



Mathematical, Information and Computer Sciences Department

School of STEM

MTH4151 Data Science Project II

1 Unit

Spring 2026

Meeting days/times: Tuesdays 4:30-5:25 PM

Meeting location: RS246 (Dr. Zack's Office)

Final Exam: Tuesday 5/5 4:30-7:00 PM

Instructor Title and Name: Dr. Maria Zack

Phone: 619-849-2458

Email: mzack@pointloma.edu

Office Location and Office Hours:

Below are the times that I work to hold open for office hours. If none of them work you can email me to see if we can find another time. I offer both in person (office RS246) and Google Meet options for office hours. [Use this link](#) to book an appointment if you want a time reserved for you or if you want to use Google Meet. You can also just stop by my office.

Monday 1:00-2:00 PM

Tuesday 8:00-9:00 AM and 2:00-3:00 PM

Wednesday 9:00-10:00 AM and 5:00-6:00 PM

Thursday by appointment only

Friday 1:00-3:00 PM

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.

Department Mission

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

Course Description

MTH 4151 Data Science Project II (1 Unit)

This course is a continuation of MTH 4142. Students will complete the project begun in MTH 4142 and present their results.

Prerequisite(s): MTH 4142

Program and Course Learning Outcomes

- Students will be able to apply their mathematical knowledge and critical thinking to solve problems. (CC: CT)
- Students will be able to use technology to solve problems.
- Students will be able to speak about their work with precision, clarity and organization. (CC: OC)
- Students will be able to write about their work with precision, clarity and organization. (CC: WC)
- Students will collaborate effectively in teams.
- Students will be able to understand and create arguments supported by quantitative evidence. (CC: QR)
- Students will understand the professional, ethical and social issues and responsibilities with the implementation and use of mathematical models and technology.

The PLO assessed in this course: Students will understand the professional, ethical and social issues and responsibilities with the implementation and use of mathematical models and technology.

The signature assignment for this assessment: Ethics Exercise

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.

There is no textbook for this class.

Course Credit Hour Information

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 1-unit class delivered over 15 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this

course, students will spend an estimated 96 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules. This breaks down as:

Project Meetings	7 hours
Project Preparation	8 hours
Data Analysis	22 hours
Writing Paper and Ethics Assignment	5 hours
<u>Final Presentation</u>	<u>1 hour</u>
Total:	43 hours

Assessment and Grading

Graded Components

- **Project Design:** This is the first phase of the project which will include identifying a question that you want to answer, identifying the data that can assist in answering the question and getting the data to load in the tool(s) that you will be using to analyze the data.
- **Project Check Points and Deliverables:** In this second phase you will be analyzing the data and providing me with progress reports (PowerPoint presentations and demos of findings from the data along with challenges encountered in the analysis process.
- **Final Project Paper:** You will write a (brief) paper that provides information about your data, your methodology for analyzing the data and your conclusions. *This should include references to articles, books and websites that you have used to acquire the data, analyze the data, and make meaning from the data.* I will provide you with an outline for the paper and we will discuss it in advance.
- **Ethics Assignment:** There will be an assignment due at the end of the semester that will ask you to consider some of the ethical issues that are inherent in the process of gathering and analyzing data. This is due at the time of the final, Tuesday 5/5 4:30-7:00 PM.
- **Examinations and the Final Examination.** There are no examinations in this class, however, there is a final presentation that will take place at the time of the final exam: Tuesday 5/5 4:30-7:00 PM.
- **Late work will not be accepted** without prior consent or a well-documented emergency.

Grade Distribution

Project Design	20%
Project Check-in/Deliverables	50%
Final Paper + Presentation	20%
<u>Ethics Assignment</u>	<u>10%</u>
Total	100%

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 one 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 619-849-2533). 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. Professors are able to view a student's approved accommodations through Accommodate.

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 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/11BgAANLOJ9tjt837d24EZ181ukM2qzHF/edit>

Assignments At-A-Glance

Date	Details	Due
Tue Jan 20, 2026	Assignment Identifying Your Question	due by 3pm
Mon Jan 26, 2026	Assignment Modifying Your Question	due by 3pm
Mon Feb 2, 2026	Assignment Identifying the Data Source	due by 3pm
Mon Feb 9, 2026	Assignment Data Loading and Basic Checks	due by 3pm
Mon Mar 2, 2026	Assignment Data Analysis Progress Report #1	due by 3pm
Mon Mar 16, 2026	Assignment Data Analysis Progress Report #2	due by 3pm
Mon Apr 6, 2026	Assignment Data Analysis Progress Report #3	due by 3pm
Mon Apr 13, 2026	Assignment Paper Outline	due by 3pm

Date	Details	Due
Mon Apr 27, 2026	Assignment Final Paper	due by 3pm
Tue May 5, 2026	Assignment Ethics	due by 4:30pm
	Assignment Final Paper Presentation	due by 4:30pm