

**MAT 121 Probability and Statistics for the Liberal Arts I**  
**Summer Start II 2014**

**Course Instructor:** Stephen Parry

**Contact:** [saparry@syr.edu](mailto:saparry@syr.edu)

**Office Hours:** 4:30-5:30 MW Carnegie 400C, or by appointment.

**Course Description:** This is the first course of a two-course sequence. The focus will be on using data to understand concepts of probability and statistics. We will cover how to display data, different probability models, distributions, and an introduction to statistical inference. NOTE: A student cannot receive credit for MAT 121 after completing any MAT course numbered 180 with a grade of C or better.

**Course Goals:** By the end of this course you will be able to ...

- Describe data: Its center, spread, and shape
- Summarize and organize data using charts and tables
- Interpret results from data
- Estimate population values based on sample data (confidence intervals)
- Gain experience using Minitab statistical software

**Prerequisites:** A knowledge of algebra.

**Texts:** *Elementary Statistics* by Mario F. Triola, SU CUSTOM EDITION.  
Minitab Student Laboratory Manual Workbook.

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

**Calculators:** You will need a calculator to do the computations that will arise throughout the course. No specific calculator is required, but TI 84 or TI 83 graphing calculator is highly recommended.

**Quizzes and Homework:** Homework assignments are given on an attached page. Homework will be assigned on a regular basis, but it will NOT be collected. However, it is ESSENTIAL you know how to do the problems. Quizzes based on the homework will be given regularly in class (these will NOT be open book).

**Exams:** The remaining exams are tentatively scheduled for **July 10 (Exam 1)** and **July 24 (Exam 2)**. All exams will be open notebook, but closed book. There will be NO MAKE-UP exams. The grade for any exam missed will be replaced with the grade you receive on the final exam

**Final Exam:** The Final exam will be given on the last day of classes during our scheduled time. This will be on August 7<sup>th</sup>. Please do not make any plans to leave campus before this date! If there is an urgent need to leave campus before the final exam is given, please see me, otherwise you must take the final exam during the scheduled time.

**Labs:** Throughout this course, you will use the techniques discussed in class to perform statistical analysis on raw data using the Minitab software.

**Attendance and Participation:** As with any math class, attendance is necessary to fully understand the material. It is expected that students come to class prepared: a notebook, a pencil, and a calculator (not on your phone). Asking and answering questions in class helps you gauge how well you are learning the material, so please do not hesitate to participate.

**Cell Phone Policy:** *Please* refrain from using your cell phone as it is not only distracting to the instructor, but it is distracting to your peers. Habitual usage of a cell phone will result in a 0 in overall participation.

**Grading:** Your final average will be calculated using the following percentages:

Exam 1	20%
Exam 2	20%
Final Exam	20%
Quizzes	20%
Labs	15%
Participation and Attendance	5%

A [93-100]      A- [90-93)      B+ [87-90]      B [83-87)      B- [80-83)  
C+ [77-80)      C [73-77)      C- [70-73)      D [60-70)      F [0-60)

**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 accommodation will be made according to the guideline that can be found at [http://supolicies.syr.edu/emp\\_ben/religious\\_observance.htm](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.

**Getting Help** My office hours are 4:30-5:30 MW. Please feel free to talk to me after class or email me to set up an appointment different than my scheduled office hours or if you have any questions on the material. In addition, SummerStart offers regular math counseling, a free math tutoring service. This service is available 7-10 PM, Sunday through Wednesday. The location will be provided once it becomes available.

**Course Supervisor:** Professor Andrew Vogel

**Office:** 229F Physics Building

Problems you cannot resolve with your instructor should be brought to the attention of the course supervisor

## **MAT 121 Tentative schedule:**

<b>Date</b>		<b>Sections</b>
June	30	1-2, 1-3
July	1	1-4, 1-5
	2	2-2, 2-3
	3	2-4, 2-5
	7	Lab 1
	8	3-2, 3-3, 3-4
	9	Catch up and Review
	10	Exam 1
	14	4-2, 4-3, 4-4
	15	4-5, 4-7
	16	Lab 2
	17	5-2, 5-3
	21	5-4, 6-2
	22	6-3, 6-4
	23	6-5, 6-6
	24	Lab 3
	28	Catch up and Review
	29	Exam 2
	30	7-2, 7-3
	31	7-4, 7-5
Aug	4	Lab 4
	5	Catch up
	6	Final Exam Review
	7	Final Exam

*These are subject to change.*

## Suggested Homework Problems

Section: problems

1-2: 1-25 odd

1-3: 1-31 odd

1-4: 1-27 odd

1-5: 1-33 odd

2-2: 1-21 odd, 29

2-3: 1-13 odd

2-4: 1-25 odd

2-5: 1-9 odd

3-2: 1-23 odd, 29, 31, 33

3-3: 1-23 odd, 29-35 odd

3-4: 1-29 odd

4-2: 1-39 odd

4-3: 1-39 odd

4-4: 1-29 odd

4-5: 1-29 odd

4-7: 1-35 odd

5-2: 1-29 odd

5-3: 1-43 odd

5-4: 1-19 odd

6-2: 1-51 odd

6-3: 1-31 odd

6-4: 9, 13, 19

6-5: 1-19 odd

6-6: 1-31 odd

7-2: 1-43 odd

7-3: 1-27 odd, 31-35 odd

7-4: 1-29 odd

7-5: 1-23 odd