MATH 107: STATISTICS I (3 CREDITS)
Spring 2016 SYLLABUS

INSTRUCTOR INFORMATION
   Instructor: Dr. Tomas Kovarik
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   Office hours: Fridays 10: 15 – 11 am (and by appointment)

Text: Introduction to Statistics and Data Analysis, Peck, Olsen, and Devore, 2016, Fifth Edition, Duxbery

Course Goals:

After completing the course, successful students will

• have an understanding of how data is collected and gain experience collecting their own data sets

• be able to effectively summarize data using graphical displays, and interpret data and draw conclusions based on graphical displays of data

• understand that the purpose of collecting and analyzing data is to answer questions and make informed decisions

• understand the role of probability and uncertainty in data analysis

• be able to explain clearly, both orally and in writing, how the results of statistical analysis relate to the context from which they were obtained

• learn to think critically about data and the results of data analysis that occur in their everyday lives

• be able to use technology appropriately as a tool for quantitative analysis

Course Topics: Throughout the course, the student will learn to collect, analyze, interpret and present numerical and descriptive data. The topic covered include collecting data sets, graphically methods for describing data, numerical measures for data, normal distributions, regression and correlation, sampling and design of experiments, basic probability theory, parameter estimation, confidence intervals and inference and tests of hypothesis. These topics are chapters 1 through 13 of the text. Assignments/Assessment:

Assessment and Grading:

1• Textbook Homework, Quizzes: As you know math is not a spectator sport. You need to practice what you learn. You are expected to spend at least 7 hours outside of class working on statistics. Each section will have a list of carefully chosen homework problems which you should complete on your own. There will be random homework checks throughout the year. There will be at least one weekly quiz which may be from the reading or the homework. First attempt at homework should be done on your own. If you still need assistance you may ask for a hint from a classmate or work on the problem together. However acquiring an entire solution from a classmate in not acceptable. Homework will prepare you for the test. You are always welcome to come to office hours to see the instructor. Late homework will not be accepted for a grade. I understand that there will be days that you can be at class on time, so the lowest quiz/homework grades will be dropped when computing your final grade.

• Class Assignments: There will be several smaller group assignments throughout the semester. These may be collected, individually, or as a group. You must be present on the day a gro

Grading: Final determination of your course grade is subject to the discretion of the professor of the course. You are responsible to keep track of your own grade. Grades will be computed as follows:

Class Structure: Class will consist of lecture, group work, individual work, and problem sessions. Please come to class prepared with you text, notes, and calculator everyday. Please be prepared to participate in class
Please turn off your cell phones prior to the start of class.

Attendance: Attendance will be taken everyday. There is a very strong correlation between attendance and grades. In order to understand the material, you need to be present in class. Group work also requires everyone to participate. Any student missing more than three classes will lose two percentage points off their final grade for each additional absence. Remember no late work or quizzes are accepted for any reason. Work is considered late if it is not turned by the start of class.

Technology: A TI83 or 84 will be extensively used throughout the course. If you do not have one of these calculators, please try to borrow one from a friend. Some quizzes you will not be allowed to use your calculator. If you have another type of technology you would like to use (iPad, computer etc), please ask.

Academic Honesty:
The College academic honesty policy appears in your Student Handbook; you are expected to be familiar with it. The Academic Honesty Policy Guidelines specific to mathematics classes are reiterated at the end of the syllabus. They apply to work done outside of class as well as to in-class quizzes and tests. All in-class or take home tests and quizzes are to be completed by you alone without the aid of books, study sheets or formula sheets unless specifically allowed by your instructor for a particular test. Please read them carefully. If you are unsure about the propriety of a particular procedure or approach, please consult with your instructor before continuing with the assignment.

Special Accommodations:

Students who wish to request accommodations in this
class for a disability should the Academic Support Center, located on the first floor of Monocacy Hall (extension
1401). Accommodations cannot be provided until authorization is received from the Academic and Disability Support office.

Reminders:

• Office Hours: If you are having trouble or are just bored, please come to office hours. We can not cover all the material in depth in 70 minutes. Sometimes hearing an explanation another way is all you need. Be a "regular".

 • Class Time: We do not have enough time in class to go over problems similar to your homework problems. Class time will be spent on background and theory first, followed by examples to give you a better understanding. You are expected to struggle through some of the homework problems.

 • Homework: You must do your homework to succeed in class. You should work on statistics EVERY NIGHT. Set a schedule and stick to it and you will succeed.

• Other Students: Get to know the other students in class. This will help if you are absent and will help with understanding the material. Set up times during the week outside of class to meet to work through homework and class assignments.

 • Tutors: Take advantage of the Math Tutors in PPHAC 238 in the evening. A schedule will be announce

Grades:

Tests (4)……………………....50%
Final Exam…………………...30%
Group Work (Labs)………….10%
Project……………………..10%

Grading Scale: 90 – 100%   A   76 – 79%   C+
                     86 – 89%   B+   70 – 75%   C
                     80 – 85%   B   60 – 69%   D
                      0 – 59%   F