Syllabus for Prob. & Stats for Lib. Arts II
MAT122 - Section M100
(Fall-2015)

Lecture:	Tuesday and Thursday, 03:30PM-4:50 PM at Watson Theater.
Instructor/Supervisor:	Dr. Abdellatif Bourhim
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Office Hours:	Tuesday and Thursday: 2:00 PM-3:10 PM.

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, Second Custom Edition for Syracuse University, Math 121 & 122, and the Minitab Manual that goes with the 12th edition of Elementary Statistics by Mario F. Triola.

Labs/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 to be done during these recitation times, which you must hand in to be graded. Please bring your textbook, laboratory manual, and calculator to these recitations.

Homework: Homework is for your practice and should not be handed in; it will not be graded. In this syllabus is a long list of recommended problems for each section. A good strategy is to do enough of them so that you feel confident with the material.

Exams: You should bring your textbook (not the lab manual) and calculator to each exam (including the final). You will be allowed to use your textbook (not the lab manual) and a calculator during each exam, but you will not be allowed to use any notes other than what you write in your textbook or attach (modestly) to it.

There will be four in-class midterm exams and a final exam.

Test1	September 17, 2015
Test2	October 08, 2015
Test3	November 05, 2015
Test4	December 08, 2015
Final exam	December 16, 2015

There will be no make-up exams for the midterm exams and the final. In the case of excused absences or otherwise at the discretion of the instructor, the final exam will be counted extra to make up for missed exams.

The final grades will be computed as follows:

Each of the four midterm exams	15%
Labs/recitations	20%
Final exam	20%

Your letter grade for the term then comes from the following table.

0–59%	60–69%	70–72%	73–76%	77–79%	80–82%	83–86%	87–89%	90–92%	93–100%
F	D	C-	C	C+	B-	B	B+	A-	A

Final Exam: MAT 122 will be assigned a two-hour time slot from 8:00am to 2:30pm on Wednesday, December 16, 2015. 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. **Do not make plans to leave campus on Wednesday, December 16, 2015 before 2:30PM.**

Calculator: Your calculator should be able to take square roots. A fairly sophisticated calculator like TI83/84 is recommended. Many formulas in MAT 122 are complicated; you should attempt to become proficient at using the calculator. The best way to do that is to bring your calculator to class and get into the habit of doing computations along with the instructor.

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 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.

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

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. For this course in particular, failure to obey the rules about what sorts of notes you are allowed to use during exams is considered to be a violation of the academic integrity policy. These rules are found on pages 1 and 6 of the syllabus.

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 “best fitting” a set of points and how that line can be used.
- Familiarity with matrices and solving systems of linear equations.
- Exposure to applications of matrix arithmetic
- Practical experience with statistical computer software (Minitab).

Tentative Schedule

Day	Date	Section(s)
Tuesday	09/01	8.1 & 8.2
Thursday	09/03	8.3
Tuesday	09/08	8.4
Thursday	09/10	8.5
Tuesday	09/15	Catch up and Review
Thursday	09/17	Test1
Tuesday	09/22	10.1 & 10.2
Thursday	09/24	10.3
Tuesday	09/29	11.1 & 11.2
Thursday	10/01	11.3
Tuesday	10/06	Catch up and Review
Thursday	10/08	Test2
Tuesday	10/13	13.1 & 13.2
Thursday	10/15	13.7, 14.1 & 14.2
Tuesday	10/20	14.2 & 14.3
Thursday	10/22	7.6
Tuesday	10/27	2.1
Thursday	10/29	2.2
Tuesday	11/03	Catch up and Review
Thursday	11/05	Test3
Tuesday	11/10	2.3 & 2.4
Thursday	11/12	2.5 & 2.6
Tuesday	11/17	2.6 & 10.1
Thursday	11/19	10.1 & 10.2
Tuesday	12/01	10.2 & 10.3
Thursday	12/03	Catch up and Review
Tuesday	12/08	Test4
Thursday	12/10	Catch up
Wednesday	12/16	Final Exam

Up to October 20, sections are from the first part of the book. Taken from Elementary Statistics, Twelfth Edition by Mario F. Triola.

From October 22, onward sections are from the second part of the book. Taken from Finite Mathematics, Tenth Edition by Lial, Greenwell, and Ritchey

Suggested Homework Problems

8-2: 1-34 odd.

8-3: 1-32 odd.

8-4: 1-24 odd.

8-5: 1-16 odd.

10-2: 1-28 odd.

10-3: 1-34 odd.

11-2: 1-24 odd.

11-3: 1-20 odd.

13-2: 1-20 odd.

13-7: 1-12 odd.

14-2: 1-12 odd.

14-3: 1-12 odd.

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.

2.1: 1-48 odd.

2.2: 1-70 odd.

2.3: 1-48 odd.

2.4: 1-52 odd.

2.5: 1-66 odd, 27, 29, 35, 37, 49, 59, 65

2.6: 1-20 odd, 27, 29.

10.1: 1-24 odd, 29, 31, 39.

10.2: 1-24 odd, 25, 27a, 31, 41

10.3: 1-16 odd, 23, 25.

Labs/Recitations:

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

2. Students do 8-1, 8-2, 8-3 (as time allows)

3. Instructor cover: 8-3, Testing Hypotheses About μ (using t) and 8-4 Testing Hypotheses About σ or $\sigma 2$.

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 10-1, 10-2, 10-4.

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

8. Instructor will cover material from Finite Mathematics appropriate to what has been covered in the main lecture.