Instructor: Professor Vincent E. Fatica, 313A Carnegie, x1587, vefatica@syr.edu, Office Hours: MW 12:00-1:45, TuTh 12:45-1:45.

Course Supervisor: Professor Steven P. Diaz, 317C Carnegie, x1583, spdiaz@syr.edu . Problems you cannot resolve with your instructor should be brought to the attention of the course supervisor.

Mathematical Prerequisites and Restrictions: MAT 121 is a prerequisite for MAT 122. A student cannot receive credit for MAT 122 after completing any MAT course numbered above 180 with a grade of C or better.

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

Texts: Elementary Statistics with Finite Mathematics, Fourth Custom Edition for Syracuse University, Math 121 & 122, and the Minitab Manual that goes with the 12^{th} edition of Elementary Statistics by Mario F. Triola.

Recitations: When you registered for this course you should have also registered for a recitation section that goes with it. There will be computer lab assignments or other work to be done during these recitation times, which you must hand in to be graded. All recitations count toward your grade. Attendance at all recitations is required. Please bring your textbook, laboratory manual, and calculator to these recitations. Your recitation TA should inform you of his/her policy on making up missed recitations. Make sure you are familiar with that policy. However, no recitation make up work may be handed in later than Thursday, May 4, 2017, noon. It is a good idea to occasionally check with your TA to make sure the two of you have the same record of what your lab grades are.

Homework: Homework is for your practice. It will not be handed in; it will not be graded. Page 5 of the syllabus contains suggested problems for each section. It is also a good idea to try the statistical literacy and critical thinking, chapter quick quiz, and review exercises at the end of each chapter.

Exams: All exams (including the final exam) are open book. Students may use their textbooks as well as any other books or notes they wish. Students may use any type of calculator they wish except that they may not use calculators capable of wireless communication. Cell phones or any other device capable of wireless communication are not allowed. Student ID's will be checked during the exams. Any questions about the grading of the four exams during the term must be brought to the instructor before the day of the final exam.

Make-up Exams: Makeups for exams will only be given as required by the University Religious Holliday policy and perhaps a few other very special circumstances. Do not assume you know what constitutes a very special circumstance without first discussing the matter with me. With a good reason I may agree to replace a missed test with the grade on the final exam grade. Again, do not assume you know what constitutes a good reason without first discussing the matter with me. It is much better to contact me before the exam. Once an exam is handed in, it is very very rare that I will allow that grade to be dropped.

Calculation of Course Grade: Each midterm exam and the final exam will be graded on a scale of 0–100. Your recitations will also be graded on a scale of 0-100. Your overall score for the term is then computed by the following formula. Overall score = (.15)(test 1) + (.15)(test 2) + (.15)(test 3) + (.15)(test 4) + (.20)(final exam) + (.20)(average of recitation scores). Your letter grade for the term then comes from the following table.

Overall score x	Letter Grade	Overall score x	Letter Grade
0<=x<60	F	80<=x<83	B-
60<=x<70	D	83<=x<86	B
70<=x<73	C-	86<=x<90	B+
73<=x<76	C	90<=x<93	A-
76<=x<80	C+	93<=x<=100	A

Final Exam: MAT 122 will be assigned a two-hour time slot some time between 8:00 am and 2:30 pm on Monday, May 8, 2017. The exact time and location for the 2-hour time slot for the final exam will be announced in lecture near the end of the term. The final exam will not be given at any other time. Therefore, do not make plans to leave campus before that time.

Calculator: Your calculator should be able to take square roots.

Available student assistance: Instructor office hours, TA office hours, Math Clinic, Review sessions.

Date		Sections
Jan	18	8-1, 8-2
	23	8-3
	25	8-4
	30	8-5
Feb	1	10-1, 10-2
	6	Review
	8	Test 1
	13	10-3
	15	11-1, 11-2
	20	11-3
	22	13-1, 13-2, 13-7
	27	Review
Mar	1	Test 2
	6	14-1, 14-2, 14-3
	8	7.6
	20	2.1
	22	2.2
	27	Review
	29	Test 3
Apr	3	2.3, 2.4
	5	2.5
	10	2.6
	12	10.1
	17	10.2
	19	10.3
	24	Review
	26	Test 4
May	1	Review

Up to Mar 6 sections are from the first part of the book. Taken from Elementary Statistics, Twelfth Edition by Mario F. Triola.

From Mar 8 onward sections are from the second part of the book. Taken from Finite Mathematics, Tenth Edition by Lial, Greenwell, and Ritchey

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Recitations

1. Instructor cover: 8-2, Testing Hypotheses About p.

2. Students do: Experiments 8-1, 8-2, 8-3.

3. Instructor cover: 8-3 Testing Hypotheses About μ, 8-4 Testing Hypotheses About σ or σ^2.

4. Students do: Experiments 8-6, 8-10, 8-14.

5. Instructor cover: 10-1 Scatter Plot, 10-2 Correlation, 10-3 Regression.

6. Students do: Experiments 10-2, 10-3, 10-4.

7. Instructor cover: sections 11-1, 11-2, 13-1, 13-2, 13-7.

8 -?. Instructor will cover material from the Textbook appropriate to what has been covered in the main lecture.

Suggested Homework Problems (During lecture the instructor might suggest more.) The number of suggested homework exercises is probably larger than most people have time to do. Therefore, I place in parentheses an abbreviated set that will in most cases be adequate.
8-2: 1-34 odd (5, 13, 17, 25, 31, 33).
8-3: 1-32 odd (9, 11, 25, 27).
8-4: 1-24 odd (11, 15, 17, 19).
8-5: 1-16 odd (5, 7, 9).
10-2: 1-28 odd (13, 15, 19).
10-3: 1-33 odd (13, 15, 19).
11-2: 1-24 odd (11, 15, 21, 23).
11-3: 1-20 odd (5, 7, 13).
13-2: 1-20 odd (9, 13, 17).
13-7: 1-12 odd (5, 7, 11).
14-2: 1-12 odd (5, 7, 9, 11).
14-3: 1-12 odd (5, 7, 9, 11).
In the finite mathematics section of the book some problems are designated as to be done with a graphing calculator. You may skip these problems even when they are on this list as the calculations get too messy.
7.6: 1-40 odd (11, 13, 29, 33).
2.1: 1-48 odd (1, 3, 13, 15, 29, 31, 39, 43).
2.2: 1-70 odd (17, 19, 21, 23, 25, 27, 31, 45, 57).
2.3: 1-48 odd (1, 17, 23, 25, 27, 31, 39).
2.4: 1-52 odd (5, 15, 19, 25, 31).
2.5: 1-66 odd (1, 3, 9, 11, 15, 19, 21, 37, 39).
2.6: 1-29 odd (1, 5, 11, 13, 15, 17).
10.1: 1-42 odd (1, 3, 15, 17, 19, 29, 39 a, b, c, d).
10.2: 1-41 odd (1, 3, 5, 7, 11, 25, 41).
10.3: 1-32 odd (1, 3, 5, 11, 13, 27, 29).

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 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.

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. In this course could result in the grade penalty of receiving an F for the course.

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 are 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.

Goals: The goal of MAT 122 is to provide the student the following.

A basic understanding of several types of the statistical process hypothesis testing.

Some knowledge about how to find the line closest to passing through a set of points and how that line can be used.

Familiarity with matrices and solving systems of linear equations.

An introduction to Markov chains.

Practical experience with statistical computer software (Minitab).