MAT 122 UC - Probability & Statistics for the Liberal Arts II Spring 2016

Instructor: Thomas (Tom) Heath Email: teheath@syr.edu Office: Archbold 103C

Office Hours: TBD

Classroom: Carnegie 119 Time: TTh 6:30 - 8:20

Course Description: MAT 122 - Probability & Statistics for the Liberal Arts II is the second of two courses in a sequence. The focus will be on probability and statistics with a focus on data and reasoning. Topics will include hypothesis testing, linear correlation, linear regression, nonparametric methods, statistical process control, solving linear equations, matrices, and Markov chains. NOTE: A student may not receive credit for MAT 122 after completing any MAT course numbered 180 or higher with a grade of C or better.

Prerequisite(s): MAT 121 and a basic knowledge of algebra will suffice.

Texts: Students should have access to the following texts:

- Elementary Statistics by Mario F. Triola (SU Third Custom Edition)
- Minitab Student Workbook

NOTE: unless otherwise instructed, students are not required to bring the textbook with them to class. However, on days we work with Minitab, students should be sure to bring the Minitab Workbook. Both books are available for purchase at the student bookstore.

Liberal Arts Core Requirement: The MAT 121/122 sequence can be used to satisfy the quantitative skills requirement of the liberal arts core in the College of Arts and Sciences.

Calculators: Calculators will be required for the many computations we will be doing throughout the course. While no specific calculator is required, I strongly recommend either a TI-83 or a TI-84. That being said, any basic scientific calculator will suffice.

Grade Distribution: Final averages will be computed using the following percentages:

 $\begin{array}{ll} \mbox{Midterm Exams} & 20\% \ \mbox{each} \\ \mbox{Labs/Assignments} & 20\% \\ \mbox{Final Exam} & 20\% \end{array}$

Letter Grade Distribution:

Homework: Homework will be assigned regularly and may at times be collected to be graded. Regardless of whether or not an assignment is collected and graded, a student should attempt all problems assigned.

Labs: Periodically throughout the semester we will go to the computer lab (Carnegie 124) to perform statistical analyses on raw data using Minitab software. You will be required to produce and submit for a grade lab reports.

Midterm Exams: We will have three in-class exams. Each of the exams will be open book. Do not mistake an open book exam as an indication that studying isn't necessary. Your exams will be written with the assumption that you will use your text as a reference, not a necessary tool for every part of every question. NOTE: Under no circumstances will a make-up exam be offered. In extreme situations, I may decide to replace the grade of a missed exam with all, or part of the final exam grade. This will be done at the discretion of the instructor.

Final Exam: The date of the final exam will be given later in the semester and will be cumulative. Do not make plans to leave campus before the final exam. If for whatever reason you are required to leave campus prior to this date, you must get in touch with me as soon as possible so that we can make arrangements.

Course Policies:

• General

- Refrain from using your cell phone during class.
- Exams are open book, closed notes.
- On days that we are in the computer lab, you are not to use the computers for any purpose other than completing labs.

• Labs and Assignments

- No late assignments will be accepted under any circumstances. I will accept submission
 of assignments in any reasonable form (e.g., scan/picture, typed, etc.) provided I am
 able to read it.
- Office hours are a great way to get help with assignments or the material. No appointment is necessary, just stop by.

• Attendance and Absences

- Attendance is expected every day that we have a scheduled meeting. If, for whatever reason you are absent from class, it is your responsibility to get the class notes/assignments from a classmate. Absence from class does not excuse you from due dates!

Course Supervisor: Problems you are unable to resolve with your instructor should be brought to the attention of the course supervisor: Professor Abdellatif Bourhim, Carnegie 313J

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.

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 accommodations will be made according to the guidelines that can be found at http://supolicies.syr.edu/emp_ben/religious_observance.htm.

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 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.

Tentative Schedule: The following schedule is tentative, and may be altered at the discretion of the instructor.

Week Beginning	Tuesday	Thursday
1/18	8.2	8.3
1/25	8.4	8.5
2/1	Lab 1	10.2
2/8	10.3	Lab 2
2/15	Review/Exam 1	11.2
2/22	11.3	Lab 3
2/29	13.2	13.7
3/7	Lab 4	14.2
3/14	No Class	No Class
3/21	14.3	Review/Exam 2
3/28	7.6	2.1
4/4	2.2	2.3
4/11	2.4	2.5
4/18	2.6	10.1
4/25	10.2	10.3
5/2	Review/Exam 3	No Class