# MAT 222 Elementary Probability and Statistics II Spring 2016

## **Course Instructors:**

Mr. Kofi Wagya (Section M005), Office: 103C Archbold, 443-3195, <u>kkwagya@syr.edu</u> Dr. Thomas John (Sections M004, M007, & M008), Office: Carnegie 313A, 443-1587, <u>thjohn@syr.edu</u>

#### Office Hours: TBA

**<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:

Dr. Thomas John, Carnegie 313 A, Phone: 315-443-1587, email: thjohn@syr.edu

**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 Moore, McCabe, and Craig, 8th Edition. ISBN: 9781464158933. Book companion site: <u>http://bcs.whfreeman.com/ips8e.</u> Chapters 6 through 13 will be covered in this course.

#### Prerequisites: MAT 221

Liberal Arts Core: This course is the second 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 TI 84 or 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.

<u>Attendance</u>: You are expected to attend every class and every 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.

<u>Grading</u>: Your overall course grade will be based on two semester exams (counting 20% each for a total of 40%), the cumulative final exam (counting 30%), weekly Homework/Quiz (counting 15%), and a data analysis project (15%). Final grades will be assigned 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 (60-70)	F (0-59)

Special Note on the Final Exam: All students must take the final exam at the scheduled time which will be a 2hour block between 8 a.m. and 2:30 p.m. on Monday, May 9, 2016. There will be no exceptions, and so <u>you</u> <u>should not plan to leave campus before 2:30 p.m. on Monday, May 9, 2016.</u>

<u>Semester Quizzes/Exams</u>: There will be no make-up quizzes/tests. For a missed quiz/test with a valid excuse (documented by a note from a doctor or the dean's office), performance on the corresponding part of the exam or the cumulative final exam will be used to replace the missing grade.

**Homework:** Homework assignments will be announced by the instructor and some of those assignments may be collected. Details will be announced in class.

<u>Statistical Software:</u> MINITAB (a statistical package) will be introduced in lecture and computer problems to use MINITAB will be assigned. If additional help is needed, please see <u>https://www.minitab.com/en-us/support/videos/</u> and <u>https://onlinecourses.science.psu.edu/statprogram/minitab</u>, as well as many other websites/videos available on the internet.

**Final Project:** Data analysis project will be assigned in the middle of the semester and will be due on the last day of classes. The objective of the project is to investigate the problem of your interest using statistical methods learned in the course. You will be required to analyze data using MINITAB, and write a report on your analysis.

<u>Academic Integrity:</u> 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 <a href="http://academicintegrity.syr.edu">http://academicintegrity.syr.edu</a>.

**Students with Disabilities:** If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <u>http://disabilityservices.syr.edu</u>, 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 your instructor privately to discuss your academic needs although your instructor may not be able to arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

**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 <a href="http://supolicies.syr.edu/emp\_ben/religious\_observance.htm">http://supolicies.syr.edu/emp\_ben/religious\_observance.htm</a>.

Week of Jan-18	Chapter 6	Week of Mar-14	Spring Break
Week of Jan-25	Chapter 6/Chapter 7	Week of Mar-21	Chapter 10
Week of Feb-1	Chapter 7	Week of Mar-28	Chapter 10/Chapter 11
Week of Feb-8	Chapter 7/Chapter 8	Week of Apr-4	Chapter 11
Week of Feb-15	Chapter 8	Week of Apr-11	Catchup/Review/Exam 2
Week of Feb-22	Catchup/Review/Exam 1	Week of Apr-18	Chapter 12
Week of Feb-29	Chapter 9	Week of Apr-25	Chapter 13
Week of Mar-7	Chapter 9/Chapter 10	Week of May-2	Catchup/Review for Final

## **Tentative Schedule:**

## **Important Dates:**

Financial Drop Deadline – Tuesday, February 9, 2016 Academic Drop Deadline – Tuesday, March 22, 2016 Withdrawal Deadline – Tuesday, April 19, 2016