Spring 2026

Meeting days: Tuesdays	**Instructor:** Professor of Data Analytics, Thea Copeland, MBA
Meeting times: 5:30 to 8:15 pm	**Phone:** (760) 663-6140
Meeting location: Mission Valley 316	**E-mail:** tcopelan@pointloma.edu
Final Exam: Tuesday, 5/6/25, 5:30 to 8:15 pm	**Office location and hours:** Upon Request - Schedule Office Hours with Professor Copeland
Class Participation: The professor will facilitate the course in person at the designated location and time. The class is designed as HyFlex (Hybrid-Flexible), meaning you have three options for participation: in-person, synchronous online, or asynchronous online. Synchronous means you attend classes live online, and asynchronous means you watch the recorded Zoom on your own time.	

Table 1 Course Information

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.

Fermanian School of Business Mission

Character – Professionalism – Excellence – Relationships – Commitment - Innovation

As members of a vital Christian community, we strive to provide high quality business programs that equip students to make a positive impact in their workplace and community by connecting purpose to practice.

COURSE DESCRIPTION

This course explores methods of applied data analysis, including capturing, identifying and analyzing data to inform decision making. Topics include an overview of statistical concepts, guidelines for effective data analysis, data visualization principles, and presenting and evaluating alternative solutions. Emphasis will be placed on designing and creating data visualizations to communicate with various stakeholders.

COURSE LEARNING OUTCOMES

1. Identify and analyze the appropriate data needed to solve organizational issues (MBA: PLO 1 & 3); (MAOL: PLO 2).
2. Design principles and techniques for exploring and visualizing data (MBA: PLO 2 & 3); (MAOL: PLO 2).
3. Apply data visualization principles and guidelines for effective analysis and presentation (MBA: PLO 2, 3 & 6); (MAOL: PLO 2 & 4).
4. Evaluate alternatives to optimize decision-making within organizational constraints (MBA: PLO 2 & 3); (MAOL: PLO 2).
5. Present persuasive, data-driven business insights in a professional and concise manner (MBA: PLO 6); (MAOL: PLO 4).

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 3 unit class delivered over 16 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Required Textbooks and Resources:

Additional Resources:

- Winston, W.L. (2020). *Analytics Stories: Using Data to Make Good Things Happen*. John Wiley & Sons, Inc.
    o You will have an assignment in which you may use this book as a resource. You can purchase online or find the eBook in the PLNU Ryan Library.

- Tableau Resources
    o Tableau Public Desktop If you prefer Tableau Public desktop to Tableau Public browser version, the desktop version is available for free. Review the technical requirements to ensure you have a laptop capable of running Tableau Desktop.
    o Viz of the Day
    o Trailblazer Account (Tableau learning platform)
- Storytelling with Data by Cole Nussbaumer
    o You will apply Nussbaumer's core concepts throughout the course.

ASSESSMENT AND GRADING

Grades will be based on the following:

Assignments & Exams	Quantity	Points Each	Points Total		Grading Scale
Quantitative Research Techniques and Statistics Leveling Module	2	50	100		A=93-100 A-=90-92
Labs	10	25	250		B+=87-89
Homework Assignments	8	25	200		B=83-86
Final Project Deliverables	2	25	50		B-=80-82
Final Project Presentation	1	100	100		C+=77-79
Module Exam 1	1	100	100		C=73-76

Module Exam 2	1	100	100		C-=70-72
Final Exam	1	100	100		D+=67-69
Total Points			1,000		D=63-66 D-=60-62 F=0-59

Table 2 Assignment Distribution and Grade Scale

Quantitative Statistics Certification: (50 points each)
You will complete the Quantitative Research Techniques and Statistics Leveling Module. This certification is divided into two parts. The first part is taking notes for the module and completing the pre-test. The second part is taking and passing the post-test exam with a score of 80%.

Homework Assignments: (25 points each)
Homework assignments reinforce skills learned during in-class labs while developing your ability to succinctly and effectively communicate the process and results of your data analysis.

Labs: (25 points each)
During class, we will spend a significant amount of time solving hands-on data problems in Tableau and Excel. Typically, the labs take 20 to 30 minutes to complete. The labs introduce and reinforce fundamental data analytics skills.

Final Project Deliverables: (25 points each)
There are two final project deliverables throughout the course that aim to prepare you for your final project presentation.

Final Project Presentation: (100 points)
You will demonstrate your analytical methods and data storytelling skills in a 10-minute presentation.

Exams: (100 points each)
This course consists of three exams. The first exam, Module One Exam, focuses on descriptive and diagnostic analytics. The second exam, Module Two Exam, prioritizes predictive and prescriptive analytics. The Final Exam is an accumulative exam that allows you to demonstrate your comprehensive understanding of data-driven decision-making.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted by the due date indicated in Canvas. Late assignments are not accepted. Late work will not be accepted for credit except in the following university-sanctioned circumstances: illness (with doctor's note), death, university-sponsored field trip or activity, military obligation, or religious holiday. There are no makeup quizzes or exams.

ARTIFICIAL INTELLIGENCE (AI) POLICY

Each assignment in this course includes specific guidelines on the use of Artificial Intelligence (AI). Generally, you are allowed to use AI tools (e.g., ChatGPT, Gemini, GrammarlyGo, Perplexity, etc) to generate ideas, but the use of AI tools to generate content (data files, charts, graphs, tables, text, video, audio, images) is limited. These guidelines are designed to support you in building AI skills while developing core data analytics skills, considering ethical issues, and avoiding plagiarism.

Permitted:

AI tools can be used to support idea generation, debug analytical models, perform rote data scrubbing, or support understanding of complex topics. Why? You want to practice using AI to augment your work and help you work more efficiently.

Homework and Final Project: These assignments will include specific guidelines for AI use.

Restricted:

Absolutely no AI-generated Excel spreadsheets, Tableau workbooks, or written content will be included in your submissions. All submissions will be originally created by you. Why? You must develop fundamental analytical skills and understand how to operate and troubleshoot with data analysis tools.

Labs: AI tools are prohibited. The datasets used in the in-class labs are copyrighted. It is forbidden to enter this proprietary content into public AI tools. The in-class labs are opportunities to practice hands-on applications for data analytics. Each lab includes detailed written instructions and a video tutorial.

Exams: AI Tools are prohibited. Exams and quizzes provide opportunities to demonstrate your skills and critical thinking in data analytics.

AI Citations:

Students must provide a copy of the AI-generated work along with the proper citation. The AI-generated work is not sufficient. You must "own" the work by making revisions that align with the specific assignment objective(s), and it must be clear that your final submission is uniquely your "own" work. Credit will not be given for work that is AI-generated, without evidence of your "human touch." Any work that uses AI-based tools must be clearly cited in accordance with APA 7th edition guidelines. Here are guidelines and an example of a proper citation:

APA Style: How to Cite ChatGPT

OpenAI. (2024). ChatGPT (version 3.5) [Large language model]. Retrieved from https://chat.openai.com/chat

AI Plagiarism:

Plagiarism is defined as using or taking credit for someone or something else's work without permission or acknowledgment. If you use AI tools to generate work in this course and do not properly cite it, this constitutes plagiarism and will be reported to the university as an Academic Integrity violation. In addition to reporting plagiarism to the university, students who use AI to generate work and fail to cite it properly will receive a grade of zero on the submitted assignment.

SPIRITUAL CARE

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our Graduate students to encounter God and grow in their Christian faith. At the Mission Valley (MV) campus we have an onsite chaplain who is available during class break times across the week. If you have questions for or a desire to meet or share any prayer requests with the onsite chaplain, you may email Dr. Sylvia Cortez Masyuk at scortezm@pointloma.edu.

In addition, on the MV campus there is a prayer chapel on the third floor. It is open for use as a space set apart for quiet reflection and prayer.

LANGUAGE AND BELONGING

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

If you (or someone you know) have experienced other forms of discrimination, you can find more information on reporting and resources at www.pointloma.edu/nondiscrimination.

SEXUAL MISCONDUCT AND DISCRIMINATION

In support of a safe learning environment, if you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that accommodations and resources are available through the Title IX Office at pointloma.edu/Title-IX. Please be aware that under Title IX of the Education Amendments of 1972, faculty and staff are required to disclose information about such misconduct to the Title IX Office.

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors at pointloma.edu/title-ix or as shown in the PLNU Spiritual Care section of this syllabus.

If you (or someone you know) have experienced other forms of discrimination or bias, you can find more information on reporting and resources at www.pointloma.edu/bias

GPS ACADEMIC RESOURCES

PLNU offers the following free academic resources virtually for Graduate Professional Studies (GPS) Students. Visit myPLNU through the links below for more information.

- **The GPS Writing Center** offers:

- **Zoom Writers Workshops** offered each quad on a variety of helpful topics
- **One-to-one appointments** with the Writing Coach
- **Microlearning YouTube Video Library** for helpful tips anytime
- **Research Help Guide** to help you start your research
- The physical office is located on the third floor of the **Mission Valley Regional Center** off the student lounge
- **Academic Writing Resources Course:** Found on your Canvas Dashboard, this course is non-credit with 24/7 access, no time limits, and self-paced content. **Watch a quick video run-through** and take time now to explore!
- **Grammarly**: Students have unlimited FREE access to Grammarly for Education, a trusted tool designed to help enhance writing skills by providing real-time feedback, identifying areas for improvement, and providing suggestions. Grammarly's Generative AI is NOT available with our student accounts.
- **Tutoring**: Students have access to 24/7 live or scheduled subject tutoring through Tutor.com, including a Paper Drop-Off Service with feedback within 12 hours.

We are here to support you! Contact us anytime: **GPSWritingCenter@pointloma.edu**

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU RECORDING NOTIFICATION

In order to enhance the learning experience, please be advised that this course may be recorded by the professor for educational purposes, and access to these recordings will be limited to enrolled students and authorized personnel.

Note that all recordings are subject to copyright protection. Any unauthorized distribution or publication of these recordings without written approval from the University (refer to the Dean) is strictly prohibited.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. For all student appeals, faculty and students should follow the procedures outlined in the University Catalog. See Graduate Academic and General Policies for definitions of kinds of academic dishonesty and for further policy information.

During the first week of class, you will be asked to submit an Academic Honesty Verification Statement. Submitting the statement is a requirement of this course. By submitting the Academic Honesty

Verification Statement, you will be verifying all assignments completed in this course were completed by you. Carefully review the Academic Honesty Statement below.

Statement: "In submitting this form, I am verifying all the assignments in this course will be completed by me and will be my own work."

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.

COURSE MODALITY DEFINITIONS

1. Online Courses: These are courses with class meetings where all instruction and interaction is fully online.
    a. Synchronous Courses: At least one class meeting takes place at a designated time.
    b. Asynchronous Courses: All class meetings are asynchronous.
2. Hybrid Courses: These are courses with class meetings that take place both in the classroom and online synchronously and/or asynchronously.
3. In-Person Courses: These are courses that meet in person with the instructor and students in a physical classroom setting. With approval by the area dean, this may include up to 25% of qualified class interactions through a Learning Management System (such as Canvas).

PLNU ATTENDANCE AND PARTICIPATION POLICY

Synchronous Attendance/Participation Definition

For synchronous courses that have specific scheduled meeting times (including in-person, hybrid, and synchronous online courses), absences are counted from the first official meeting of the class regardless of the date of the student's enrollment. For courses with specific attendance requirements, those requirements are outlined in the course syllabus.

Online Asynchronous Attendance/Participation Definition

Students taking online courses with no specific scheduled meeting times are expected to actively engage throughout each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes, but is not limited to:

- Engaging in an online discussion
- Submitting an assignment
- Taking an exam
- Participating in online labs
- Initiating contact with faculty member within the learning management system to discuss course content

Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.

USE OF TECHNOLOGY

In order to be successful in the online or hybrid environment, you'll need to meet the minimum technology and system requirements; please refer to the *Technology and System Requirements* information. Additionally, students are required to have headphone speakers, microphone, or webcams compatible with their computer available to use. Please note that any course with online proctored exams requires a computer with a camera (tablets are not compatible) to complete exams online.

Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day**. No requests for early examinations or alternative days will be approved.

COURSE SCHEDULE AND ASSIGNMENTS

WK |Date	Attendance Requirements	Homework & Labs	Due Date
WK1|01/13	No Class (Light Week)	HW#1: Quant Module Pre-Test and Study Notes	1/19/2025
WK2|01/20	In-Person, Synchronous, or Asynchronous	HW#2: Quant Module Post-Test Lab 1	1/26/2025
WK3|01/27	In-Person, Synchronous, or Asynchronous	HW#3: Introduction to Tableau Lab 2	2/2/2025
WK4|02/03	In-Person, Synchronous, or Asynchronous	HW #4: Descriptive Analytics Lab 3	2/9/2025
WK5|02/10	In-Person, Synchronous, or Asynchronous	HW#5: Project Deliverable Part One Lab 4	2/16/2025
WK6|02/17	In-Person, Synchronous, or Asynchronous	Module 1 Exam: Real Estate Dashboard	
WK7|02/24	In-Person, Synchronous, or Asynchronous	HW#6: WSJ Article Synthesis Lab 5	3/2/2025
WK8|03/03	In-Person, Synchronous, or Asynchronous	HW#7: Regression Analysis Lab 6	3/9/2025
WK#|03/10	SPRING BREAK		
WK9|03/17	In-Person, Synchronous, or Asynchronous	Module Exam 2: Regression, Correlation, Deep Learning	
WK10|03/24	In-Person, Synchronous, or Asynchronous	HW#8: Project Deliverable Part 2 Lab 7	3/30/2025
WK11|03/31	In-Person, Synchronous, or Asynchronous	HW#9: WSJ Articles Synthesis Lab 8	4/6/2025
WK12|04/07	In-Person, Synchronous, or Asynchronous	HW#10: Linear Programming Lab 9	4/13/2025
WK13|04/14	In-Person, Synchronous, or Asynchronous	HW #11: Linear Programming Lab 10	4/20/2025
WK14|04/21	In-Person, Synchronous, or Asynchronous	Final Project Presentations	
WK15|04/28	In-Person, Synchronous, or Asynchronous	Final Project Presentations	
WK16|05/05	In-Person, Synchronous, or Asynchronous	Final Exam	