POINT ¹⁹○² LOMA
NAZARENE UNIVERSITY

School of STEM: Department of Mathematical, Information and Computer Sciences

MTH2003—Introduction to Statistics

3 Units

Summer 2025, Session 2

W 7:30am – 9:15am

Online

Final Exam: Wednesday, 7/16

INFORMATION	SPECIFICS FOR THE COURSE
Instructor title and name:	Dr. Carlson Triebold
Phone:	(619) 849-2968
Email:	ctriebol@pointloma.edu
Office location and hours:	Zoom, times posted on Canvas

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Course Description

A first course in statistics for the general student. Description of sample data, probability theory, theoretical frequency distributions, sampling, estimation, and hypothesis testing. Not applicable toward a major in mathematics.

Program and Course Learning Outcomes

1. Students will be able to apply their technical knowledge to solve problems.
2. Students will be able to compute measures of central tendency for data.

3. Students will be able to compute measures of dispersion for data.
4. Students will be able to use statistical methods to test hypotheses.
5. Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats.

Required Texts and Recommended Study Resources

Students are responsible for having the required course textbooks prior to the first day of class.

All supplemental materials posted on this course site (including articles, book excerpts, or other documents) are provided for your personal academic use. These materials may be protected by copyright law and should not be duplicated or distributed without permission of the copyright owner.

1. The Basic Practice of Statistics, 9th edition by Moore, Notz & Fligner
2. Access to Achieve, available through the online access key
3. A cheap calculator other than your phone, tablet, or computer (with at least a square root key)
4. Laptop or access to a computer with Java enabled in the web browser
5. Excel (see Canvas for download and instillation instructions)

Assessment and Grading

Grading Distribution	Percent
Midterm Exam	25
Final Exam	30
Labs	20
Homework	20
Reading and Video Notes	5
Total	100

Grades will be based on the following:

- **Homework:** Homework problems will be assigned regularly and posted on Canvas. Please check regularly to ensure that you are keeping up with the homework. Late homework will not be accepted. Your lowest homework score will be dropped.
- **Labs:** The labs are to be submitted only in Word or PDF format in Canvas. Late lab assignments will not be accepted. Your lowest lab assignment score will be dropped.
- **Midterm Exam and Final Exam:** The Midterm Exam and the Final Exam will include problems and questions over material assigned in the text, readings and handouts, as well as material

presented in class. No exam shall be missed without a well-documented emergency beyond your control. A score of zero will be assigned for an exam that is missed without a well-documented emergency beyond your control.

- **Late work will not be accepted.** Homework assignments that are submitted late will be recorded with a score of zero. During the course, you may find that you are unable to submit homework on time due to a personal situation (for example, a personal or family illness, accident, business trip, etc.). For this reason, your lowest homework score and your lowest lab assignment score will be dropped. There are no exceptions to this policy, so please use your dropped assignments wisely.

Grades are based on the number of points accumulated throughout the course with the following exception. A student must pass at least one of the Midterm Exam or the Final Exam to pass the class. That is, a score of 60% must be achieve on one of the Exams, or else the final grade will be an F regardless of all other point totals.

Standard Grade Scale Based on Percentages

A	B	C	D	F
A [92.5-100]	B+ [87.5-90)	C+ [77.5-80)	D+ [67.5-70)	F [0-60)
A- [90-92.5)	B [82.5-87.5)	C [72.5-77.5)	D [62.5-67.5)	
	B- [80-82.5)	C- [70-72.5)	D- [60-62.5)	

Final Examination Policy

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the Traditional Undergraduate Records: Final Exam Schedules site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for <u>one</u> of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

Incompletes and Late Assignments

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

Artificial Intelligence (AI) Policy

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro 1.5, GrammarlyGo, Perplexity, etc) to generate ideas, but you are not allowed to use AI tools to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course. If you have any doubts about using AI, please gain permission from the instructor.

PLNU Academic Accommodations Policy

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines allowed accommodations. The EAC makes accommodations available to professors at the student's request.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course. Accommodations are not retroactive so clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any special accommodations.

Additional Course Information:

Additional PLNU policies and practices that apply to this course can be found at the following link: https://docs.google.com/document/d/18i1pUoY0iCfB8w7JKxVvACQW309X-JRB/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true

Summer 2025   MTH 2003 Calendar

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
June 1	16	17 <u>Assigned</u> Reading & Videos: 1: Picturing Data 2: Describing Data Labs 0 & 1 Homework 1: Ch. 1 & 2	18 <u>Class on Zoom</u> <u>Due</u> Reading & video notes for 1 & 2 Lab 0 <u>Assigned</u> Reading & Videos: 4: Correlation 5: Regression 6: Two-way Tables Lab 2 Homework 2: Ch. 4, 5 & 6	19 <u>Due</u> Reading & video notes for 4, 5 & 6 Lab 1 Homework 1: Ch. 1 & 2	20 <u>Assigned</u> Reading & Videos: 8: Sampling 9: Experiments Lab 3 Homework 3: Ch. 8 & 9	21 <u>Due</u> Reading & video notes for 8 & 9 Lab 2 Homework 2: Ch. 4, 5 & 6
2	23 <u>Assigned</u> Reading & Videos: 3: Normal Lab 4 Homework 4: Ch. 3	24 <u>Due</u> Reading & video notes for 3 Lab 3 Homework 3: Ch. 8 & 9	25 <u>Class on Zoom</u> <u>Assigned</u> Reading & Videos: 15: Sampling Distribution 16: Confidence Intervals Labs 5 & 6 Homework 5: Ch. 15 & 16	26 <u>Due</u> Reading & video notes for 15 & 16 Lab 4 Homework 4: Ch. 3	27 <u>Assigned</u> Reading & Videos: 17: Hypothesis Tests 18: Inference in Practice Lab 7 Homework 6: Ch. 17 & 18	28 <u>Due</u> Reading & video notes for 17 & 18 Lab 5 Lab 6 Homework 5: Ch. 15 & 16
3	30	1 <u>Due</u> Lab 7 Homework 6: Ch. 17 & 18	2 <u>Class on Zoom</u> **Midterm Exam** <u>Assigned</u> Reading & Videos: 20: Inference About a Mean Homework 7: Ch. 20	3 <u>Due</u> Reading & video notes for 20	4 Independence Day	5 <u>Due</u> Reading & video notes for 21 & 27 Homework 7: Ch. 20
July 4	7 <u>Assigned</u> Reading & Videos: 21: Comparing Two means 27: ANOVA Lab 8 Homework 8: Ch. 21 & 27	8	9 <u>Class on Zoom</u> <u>Assigned</u> Reading & Videos: 22: Inference About Proportions 23: Comparing Two Proportions Lab 9 Homework 9: Ch. 22 & 23	10 <u>Due</u> Reading & video notes for 22 & 23 Lab 8 Homework 8: Ch. 21 & 27	11 <u>Assigned</u> Reading & Videos: 25: Chi-Square Lab 10 Homework 10: Ch. 25	12 <u>Due</u> Reading & video notes for 25 Lab 9 Homework 9: Ch. 22 & 23
5	14	15 <u>Due</u> Lab 10 Homework 10: Ch. 25	16 <u>Class on Zoom</u> **Final Exam**	17	18	19