 13.24, 13.39*, 13.40*