

**MAT 121-U800, Fall 2017**  
**Probability and Statistics for the Liberal Arts I**  
**August 28th to December 12th**

**Instructor:** Ronald Margrey  
**E-mail:** rfmargre@uc.syr.edu  
**Phone:** 315-447-6208 {cell}  
**Office Hours:** By Appointment

**Textbook:** *Elementary Statistics w/Finite Math Package Custom SU: 5<sup>th</sup> edition*  
*year: 2018 by Mario F. Triola*

OR *Elementary Statistics, 13th Edition*, Mario L. Triola

**Statistic Program:** Free Download of *Statdisk*, we will not use Minitab

**Calculator:** Your calculator must do square roots. However, a TI-84 or TI-83 is very highly recommended.

**Final Exam:** Tuesday, December 12th

**Mathematical Prerequisites and Restrictions:** MAT 121 has no formal prerequisites; however, it is desirable that students have a reasonable level of competence in high school algebra. MAT 121 is a prerequisite for MAT 122. A student cannot receive credit for MAT 121 after completing STT 101 or any MAT course numbered above 180 with a grade of C or better.

**MAT 121 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.

**Course Format:** This course is an online course. Notes, homework and four tests will all be posted on Blackboard during the semester. All submitted work must be in Microsoft Word. Some of the homework will require the use of the program *Statdisk*, which is a free download from the Internet and is written for our textbook. All submitted homework and tests will be returned to you graded and with comments within four days from the due date. Proctored midterm exam is scheduled for Tuesday, October 31, 5:15 pm- 7:15 pm in a room on campus, TBA, with a proctor. The proctored final exam is scheduled Tuesday,

December 112, 5:15 pm-7:15 pm, in a room on campus, TBA, with a proctor. If you cannot do either time or day, contact me and we can arrange a time and place with an approved proctor. The mid-term and the final exam must be taken with an approved proctor.

**Grades:** Course grades will be determined by the averaged homework grades {20%} the averaged grades on two exams {30%}, the proctored mid-term exam {25%}, and the proctored final exam {25%}.

Your graded homework and tests will be sent to you within a few days after they are submitted.

**Homework:** Lecture notes and homework will be posted on Blackboard according to the schedule below. The notes will contain comments on the subject matter, instructions for using Statdisk, the calculator, and a list of assigned homework problems with a due date; late homework will be docked.

Communicate with me if there are any problems. Solutions to the assigned practice problems need not be submitted for grading. The answers for these practice problems will be given or can be found in the back of the textbook. The practice problems are very similar to the homework. If you have questions with the practice problems, contact me for assistance.

**Exams:**

You should bring your textbook (not your notebook) and calculator to each exam (the mid-term and final). You will be allowed to use your textbook and calculator during the exam, but will not be allowed to use any notes other than what you write in your textbook. Cell phones or any other devices capable of wireless communication are not allowed. Student ID's will be checked during the exams. Calculators on a phone are not allowed in the exams.

**Exam One-** will cover Chapters 1 and 2 and some of 3

**Proctored Midterm** - will cover some of Chapters 1, 2, 3, 4 and some of chapter 5

**Exam Two-** will cover some of Chapter 5 and all of Chapter 6, and 7

**Proctored Final Exam-** will be cumulative covering Chapters 1 through 7.

**Letter Grade Distribution:**

93.00 - 100.00 A	77.00 - 79.99 C+
90.00 - 92.99 A-	73.00 - 76.99 C
87.00 - 89.99 B+	70.00 - 73.99 C-
83.00 - 86.99 B	60.00 - 69.99
D 80.00 - 82.99 B-	50 - 59.99 F

**Course Topics:** Chapter Sections covered in the course are.

- Chapter 1 Sections 1.1, 1.2, 1.3, 1.4
- Chapter 2 Sections 2.2, 2.3, 2.4
- Chapter 3 Sections 3.2, 3.3, 3.4
- Chapter 4 Sections 4.2, 4.3, 4.4, 4.5, 4.7
- Chapter 5 Sections 5.2, 5.3, 5.4
- Chapter 6 Sections 6.2, 6.3, 6.4, 6.5, 6.6
- Chapter 7 Section 7.2, 7.3, 7.4, 7.5

**How to Study:**

Each week.

1. Read the lecture notes for that section
2. Read the textbook sections carefully. We will use the calculator instead of the formulas and table. Notice at the end of each section, a valuable summary of important concepts introduced in the section.
3. Work each assigned Practice Problem and check your answer to that given in the lecture notes or in the back of the book.
4. Work the assigned Graded Problems and write up your solutions in a WORD document that contains the screens from your calculator. Attach the WORD document to an e-mail and send it to me on Blackboard.

**How to Get Help:** This course moves rapidly through the material. If you find you need help understanding the textbook reading, solving an assigned problem, or learning the calculator, you should contact me right away by E-mail. I will try to work you through any problem you are having. If needed, a meeting can be scheduled to discuss the material more thoroughly. Again, E-mail me for assistance or to arrange an appointment.

In addition, the Mathematics Department offers regular math clinics. These will be set up by the second week of the semester and a schedule of the clinics will be posted outside the math office and on the department's website.

<http://math.syr.edu/Help.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. Related link:

<http://disabilityservices.syr.edu/faculty-staff/syllabus-statement/>

**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 a 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. Related link:

[http://supolicies.syr.edu/studs/religious\\_observance.htm](http://supolicies.syr.edu/studs/religious_observance.htm)

**Academic Integrity:** Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions

determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/policy/>

**Learning Outcomes:** Completing MAT 121 will provide the student with the following.

- A basic understanding of the notions fundamental to the use of statistics as a tool for understanding decision-making. These notions include the description of data (pictorially and numerically), frequency distributions, probability, some classical probability distributions (binomial, normal, Student -t, Chi-square), and confidence interval estimates.
- Facility in naming, computing, and interpreting the various numeric quantities associated with the notions mentioned above. These quantities include several population parameters and sample statistics, notably measures of central tendency (mean, median, mode) and measures of spread (range, standard deviation and variance). They also include measures of position (percentiles and z-scores), probabilities, point estimates, and margins of error.
- A foundation for the further study of statistical inference (for example, MAT 122).