

SYLLABUS
MATH 1700 Section 101, Fall 2025
TTh 11:00 - 12:15pm, Cudahy Hall 001

Instructor: Mehdi Maadooliat, Ph.D.

e-mail: mehdi.maadooliat@marquette.edu

website: <http://www.mscs.mu.edu/~mehdi>

Office Hours: T (CU 351) & Th (HelpDesk) 12:15 - 1:30pm

Office: CU 351

TA: Soroush Mahmoudiandehkordi

e-mail: soroush.mahmoudiandehkordi@marquette.edu

Office: CU 368

Help Desk Location: 4th floor Cudahy Hall

Help Desk Hours

Textbook: Elementary Statistics, 11th edition, by Johnson and Kuby, 2012.

(You need to acquire the WebAssign account, which includes the ebook.)

Calculators: You will need some sort of scientific calculator for the course.

Core of Common Studies Mathematical Reasoning Learning Outcomes: You should be able to:

1. Evaluate the effectiveness of the mathematical sciences in describing the world.
2. Analyze quantitative information symbolically, graphically, numerically, and verbally for the purpose of solving problems or drawing conclusions.
3. Construct logical arguments in support of mathematical assertions.

Learning Objectives:

1. Understand some important basic concepts of probability.
2. Understand the difference between descriptive statistics and inferential statistics.
3. Understand the estimation problem.
4. Understand the hypothesis problem.
5. Use Linear Correlation to find and interpret the Line of Best Fit.
6. Understand tests of independence and goodness of fit for categorical data.

Homework: Online homework will be assigned and graded through WebAssign.

WebAssign page: <https://www.webassign.net/>

WebAssign class key: [marquette 4908 8705](#)

Assignments are **typically** due Fridays at 11:50pm (check for the **exact** due dates in WebAssign).

Exams: There will be two **70 minutes long** on Sept. 25th, and Oct. 23rd, plus
a **120 minutes long** final: Dec. 12th from 3:30 - 5:30pm.

MAKE-UP POLICY: If you have an “unavoidable absence” as defined in Arts and Sciences Undergraduate Bulletin, the percent of the missed Exam will be added to your Final Exam percentage. **Contact me if is University event absence.**

Websites: Announcements: <http://d2l.mu.edu/>

Lecture Notes: <https://tinyurl.com/MoElstat>

Assignments: <http://www.webassign.net/>

Grading: Examinations 25% each - 2 Final Exam 30%

Attendance 5% Homework 15%

Everyone must be given the same opportunity to do well in this class. Individual exams WILL NOT be curved; however, I **MAY** use class participation to make adjustments at the end of the semester. The final grade is based on a scale no stricter than:

$93.5 \leq x \leq 100$	= (A)	$90 \leq x < 93.5$	= (A-)	$86.5 \leq x < 90$	= (B+)
$83.5 \leq x < 86.5$	= (B)	$80 \leq x < 83.5$	= (B-)	$76.5 \leq x < 80$	= (C+)
$73.5 \leq x < 76.5$	= (C)	$70 \leq x < 73.5$	= (C-)	$66.5 \leq x < 70$	= (D+)
$60.0 \leq x < 66.5$	= (D)	below 60	= (F)		

Drop Date: The last day to drop without a W is 09/02/2025 and with a W is 11/14/2025.

WebAssign Support: -

1. Here's a website which provides registration instructions and purchase option information. https://www.cengage.com/coursepages/MarquetteUniversity_WebAssign. It also includes live virtual help drop-in hours for students, Cengage Unlimited courses, and more.
2. Here are video walkthrough instructions: How to Register for WebAssign.

3. If any students have questions or issues with registering or purchasing access, they can get use our virtual help drop-in hours to speak with a Cengage team member. All drop-in dates/times can be found here: <https://events.cengage.com/event/04d72f2d-0bb9-41c9-af36-426ad654b301/schedule?RefId=Agenda>.

Course Description: Fundamental theory and methods of statistics without calculus. Descriptive statistics, elements of probability theory, estimation, tests of hypotheses, regression, correlation, introduction to computer methods of statistical tabulation and analysis. Recommended for students seeking a general introduction to statistical concepts and not intended to be a final course in statistics for students who need a thorough working knowledge of statistical methods.

Prerequisite: Two years of college preparatory mathematics. May not be taken for credit by students who have received college credit for another probability or statistics course.

Grading Style for Exams: Your work is considered, not just a final answer. It is possible to have the wrong answer but receive (almost) full credit for a problem. If your work does not support your answer, it is unlikely that you will receive many points even if your answer agrees with the solution key.

Grading Style for Homework: The homework is designed to provide you with practice using the concepts taught in the course. Practice is essential to be prepared for the tests in this class. Online homework will be assigned and graded through WebAssign. These assignments will be graded with a 20% adjustment. This means that if you score 80% or higher for your online homework you will receive the full 15% towards your overall score. If you score less than 80%, I will calculate your percentage as $\frac{\text{Your percentage}}{80} \%$. In other words, if you end the semester with 70% you will receive $\frac{70}{80} = 87.5\%$ for your homework score.

Attendance: Attendance is required. The College of Arts and Sciences' attendance policy will be observed: <https://bulletin.marquette.edu/policies/attendance/undergraduate/>.

Academic Support: You are encouraged to obtain help from me, the course instructor, the course TA in [HelpDesk \(22 hours per week\)](#). However, if you miss class, you are responsible for the missed material/information covered.

Tutoring: How can I be successful in this course?

Join the free small group tutoring sessions. It is built-in study time with your classmates and led by a student who excelled in this course and wants to help you do the same. Sessions begin on September 8th, but you can sign up for your weekly tutoring session as early as the first day of class! Do it today. Visit the website: <https://www.marquette.edu/tutoring/> for the sign-up link and more information.

Academic Coaching: <https://www.marquette.edu/student-educational-services/coaching.php>

Deportment: Norms for classroom conduct are based on respect for the instructor and fellow students. While in class, please silence your cell phones. The use of cell phones, laptops, and tablets is permitted only for note-taking or accessing course-related materials. Surfing the internet, texting, updating social media, playing games, reading unrelated materials, or any other non-course activity is not allowed, as it distracts both you and your classmates.

Honor Pledge and Honor Code: I recognize the importance of personal integrity in all aspects of life and work. I commit myself to truthfulness, honor, and responsibility, by which I earn the respect of others. I support the development of good character, and commit myself to uphold the highest standards of academic integrity as an important aspect of personal integrity. My commitment obliges me to conduct myself according to the Marquette University Honor Code.

Class #	Week	Date	Topics	Chapters/Sections
1	1	Tu Aug 26	Introduction, Syllabus, Math Review, Statistics, Definitions	Math Review, 1
2		Th Aug 28	Graphs (pie diagram, bar graphs, stem-and-leaf displays, dot plot), Frequency distributions and histograms, Measures of Central Tendency, Measures of Dispersion	2.1, 2.2, 2.3, 2.4
3	2	Tu Sep 2	Measures of Position, Box-Plot, z-scores, Bivariate Data	2.5, 3.1
4		Th Sep 4	Linear Correlation, Linear Regression	3.2, 3.3
5	3	Tu Sep 9	Probability of Events, Conditional Probability	4.1, 4.2
6		Th Sep 11	Rules of Probability, Mutually Exclusive, Independent Events	4.3, 4.4, 4.5
7	4	Tu Sep 16	Random Variable, Discrete Random Variable, Binomial Probability Distribution	5.1, 5.2, 5.3
8		Th Sep 18	Normal Distribution, Standard Normal Distribution	6.1, 6.2, 6.3
9	5	Tu Sep 23	Review Chapters 1-5 for Exam 1	2-5
10		Th Sep 25	Exam 1	
11	6	Tu Sep 30	Return and Go Through Exam 1	
12		Th Oct 2	Sampling Distributions, The Sampling Distribution of Sample Means, Application of the Sampling Distribution of Sample Means	7.1, 7.2, 7.3
13	7	Tu Oct 7	The Nature of Estimation, Estimation of Mean μ (σ known)	8.1, 8.2
14		Th Oct 9	Estimation of Mean μ (σ known), Hypothesis Test of μ (σ known): p-value approach	8.3, 8.4
15	8	Tu Oct 14	Hypothesis Test of μ (σ known): classical approach	8.5
		Th Oct 16	Fall Break	
16	9	Tu Oct 21	Review Chapters 6-8 for Exam 2	6-8
17		Th Oct 23	Exam 2	
18	10	Tu Oct 28	Return and Go Through Exam 2	
19		Th Oct 30	Inference about the mean μ (σ unknown)	9.1
20	11	Tu Nov 4	Inference about the Binomial Probability of Success	9.2
21		Th Nov 6	Inference about the Variance and Standard Deviation	9.3
22	12	Tu Nov 11	Dependent and Independent Samples, Inferences Concerning the Mean Difference Using Two Dependent Samples	10.1, 10.2
23		Th Nov 13	Inferences concerning the Difference between Means Using Two Independent Samples	10.3
24	13	Tu Nov 18	Inferences Concerning the Difference between Proportions Using Two Independent Samples	10.4, 10.5
25		Th Nov 20	Chi-Square Statistic, Inferences Concerning Multinomial Experiments	11.1, 11.2, 11.3
26	14	Tu Nov 25	Introduction to the ANOVA, Logic Behind ANOVA	12.1, 12.2
		Th Nov 30	Thanksgiving Break	
27	15	Tu Dec 25	Application of Single-Factor ANOVA	12.3
28		Th Dec 4	Review Chapters 9-12 for Final Exam	9-12
29		Fr Dec 12	Final Exam 3:30 pm-5:30 pm	

Table 1: **Tentative** Course Schedule