MAT 122 Probability and Statistics for the Liberal Arts II
Summer Session II 2017
MTWTh 8:00 – 10:25 AM
Class: Carnegie 200 & **Labs**: Carnegie 124

Instructor:	Fred Liederbach
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Course Supervisor:	Dan Zacharia zacharia@syr.edu
Office:	Smith Hall 221
Office hours:	Monday & Wednesday 11AM – 12PM or by appointment

Course Description Teaches probability and statistics focusing on data and reasoning. Topics include hypothesis testing, linear correlation, linear regression, nonparametric methods, statistical process control, solving liner equations, matrices, Markov chains. NOTE: A student cannot receive credit for MAT 122 after completing any MAT course numbered above 180 with a grade of C or better. **Prerequisites**: A basic understanding of algebra.

Texts:
- *Elementary Statistics* with Finite Mathematics, Custom Edition for Syracuse University, MAT 121 & 122, by Mario F. Triola, 12th edition.
- Minitab Manual by Mario F. Triola, 12th edition.

Attendance: This class will meet July 3rd – August 11th. Attendance is mandatory (see homework & labs).

Cell Phones: All electronic devices other than a calculator should be turned off and put away during class. Calculators on cell phones are not to be used for tests.

Calculator: A TI-83/84 is highly recommended, however, any calculator with the ability to take square roots will work. Calculators will be allowed for all class work, homework and tests. *Calculators on cell phones are not to be used for tests*.

Homework: Worksheets will be assigned on a regular basis and time will be provided in class to work on them. If the worksheets are not completed in class, they must be completed as homework and turned in at the beginning of the next class period. *Late worksheets will not be accepted. However, the lowest two worksheet grades will be dropped at the end of the semester.*

Labs: Part of several class periods will be spent in Carnegie 124 completing Minitab labs (see attached course schedule for tentative dates). *Labs may not be made up.*

Exams: There will be two midterm exams and one final exam. Make-up exams will only be given as required by the University Religious Holiday policy. **The final exam will be on Thursday, August 10th, during the last class period**. *Do NOT make any plans to leave campus before the final exam.* The midterm exams are tentatively scheduled for **July 18th (Exam 1)** and **August 1st (Exam 2)**. *All exams are open book and open notes.*

Grades: Grades will be assigned based on the percentages below:

Exam 1	25%
Exam 2	25%
Final Exam	30%
Homework	15%
Labs	5%

Your letter grade is based on the following table of scores:

Letter Grade	Overall Grade	Letter Grade	Overall Grade
A	93 - 100	C+	76 - 79
A-	90 - 92	C	73 - 75
B+	86 - 89	C-	70 - 72
B	83 - 85	D	60 - 69
B-	80 - 82	F	0 - 59

Course Goals: The goal of MAT 122 is to provide the student with the following:
- a basic understanding of several types of hypothesis tests
- the ability to calculate and interpret a regression line
- familiarity with matrices and solving systems of linear equations
- an introduction to Markov chains
- experience using Minitab statistical software

Getting Help: Your instructor will be holding regular office hours and will make appointments with students having class conflicts with their scheduled office hours. In addition, the math department offers a free math clinic. The clinic begins on Monday, July 3rd and runs through Thursday; August 10th in Carnegie 109.

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

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 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 test.

Religious Observances: 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 the 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.

Problems: Please inform your instructor of any problems that you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor without delay.

Course Calendar

July 2017

Monday	Tuesday	Wednesday	Thursday
3 **Sections:** 8.1, 8.2	4 No Class	5 **Sections:** 8.3, 8.4	6 **Sections**: 8.5 **Lab #1**
10 **Sections**: 10.1, 10.2	11 **Sections**: 10.3 **Lab #2**	12 **Sections:** 11.1, 11.2	13 **Sections:** 11.3 **Lab #3**
17 Review	18 **Exam #1** (through Ch 11)	19 **Section:** 13.1, 13.2	20 **Sections:** 13.7, 14.1, 14.2
24 **Sections:** 14.3 **Lab #4**	25 **Sections:** 7.6, 2.1	26 **Sections:** 2.2, 2.3, 2.4	27 **Sections:** 2.5, 2.6

August 2017

Monday	Tuesday	Wednesday	Thursday
31 st July Review	1 **Exam #2** (through Ch 2)	2 **Sections:** 10.1	3 **Sections:** 10.2
7 **Sections:** 10.3	8 Review	9 Review	10 **Final Exam**

Computer Labs

Lab 1: Experiments 8-1, 8-2, 8-3, 8-6, 8-10, 8-14

Lab 2: Experiments 10-2, 10-3, 10-4,

Lab 3: Experiments 11-1, 11-2, 11-7

Lab 4: Experiments 13-1, 13-2, 13-7, 14-7, 14-9