

Fall 2026

Meeting days: Tuesday & Thursday	Instructor title and name: Assistant Professor of Data Analytics, Thea Copeland, MBA
Meeting time and location: Section 04: 8 to 9:15 am, FSB RM 103 Section 01: 11 am to 12:15 pm, FSB RM 102 Section 02: 1:30 to 2:45 pm, FSB RM 104 Section 03: 3 to 4:15 pm, FSB RM 104	Phone: (760) 653-6140 E-mail: tcopelan@pointloma.edu Office location and hours: FSB RM 135, Tue & Thu 9:30 to 10:30 am or available upon request
Final Exam: Section 04: Tue., 12/15, 7:30 to 10 am Section 01: Tue., 12/15, 10:30 am to 1 pm Section 02: Thu., 12/17, 1:30 to 4 pm Section 03: Tue., 12/15, 4:30 to 7 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.

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 how leaders can use data to inform the decision-making process. Topics include identifying the right information, eliminating bias, understanding predictive analytics, data visualization, communicating uncertainty, and addressing challenges to your data. An emphasis is placed on basic methods of gathering, analyzing, and communicating data.

COURSE LEARNING OUTCOMES

The student who completes this course will be able to:

1. Define “big data” and the increasing role of evidence-based decision making to support executive decision making (PLO 1).

2. Explain the differences between predictive, prescriptive, and descriptive analytics, and the organizational questions that can be answered with each approach (PLO 1).
3. Examine processes of gathering, analyzing, visualizing, and communicating data (PLO 1, 2, 3).
4. Demonstrate an understanding of the principles of analytics using examples from a variety of organizational functions and industries (PLO 2, A2, G2).
5. Recognize the ethical implications of collecting, managing, and using data for managers and leaders (PLO 4).

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Lomabooks Instructions for Students:

This course is part of our course material delivery program, [LomaBooks](#). The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into Canvas.

You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your [LomaBooks](#) materials.

Required Textbook:

For this course, we will use the Connect version of this textbook (ISBN10 1265444927). In Canvas, the professor will provide you with a link to access the eBook and Connect platform. You will gain access through the code provided by LomaBooks or purchase directly on the McGraw-Hill website.

Richardson, V., & Weidenmier Watson, M. (2026). *Introduction to Business Analytics*. McGraw-Hill.

Required Software:

For this course, you will need access to the software platforms below. We will spend time in class making sure you have properly set up your access with appropriate downloads or user credentials.

- Microsoft Excel – [How to Access and Install Office 365](#)
 - Through the provided link, you will find instructions for accessing the Microsoft Office Suite, which is free to PLNU students. Students will use MS Excel to complete multiple labs, homework assignments, and exams.
- Microsoft Excel – [Load the Analysis ToolPak in Excel](#)
 - The Analysis ToolPak will support various statistical analysis applications throughout the course.
- Tableau Public – [Sign Up Here](#)
 - Students will use Tableau Public, a data visualization platform, to complete multiple labs, homework assignments, and exams.
- Trailblazer Account – [Sign Up Here](#)

- Students will gain access to the Salesforce Trailhead learning platform after creating a Trailblazer Account. Salesforce, Tableau's parent company, developed learning modules specific to Tableau. Students will earn 15 Trailhead badges throughout this course.

ASSESSMENT AND GRADING

Assignments & Exams	Quantity	Points Each	Points Total		Grading Scale
Quizzes & Class Participation	25	5	125		A=93-100 C=73-76 A-=90-92 C-=70-72 B+=87-89 D+=67-69 B=83-86 D=63-66 B-=80-82 D-=60-62 C+=77-79 F=0-59
In-Class Labs & Exercises	25	10	250		
Homework	10	25	250		
Group Presentation	1	125	125		
Module Exam 1	1	125	125		
Module Exam 2	1	125	125		
Total Points			1,000		

Quizzes & Class Participation: (5 points each)

The purpose of the quizzes is to prepare you for class discussions, lectures, and labs by reading the textbook and familiarizing yourself with core course concepts. Quizzes are given during the first 5 minutes of class. In addition to quizzes, polls will be distributed during class to reinforce key learning points.

In-Class Labs & Exercises: (10 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.

Homework: (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.

Group Presentation: (125 points)

In groups of four, you will create a 15-minute presentation that applies data analytics methods and storytelling with data fundamentals.

Exams: (125 points each)

This course includes two exams. The first exam, Module One Exam, focuses on descriptive and diagnostic analytics. The second exam, Module Two Exam, prioritizes predictive and prescriptive analytics.

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.

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.

PLNU 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, Claude, Grammarly, etc.) to generate ideas and troubleshoot, 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 Group Presentation: 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 in-class labs are opportunities to practice hands-on applications for data analytics. Each lab includes detailed written instructions and a video tutorial.

Exams and Quizzes: 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.

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 via the [Nondiscrimination and Anti-harassment Policy](#).

PLNU ACADEMIC BEHAVIOR POLICY

Both faculty and students at Point Loma Nazarene University have the right to expect a safe and ordered environment for learning. Students are expected to take the initiative to learn and conduct themselves in a mature and civil manner in the classroom environment. Any student behavior that is disruptive or threatening is a serious affront to Point Loma Nazarene University as a learning community. Students who fail to adhere to these behavioral standards may be subject to disciplinary action, including removal from class or further university sanctions. For a full definition of disruptive behavior, response procedures, and the appeal process, please consult the [Academic Behavior Policy](#) in the [University Catalog](#).

LOMA WRITING CENTER

Getting feedback from the Loma Writing Center while you're in the process of working on an assignment is a great way to improve the quality of your writing and develop as a writer. You are encouraged to talk with a trained writing consultant about getting started on an assignment, organizing your ideas, finding and citing sources, revising, editing for grammar and polishing final drafts, and more.

Walk-ins are welcome, but we recommend making an appointment in advance. For information about how to make in-person or online appointments, see [Loma Writing Center webpage](#) or visit the Loma Writer Center on the first floor of the Ryan Library, room 221.

- [Appointment Calendar](#)
- [Website](#)
- [Email](#)

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](#). 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](#) or [consult the list of campus pastors](#).

If you (or someone you know) has experienced other forms of discrimination or bias, you can find more information on reporting and resources via the [Nondiscrimination and Anti-harassment Policy](#).

SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If students have questions, a desire to meet with the chaplain or have prayer requests you can contact your professor or the [Office of Spiritual Life and Formation](#).

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 [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

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, [by email](#) or phone at 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 approved 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 approved accommodations in that particular course. Accommodations are not retroactive; as such, 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-related need should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. In accordance with ADA, accommodations cannot constitute a fundamental alteration to course outcomes; therefore, planning ahead is vital in establishing appropriate accommodations for equal access to this course. 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 eligibility 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.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive an "F" grade.

COURSE SCHEDULE AND ASSIGNMENTS

WK Date	Class Content	Reading & Homework
WK1 09/01	Quiz #1: Survey - Who's Who Loma Edition Introductions & Course Overview Access MS Excel, Tableau, Lab	HW #1: Tableau Trail - Tour the Tableau Environment, Build Your Data Literacy (4.3 hours) Due Monday 09/07 @ Midnight
WK1 09/03	Introduction to SOAR and Analytics Ascendancy Model Applied Data Analytics	
WK2 09/08	Quiz #2: Ch 1 Analytics Ascendancy Model Artificial Intelligence in Data Analytics Access to Tableau Public, McGraw Hill Connect, Excel Add-Ins	Reading: Ch 1 Specify the Question HW#2: Data Visualization Using Tableau Due Sunday 09/14 @ Midnight
WK2 09/10	Introduction to Tableau	
WK3 09/15	Quiz #3: Ch 1 SOAR Analytics Model Lab: 1.2 & 1.3 Excel Assessing Customer and Product (SKU) Profitability	Reading: Ch 1 Specify the Question HW #3: Tableau Trail - Build Your Data Literacy Due Monday 09/21 @ Midnight
WK3 09/17	Lab: 1.2 & 1.3 Tableau Assessing Customer and Product (SKU) Profitability	
WK4 09/22	Quiz #4: Tableau Data Types Lab: Building Databases with LEGO Bricks	Reading: Ch 2 Obtain the Data HW #4: SOAR Report Lab 2.4 Aggregating and Visualizing Different Data Types Due Sunday 09/21 @ Midnight
WK4 09/24	SOAR Reports Detailed Overview Lab: 2.3 Tableau Prep Data, Conduct Prelim Exploratory Analysis	
WK5 09/29	Quiz #5: Ch 6 Chart and Graph Types Lab: Fizz Forward Create a Dashboard in Tableau	Reading: Ch 6 Report the Results HW #5: Tableau Trail - Analysts Choice Due Sunday 09/30 @ Midnight
WK5 10/01	Lab: Fizz Forward Create a Dashboard in Excel	
WK6 10/06	Quiz #6: Ch 3 Descriptive Analytics Lab: 3.1 & 3.2 Excel Functions, Toolpak	Reading: Ch 3 Analyze the Data: Basic Statistics HW #6: SOAR Report Sales Transactions Due Sunday, 10/12 @ Midnight
WK6 10/08	Ethics	
WK7 10/13	Quiz #7: Ch 4 Diagnostic Analytics Lab: 4.1 & 4.2 Excel Inventory, Bank Reconciliation	Reading: Ch 4 Analyze the Data: Descriptive and Diagnostic Analytics
WK7 10/15	Lab: 4.3 Excel Benford's Law Module 1 Exam Review	

WK8 10/20	Module 1 Exam	
WK8 10/22	Fall Break (No Class)	
WK9 10/27	Storytelling with Data, Group Presentation Kickoff In-Class Exercise: Group Presentation - Team Contract	Reading: Ch 3: Analyze the Data: Basic Statistics, Section 3.8 Regression HW #7: Tableau Trail - Analyst's Choice Due Monday 11/02 @ Midnight
WK9 10/29	Lab: 3.5 Excel Regression Activity Based Costing	
WK10 11/03	Quiz #8: Ch 5 Regression Analysis In-Class Exercise: Regression Analysis Use Cases	Reading: Ch 5: Analyze the Data: Predictive and Prescriptive Analytics HW #8: Storytelling with Data Due Sunday, 11/09 @ Midnight
WK10 11/05	Lab: 5.1 & 5.2 Excel Sales & R&D Linear Relationship, Excel Sales & R&D Non-Linear Relationship	
WK11 11/10	Quiz #9: Ch 5 Predictive Analytics Lab: 5.4 & 5.6 Tableau Forecasting Product Demand Using Time Series Analysis, Excel Product Demand Linear Regression	Reading: Ch 5: Analyze the Data: Predictive and Prescriptive Analytics HW #9: Storytelling with Data Due Sunday, 11/16 @ Midnight
WK11 11/12	Lab: 5.7 Excel Return on Education In-Class Exercise: Group Presentation - Project Selection Refinement	
WK12 11/17	In-Class Exercise: Group Presentation - Exploratory Analytics Module 2 Exam Review	
WK12 11/19	Module 2 Exam	
WK13 11/24	In-Class Exercise: Group Presentation - The Big Idea Worksheet	
WK13 11/26	Thanksgiving Recess (No Class)	
WK14 12/01	Lab: AI in Data Analytics	HW #10: Real Estate Dashboard Due Monday 11/30 @ Midnight
WK14 12/03	In-Class Exercise: Group Presentation - Brainstorm & Narrative Arc	
WK15 12/08	Quiz #10: AI in Data Analytics Lab: Analyst's Choice	
WK15 12/10	In-Class Exercise: Group Presentation - Presentation Outline & Practice	

WK16 12/14	Final Exam Section -04 (8 to 9:15 am) Final Exam Tuesday, 12/15, 7:30 to 10 am Section -01 (11 am to 12:15 pm) Final Exam Tuesday, 12/15, 10:30 am to 1 pm Section -02 (1:30 to 2:45 pm) Final Exam Thursday, 12/17, 1:30 to 4 pm Section -03 (3 to 4:15 pm) Final Exam Tuesday, 12/15, 4:30 to 7 pm
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