

# Math 125 – Intro to Math & Stat Modeling

**Term: Spring 2018**

**Professor: Erich Friedman**

**About the course:** We will meet every MWF at 8:00 in Elizabeth 209. This course will cover material from every chapter of the text *Statistics: Informed Decisions Using Data*, third edition by Sullivan. The book is out of print, with ISBN 978-0-321-56802-1, and features one red shoe on its cover. In this course, we will study descriptive statistics of one and two dimensional data, curve fitting and regression, basic probability, the binomial and normal distributions and the connection between them, and confidence intervals and hypothesis tests for proportions, means, and correlations. Your grade will be determined by quizzes, tests, and a comprehensive final exam.

This is a Quantitative Reasoning (Q) course in which students can apply quantitative techniques to solve problems or analyze data, or can apply mathematical or symbolic reasoning to move from a set of assumptions to a conclusion.

**About me:** My web page can be found at <http://www2.stetson.edu/~efriedma/>, and my e-mail address is [efriedma@stetson.edu](mailto:efriedma@stetson.edu). My office is Elizabeth 214-2, and my phone extension is x7552. My office hours this semester are WF 9:00–10:00, MW 11:00–12:00, and by appointment. Please come by if you need help, or if you just want to chat. You will soon see that my lecture style is informal. I will be calling you by your first names (or a nickname if you prefer), and I like to be called Erich.

**About you:** Anyone with a need for or interest in statistics may take this course. Most of the students in this course are biology, health science, environmental science, psychology, or sociology majors who need to understand statistics to analyze their senior research data. There are much easier math courses for those who only need to satisfy their “Q” requirement. Please be respectful of both me and your classmates. This means coming to class on time and not socializing in class.

**About your responsibility as a student:** You should plan on spending 6-10 hours per week outside of class on this course. I know you didn’t have to work that hard in high school, but this isn’t high school. You should read the book. You should do the homework assigned. You should inform me beforehand if you are unable to take a quiz or test at the scheduled time.

If you don’t ask any questions, either in class or in office hours, you are essentially paying \$100 per class to have me explain what you could read for yourself in the book. To get your money’s worth, you should take advantage of my expertise. Ask questions in class about things you don’t understand or problems you couldn’t do. Come to my office hours (or make an appointment for another time if they are inconvenient for you) if you need additional help.

**About the math department:** I am usually available to answer your questions, in and out of class, but the math department offers additional ways to get help. There is a free math clinic in the afternoons and evenings on the second floor of the library. The math secretary in Elizabeth 211 also has a list of paid tutors available at other times. Please seek help as soon as you fall behind.

**About the honor code:** Stetson has an honor code. You are not only expected to do your own work, but to tell me if another student is not. The punishment for cheating is a zero on the quiz or test involved, and it goes on your record in case it happens again.

**About cell phones:** You are not allowed to use them for any reason during quizzes and tests. It is polite to keep yours turned off so it does not disturb class. If one goes off in class, it’s mine for the rest of the day.

**About calculators:** Use of a graphing statistical calculator is required for this course, starting next week. You are expected to have one and know how to use it. You are not allowed to share calculators during quizzes or tests, or use a phone as a calculator. I will be using a TI-84 in class, but you can use any calculator as long as it does means, standard deviations, statistical probabilities, and can graph data.

**About Quantitative Reasoning:** In order to assure that Stetson University is meeting its goals in providing an excellent General Education, the College has established specific General Education Learning Outcomes for all courses meeting a particular area requirement in the General Education curriculum. To monitor how well students are meeting those outcomes, instructors of those courses regularly submit work to the committees assessing each outcome. While the outcomes of these assessments are primarily for our internal use in monitoring and enhancing our curriculum, we may occasionally report the results of these assessments in published research or academic conferences. All reports will include only aggregate data and will not include information that could identify the student or the instructor. While the use of this information within the institution is part of normal educational practice, you may choose not to allow data derived from your own work to be used for published reports or presentations by signing an “opt out” form in the Registrar’s office.

**About Accommodations:** If you anticipate barriers related to the format or requirements of a course, you should meet with the course instructor to discuss ways to ensure full participation. If disability-related accommodations are necessary, you should register with the Academic Success Center (386-822-7127; [stetson.edu/asc](http://stetson.edu/asc)) and notify the course instructor of your eligibility for reasonable accommodations. You, the course instructor and the Academic Success Center will plan how best to coordinate accommodations.

### **About your grade:**

- **Attendance** is not taken, so is not part of your grade.
- **Homework** is assigned daily, but will not be collected or graded. Only odd numbered homework problems are assigned on the syllabus, and the answers are in the back of the book so you can check your work. I will answer some homework questions at the beginning of each class as time permits. If you want to be sure I have time to answer your question, e-mail me or come to my office hours.

The first half of the homework helps you practice basic skills, but the quizzes and tests will be similar to the second half of each homework assignment. There are lots of word problems. I encourage you to work together on the homework problems. If you are getting less than 2/3 of the homework correct, the same is likely to happen on quizzes and tests.

- **Quizzes** will be given during the last 30 minutes of 3 different classes, as seen on the syllabus. These will cover recent material, and are worth 50 points each. There is also a 10 point open-book extra-credit quiz the first day of class.
- **Tests** will be given on the 3 dates shown on the syllabus. You will be expected to show your work and justify your answers. The tests are 50 minutes long and are worth 100 points each. Missing a quiz or test without prior authorization incurs a 10% penalty per day, no exceptions.
- **The Final Exam** is comprehensive and is worth 200 points. There are 650 points total. The grading scale is the standard 90/80/70/60 scale, with pluses and minuses for the top and bottom 2% of each range.