

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

## MTH2003—Introduction to Statistics

3 of Units

Spring 2025

TR 2:30pm – 3:45pm Liberty Station 201

Final Exam: Monday, 5/5, 7:30am – 10:00am, in the large central room at Liberty Station

Information	Specifics for the Course
Instructor title and name:	Dr. Carlson Triebold
Phone:	(619) 849-2968
Email: <a href="mailto:ctriebol@pointloma.edu">ctriebol@pointloma.edu</a>	
Office location and hours:	Rohr Science 228, 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
Two Exams (at 17.5% each)	35
Final Exam	30
Lab Final Exam	5
Labs	10
Online and Written Homework	15
Attendance and Participation	5
Total	100

Grades will be based on the following:

• Online Homework: This homework is completed in Achieve, available through the online access key. You will have multiple attempts to complete each problem. Each section covered in class will have associated problems assigned online. Late homework will not be accepted. Your lowest two online homework scores will be dropped.

- Written 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 two written homework scores 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.
- Exams and the Final Exam: Exams 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 two online and written homework scores 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 Exam 1, Exam 2, the Lab Final 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	В	С	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 <u>Traditional Undergraduate Records: Final Exam Schedules</u> 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: <a href="https://docs.google.com/document/d/18i1pUoY0iCfB8w7JKxVvACQW309X-JRB/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true">https://docs.google.com/document/d/18i1pUoY0iCfB8w7JKxVvACQW309X-JRB/edit?usp=sharing&ouid=116164865489739533893&rtpof=true&sd=true</a>

Spring 2025 MTH 2003 Calendar

	Week	Tuesday	Thursday
January	1	14	16
		Introduction Lab 0	Chapters 1 & 2
	2	21	23
	_	No class	Chapters 4, 5 & 6
	3	28	30
		Chanter 9	Lab Review (Labs 1 & 2)
	4	Chapter 8	6
ary	4		
February		Chapter 9	Chapter 3
Fek	5		
_		Chapter 3 continued 18	Lab Review (Labs 3 & 4)
	6	16	Exam I
		Review for Exam I	
	7	25	27
	-	Chapter 15	Chapter 16
March	8	4	6
		Chapter 17	Lab Review (Labs 5 & 6)
	9	11	13
	9	Spring Break	
	10	18	20
		Chapter 18	Chapter 20
	11 25		27
	- 1 1	Chapter 20 continued	Lab Review (Labs 7 & 8)
	40	1	3
April	12	Ohamtan 24	Observan 27
⋖	40	Chapter 21 8	Chapter 27
	13	5 5	Exam II
	4.4	Review for Exam II 15	17
	14		
	4 =	Chapters 22 & 23 22	Easter Break
	15		
		Chapter 25	Lab Review (Labs 9 & 10)
	16	29	Lab Final Exam
		Review for Final Exam	
<u>~</u>	17	65	8
Мау	17	Final Exam	← On Monday! (May 5)
		7:30-10:00am in the Large Central Room	