

Mathematical, Information and Computer Sciences

MTH4072 Internship in Data Science

Number of Units 2

Hybrid (work for internship host + PLNU online tasks)

No Final Exam

Spring 2025

Instructor: Dr. Maria Zack

Phone: 619.849.2458

Email: mzack@pointloma.edu

Office hours:

In Person or Google Meet. <u>Use this linkLinks to an external site.</u> to book an appointment.

These are the times that I work to hold open for appointments. If none of them work you can email me to see if we can find another time. You can come to my office or join via Google meetings. My office is RS246.

Monday 1:00-2:00 PM

Tuesday 8:30-10:00 AM and 1:00-2:00 PM

Wednesday 1:45-2:45 PM Thursday 8:30-10:00 AM Friday 2:00-3:00 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

ISS 4072 - Internship in Data Science (2)

A supervised experience in which the student works with industry professionals to gain experience in data science. May be repeated up to a total of four (4) units. Credit/No Credit. Prerequisite(s): MTH 3083, Junior standing, and consent of instructor.

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 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: OR)
- Students will understand the professional, ethical and social issues and responsibilities with the implementation and use of mathematical models and technology.

In addition, an internship is an opportunity for students to:

- Apply skills and knowledge learned in major courses to real business situations.
- Reinforce and expand previous conceptual learning through work experience.
- Develop "networks" in the business and professional community.

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

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 2 unit class delivered over fifteen weeks. Specific details about how the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

Distribution of Student Learning Hours		
Category	Time Expectation in Hours	
Work at internship location (verified via time sheets).	80	
Reading Assignments	5	
Written Assignments	10	
Other Assignments & Learning Activities	1	
Total Hours	96	

ASSESSMENT AND GRADING

Graded Components

- Academic Internship Contract: You must complete an "Academic Internship Contract" and turn it in to me no later than midnight on Friday of the second week of classes. The form is attached. The person who is to supervise you at your internship work place must sign as your on-site supervisor and I must sign as your department sponsor. Please be as precise as possible in specifying your duties as an intern and the skills you hope to develop. Your internship should not be considered valid for academic credit until I have approved and signed your completed contract.
- Weekly Timesheets: Each week you need to turn in your timesheet indicating the hours that you have worked and what you did during those hours. The timesheet must be signed by your supervisor. Each weekly report covers Monday through Saturday of that week and is due by Wednesday of the following week. You can find a link to the timesheet in the relevant assignment. Please upload you signed timesheet in Canvas.
- **Internship Evaluation Essay**: There are multiple steps in preparing this essay and a assignment related to each step. This brief paper asks you to reflect on the quality of your internship, what new things you learned and how the work connects with the coursework that you have taken. This *should include references to articles and books that you have read to gain technical knowledge for your internship.*

- 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 you observed or encountered during your internship.
- Examinations and the Final Examination. There are no examinations in this class.
- Late work will not be accepted without prior consent or a well-documented emergency.

Grading Distribution	Percent
Contract Documents	5
Time Sheets	35
Paper Outline	10
Paper Draft	10
Final Paper	30
Ethics	10
Total	100

Grading Scale

Approximate minimal percentages required to obtain a given grade are:

Standard Grade Scale Based on Percentages					
	A	В	C	D	F
+		87.5- 90	77.5-80	67.5-70	
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60
	90-92.5	80-82.5	70-72.5	60-62.5	

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.

CLASS ENROLLMENT

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

ARTIFICIAL INTELLIGENCE (AI) POLICY

Use of Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski) to generate content (text, video, audio, images) that will end up in any work submitted to be graded for this course is not permitted. Use of these tools will be treated as plagiarism. If you have any questions about using AI, please discuss this with the instructor.

PLNU ACADEMIC ACCOMODATIONS 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=trueLinks to an external site.

Course Summary:

Date	Details	Due
Wed Jan 22, 2025	Assignment Week 1 Time Sheet	due by 11:59pm

Date	Details	Du
Fri Jan 24, 2025	Assignment Contract Work	due by 5pm
FII Jan 24, 2023	Assignment <u>Location Paperwork</u>	due by 5pr
Wed Jan 29, 2025	Assignment Week 2 Time Sheet	due by 11:59pr
Wed Feb 5, 2025	Assignment Week 3 Time Sheet	due by 11:59pn
Wed Feb 12, 2025	Assignment Week 4 Time Sheet	due by 11:59pn
Fri Feb 14, 2025	Assignment Schedule a Meeting To Discuss Reading	due by 11:59pm
Wed Feb 19, 2025	Assignment Week 5 Time Sheet	due by 11:59pr
Wed Feb 26, 2025	Assignment Week 6 Time Sheet	due by 11:59pr
Wed Mar 5, 2025	Assignment Week 7 Time Sheet	due by 11:59pr
Wed Mar 12, 2025	Assignment Week 8 Time Sheet	due by 11:59pr
Wed Mar 19, 2025	Assignment Week 9 Time Sheet	due by 11:59pr
Sun Mar 23, 2025	Assignment Paper Outline	due by 11:59pr
Wed Mar 26, 2025	Assignment Week 10 Time Sheet	due by 11:59pr
Wed Apr 2, 2025	Assignment Week 11 Time Sheet	due by 11:59pr
Fri Apr 4, 2025	Assignment <u>Draft of Paper</u>	due by 11:59pr
Wed Apr 9, 2025	Assignment Week 12 Time Sheet	due by 11:59pr
Wed Apr 16, 2025	Assignment Week 13 Time Sheet	due by 11:59pr

Details	Due
Assignment Week 14 Time Sheet	due by 11:59pm
Assignment Week 15 Time Sheet	due by 11:59pm
Assignment Final Paper	due by 11:59pm
Assignment Ethics	due by 11:59pm
	Assignment Week 14 Time Sheet Assignment Week 15 Time Sheet Assignment Final Paper