Instructor Information

Instructor: Safaa Dabagh
Lecture Meeting Time and Location: TWTH: 6:30 PM - 9:30 PM, MSB 206
Office Hours and Location: TWTH: 5:30 PM – 6:25 PM-MSB 206
Contact Info: *dabagh_safaa@smc.edu*

Welcome Message and Course Description

My name is Safaa Dabagh- you may call me Safaa. I first developed a passion for Statistics in college and am looking forward to sharing that passion with you. Feel free to reach out via email or come to my drop-in hours if our class prompts you to want to learn more about Statistics; this is my favorite part about teaching. When I'm not working, I enjoy spending time with my children Adam, Aya, Abed, Issa, and Zach!
Statistics is the science of gathering, describing, and analyzing data to draw conclusions. Statistics help us understand the world that can seem too large to comprehend. This course can be challenging, both in terms of the breadth of the subject matter, and its complexity. Almost every student will be challenged by course material at some point in this term. I have found that students who are most successful in this course are those who attend class consistently, complete all assignments, thoughtfully review feedback, develop good study strategies, and take advantage of the academic support resources made available by the mathematics department. If you are having a hard time with course material or keeping up with the pace of the class, please do not wait until the end of the term to seek guidance. I will be in a much better position to support your learning if you seek support as soon as you are having trouble.

Diversity and Inclusion Statement

I aim to create a learning environment in which all students can learn, and I honor your identities (including race, gender, class, sexuality, religion, ability, etc.) Every student brings different experiences that will enrich the course content and I strive to do my best to respect this diversity throughout the semester. If you have an experience related to the class that contradicts this commitment or there is an aspect of the course that could be reasonably modified to improve your learning, please contact me.

Here is a link to the Student Code of Conduct (.pdf file, AR 4410) Title IX: is a comprehensive federal law that prohibits discrimination on the basis of sex in any federally funded education program or activity: No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.
Those interested in the details can view the entire Title IX Legal Manual . Students who have experienced some form of sexual misconduct or discrimination are encouraged to talk to someone about their experience, so they can get the support they need. To learn more about the support available for students, please click here. You can also call Lisa Winter, Compliance Administrator Title IX Coordinator, at 310-434-4225

Prerequisites

Completion of Intermediate Algebra (Math 20 or math 18, or math 49 or math 50), or equivalent, with a grade of C or better.

Course Content

Content Math 54: Emphasis is on understanding statistical methods. The major topics include: descriptive statistics, probability, probability distributions, estimation, hypothesis testing (one and two populations, correlation and regression, ANOVA, test for independence, and non-parametric tests.

Student Learning Outcomes (SLOs):

Student Learning Outcomes Math 54:
Given a data set, students will analyze the data set and design a presentation of information using tables, graphs, and statistical calculations.
Given sample data, students will decide on and use appropriate estimation strategies to make inferences about the important characteristics of population data, including the mean, proportion, and variation.
Given sample data, students will decide on and use an appropriate test to reach conclusions about the hypothesis made about a population parameter.

Course Materials

Text:
Great news: your textbook for this class is available for free online! Statistics Using Technology By By Kathryn Kozak.

StatCrunch
We will use Statcrunch in place of the calculator. This powerful, web-based statistical software lets students collect data and perform complex statistical analysis that generates compelling results. The student can purchase an access code for $15 please click here.

Classroom Behavior and Participation:

Attendance:

Attendance is very important. You are responsible for any announcements made in class, including any changes to the schedule. A student may be dropped for excessive absences (10 % or more of the classes). If you decide to drop this class, it is your responsibility to drop officially, on line or at the Admissions Office. See the official class schedule for relevant dates.

Your Course Grade Is Based On The Following:

Quizzes (10%) online and in-class quizzes. "Make-up" quizzes are granted with a legitimate excuse such as a medical or legal excuse (e.g., a letter from your employer, police report, or athletic department).

Homeworks (10%) homeworks. "Make-up" homeworks are granted with a legitimate excuse such as a medical or legal excuse (e.g., a letter from your employer, police report, athletic department).

In Class Assignments (5%). Your attendance will be recorded using in-class assignments given every day. The purpose of in-class assignments is to help you apply concepts learned in class and will be graded based on completion.

In-Class Quizzes (5%). There will be several projects done outside of class. More details will be given later.

Exams (45%) Three exams are administered in class. These are based on lecture and homework materials. Make-up exams will be given for a legitimate reason.

Final Exam (25%) The final exam is cumulative. The final exam date and time are determined by Santa Monica College Academics and will be administered in class.

Grades:

Your grades will be based upon the following point distribution:
90 % - 100 % A
80 % - 89 % B
70 % - 79% C
60 % - 69% D

I strive to help every student pass this course. Please do not hesitate to reach out and ask for help as soon as possible; please do not wait till the end of the term.
Students are bound by the Code of Academic Conduct and Reporting Policy which addresses issues of academic dishonesty. Please be extremely careful that you do not engage in any behavior that could even be construed as cheating.
Student responsibilities:
Honor Council website:
Administrative Regulation 4412:

Course Objectives for Math 54:

Course Objectives for Math 54:
Upon completion of the course, students will be able to:
Summarize and interpret data.
Identify the standard methods of obtaining data and identify the advantages and disadvantages of each.
Analyze and interpret graphical presentations of data.
Find and interpret measures of central tendency and dispersion.
Solve basic probability problems.
Analyze and interpret probability distributions including the discrete binomial distribution and the continuous normal distribution. Calculate the mean and variance for both discrete and continuous distributions.
Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem.
Formulate, test, and interpret the statistical significance of a hypothesis made about one-population parameters including the p-value and type I and type II errors.
Formulate, test, and interpret the statistical significance of a hypothesis made about the difference between the means and proportions of two populations, including the p-value and type I and type II errors.
Formulate and analyze point and confidence interval estimates for the difference between the means and proportions of two populations.
Formulate, test, and interpret a hypothesis of independence between two variables.
Formulate, test, and interpret for equality of three or more population means using ANOVA.
Find and interpret the correlation between two variables.
Find the regression line, interpret associated values in context, and evaluate the goodness of fit of the regression model.
Use the calculator and/or statistical analysis software to effectively implement the above objectives.
Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life sciences, health science, and education.

Course Outline (this is subject to modification if necessary)

Week 1		Class Intro & Chapters 1-2	June 24-26
	Lecture	Sections 1.1-1.3	
	Lecture	Sections 1.4-1.6	
	Lecture	Sections 2.1- 2.3	
Week 2		Chapters 2-3	July 1-3
	Lecture	Sections 2.4- 2.7	
	Lecture	Sections 3.1- 3.2	
	Lecture	Sections 3.3- 3.4	
Week 3		Chapter 4	July 8-10
	Lecture	Section 4.1-4.2	
	Lecture	Sections 4.3	
	Exam 1	**Exam 1-chapters 1-2-3**	July 10
Week 4		Chapters 5-6	July 15-17
	Lecture	Sections 5.1	
	Lecture	Sections 5.2	
	Lecture	Section 6.1-6.2-6.3	
Week 5		Chapters 7-8	July 22-24
	Lecture	Section 7.1	
	Lecture	Section 7.2-7.3	
	Lecture	Section 8.1-8.2	
	Exam 2	**Exam 2-chapters 4-5-6**	**July 24**
Week 6		Chapters 8-9	July 29-31
	Lecture	Section 8.3	
	Lecture	Section 9.1-9.2	
	Lecture	Sections 9.3-9.4	
Week 7		Chapters 9-10	August 5-7
	Lecture	Section 10.1-10.2	
	Lecture	Section 10.3-10.4	
	Exam 3	**Exam 3-chapters 7- 8-9**	**August 7**
Week 8		Chapter 11-Review	August 12-14
	Lecture	Section 11.1-11.2	
	Lecture	Section 11.3-11.4	
	Final Exam	**Final Exam-cumulative: 6:30 PM-9:30 PM**	**August 14**

Students with Disabilities

Santa Monica College accommodates students with disabilities. If you qualify for any special accommodations due to a disability, you need to officially process your request through the Disabled Students Programs and Services (DSPS) office as close to the beginning of the semester as possible. An early notification of your request for test-taking and/or other accommodations is necessary to ensure that your disability related needs are addressed appropriately; testing accommodations cannot be applied retroactively. More information can be found on their website:

Disclaimer

Although every effort will be made to adhere to the policies, procedures, and schedules outlined in this syllabus, the instructor reserves the right to revise any information without prior notice.