

Fermanian School of Business
Point Loma Nazarene University
BUS 3010-01
Data Driven Decision Making
Number of Units: 3

#### Fall 2025

Meeting days: Tuesday & Thursday	Instructor title and name: Thea Copeland, MBA	
Meeting times: 1:30 to 2:45 pm	<b>Phone:</b> (760) 653-6140	
Meeting location: FSB 101	E-mail: tcopelan@pointloma.edu	
<b>Final Exam:</b> Tuesday, 12/16/25, 1:30 to 4 pm	Office location and hours: FSB Office ##, M: 1:30 to 2:30 pm,	
Final Exam: Tuesuay, 12/16/25, 1:30 to 4 pm	T & Th: 12 to 1 pm, Upon Request	

#### **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.

## **Program and Course Learning Outcomes**

The student who successfully 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).

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- 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 materials.

For more information about LomaBooks, please go: HERE

#### Required Software:

- Microsoft Excel Please ensure you have the <u>data tools</u> installed in Excel.
- Tableau Desktop
  - Sign into an existing <u>Tableau.com</u> account, or <u>create</u> a new account using your schoolissued email.
  - 2. Once signed in, visit the <u>Academic Quick Start page</u> to download the latest versions of Tableau Desktop and Tableau Prep Builder.
  - 3. Activate with product key: TCKT-64B2-07D0-BE65-CDD9
  - 4. Already have a copy of Tableau Desktop installed? Update the license key in the application: Help menu → Manage Product Keys
  - 5. Having trouble? The Academic Quick Start page includes FAQs and help articles.
- Salesforce Trailhead Create a <u>Salesforce Trailhead account</u> to complete Tableau training modules required for several homework assignments. Additionally, this platform provides resources such as user groups, projects, and certifications for further skill development.

#### Optional Resources:

This text is optional. If you prefer to have a book that walks you through how to use Tableau, this is a good resource. The same information can be found online through Tableau user groups, blogs, video tutorials, and other training resources.

• Loth, A., Vogel, N., & Sparkes, S. (2019). *Visual analytics with tableau.* John Wiley & Sons. ISBN: 978-1-119-56020-3

Students are responsible for having the required course textbooks prior to the first day of class.

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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.

# **Assessment and Grading**

Grades will be based on the following:

Assignments & Exams	Quantity	Points Each	Points Total		<b>Grading Scale</b>
Chapter Quizzes	10	5	50		A=93-100
Excel Challenges	10	5	50		A-=90-92
In-Class Labs &	25	10	250		B+=87-89
Exercises	25	10			B=83-86
Homework	10	20	200		B-=80-82
Class Project	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	150	150		D+=67-69
	1	ı			D=63-66
Total Points		1,000		D-=60-62	
				F=0-59	

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

## **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 you have questions, a desire to meet with the chaplain or have prayer requests you can contact your professor or the <u>Office of Spiritual Life and Formation</u>.

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#### State Authorization

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on <a href="State Authorization">State Authorization</a> to view which states allow distance education outside California.

# **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 <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

## **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.

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## **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.

## **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**

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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 <a href="mailto:pointloma.edu/Title-IX">pointloma.edu/Title-IX</a>. 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 <a href="mailto:counselingservices@pointloma.edu">counselingservices@pointloma.edu</a> or find a list of campus pastors at pointloma.edu/Title-IX.

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

# **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 deenrolled without notice until the university withdrawal date or, after that date, receive an "F" grade.

#### **Asynchronous Attendance/Participation Definition**

A day of attendance in asynchronous content is determined as contributing a substantive note, assignment, discussion, or submission by the posted due date. Failure to meet these standards will result in an absence for that day. Instructors will determine how many asynchronous attendance days are required each week.

# **Loma Writing Center**

The Loma Writing Center exists to help all members of the PLNU community cultivate transferable writing skills to engage their academic, professional, personal, and spiritual communities. We work toward this goal by conducting one-on-one consultation sessions, supporting writing education across the PLNU community, and participating in ongoing writing center research.

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. For information about how to make in-person or online appointments, see <a href="Loma Writing Center webpage">Loma Writing Center webpage</a> or visit the Loma Writer Center on the first floor of the Ryan Library, room 221.

- Appointment Calendar
- <u>Website</u>
- Email: writingcenter@pointloma.edu

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# **Assignments At-A-Glance**

WK	Date	Class Content	Homework
WK1 0	09/02	Introductions & Course Overview	
-		Quiz #1: Survey - About Me + Data Analytics Survey	
WK1 0	09/04	Access MS Excel, Tableau, Labs	
WK2 0	09/09	Quiz #2: Ch 1 Analytics Ascendency Model	HW #1: Tableau Trail - Tour the Tableau Environment (55 min) Due Monday 9/8 @ Midnight
WK2 0	09/11	Excel Challenge #1: Excel Pivot Table Summing Values	
		Quiz #3: Ch 1 SOAR Report	HW#2: Data Visualization Using Tableau (Halloween Candy)
WK3 0	09/16	Lab: 1.2 & 1.3 Excel Assessing Customer and Product (SKU) Profitability	Due Monday 9/15 @ Midnight
WK3 0	09/18	Excel Challenge #2: Pivot Table Value >> Field Settings >> Summarize Values By Lab: 1.2 & 1.3 Tableau Assessing Customer and Product (SKU) Profitability	
WK4 0	09/23	Quiz #4: Tableau Data Types Lab: 2.1 Excel Identify and Work with Different Types of Data	HW #3: Tableau Trail - Build Your Data Literacy (3.3 hours) Due Monday 9/22 @ Midnight
		Excel Challenge #3: Pivot Table Value >> Field Settings >> Show Values As	, , , ,
WK4 0	09/25	Lab: 2.2 & 2.3 Tableau Prep Data, Conduct Prelim Exploratory Analysis	
		Quiz #5: Ch 3 Descriptive Analytics	HW #4: SOAR Report Lab 2.4 Aggregating and Visualizing Different Data Types
WK5 09/30	Lab: 3.1 & 3.2 Excel Functions, Toolpak	Due Monday 9/29 @ Midnight	
	Excel Challenge #4: Pivot Table Value >> Unique Count	Group Project: Milestone #1 Specify the Question	
WK5 1	10/02	Lab: 3.5 Excel Regression Activity Based Costing	Due Thursday 10/02 @ 1:30 pm
		Lab. 3.3 Excer regression Activity based costing	HW #5: Tableau Trail - Get Started with Data Visualization in Tableau Desktop
MIKEL	10/07	Quiz #6: Ch 3 Regression Analysis	·
WK6 10/07	Lab: 6.2 Tree Map	(2.75 hour)	
		E LOLU WE BY A THE AND THE	Due Monday 10/06 @ Midnight
WK6 1	10/09	Excel Challenge #5: Pivot Table Join Tables	
	-	Lab: 4.1 & 4.2 Excel Inventory, Bank Reconciliation	
			HW #6: SOAR Report Lab 2.3 Tableau: Conducting Preliminary Exploratory
WK7 1	10/14	Quiz #7: Ch 4 Diagnostic Analytics	Analysis and Lab 3.2 Calculating Descriptive Statistics to Gain Insights About the
******	10/14	Lab: 4.3 Excel Benford's Law, 8.3 Excel Using Fuzzy Matching to Look for Fraud	Distribution of Sales Data Set
			Due Monday 10/13 @ Midnight
	10/16	**	Group Project: Milestone #2 Obtain the Data
WK7 1	10/16	Module 1 Exam Review	Due Thursday 10/16 @ 1:30 pm
WK8 :	10/21	Module 1 Exam	
WK8 1	10/23	No Class - Fall Break	
WK9 1	10/28	Module 1 Exam Review & Regression Analysis Exercise	
		Excel Challenge #6: XLOOKUP	
WK9 1	10/30	Lab: 5.1 Excel Sales & R&D Linear Relationship	
		Quiz #8: Ch 5 Predictive Analytics Techniques	HW #7: Tableau Trail - Tell Stories with Data Using Tableau Public (4.3 hours)
WK10	11/04	Lab: 5.2 Excel Sales & R&D Non-Linear Relationship	Due Monday 11/03 @ Midnight
		Excel Challenge #7: XLOOKUP & Convert To Number	Group Project: Milestone #3 Analyze the Data Part A
WK10	11/06	Lab: 5.4 Tableau Forecasting Product Demand Using Time Series Analysis	Due Thursday 11/6 @ 1:30 pm
		Lab. 5.4 Tableau Forecasting Froduct Demand Osing Time Series Analysis	
VA/IZ1 1	111/11	Quiz #9: Ch 5 Different Types of Analytics	HW #8: Lab 8.6 Tableau Forecasting Future Performance of IBM using Time
WKII	11/11	Lab: 5.6 Excel Product Demand Linear Regression	Series Analysis
		F Let II He W. COWID & IFFEDOD	Due Monday 11/10 @ Midnight
WK11	11/13	Excel Challenge #8: XLOOKUP & IFERROR	
		Lab: 5.7 Excel Return on Education, 9.5 Evaluating Investments Using NPV	WWW.00     F.C.F
WK12	11/18	Module 2 Exam Review	HW #9: Lab 5.6 Forecasting Product Demand Using Regression
		Excel Challenge #9: IF, THEN	Due Monday, 11/17 @ Midnight
WK12	11/20	Module 2 Exam	
WK13	111/25	Tableau Dashboard Reverse Engineer	Group Project: Milestone #4 Report the Results
			Due Tuesday 11/15 @ 1:30 pm
WK13	11/27	No Class - Thanksgiving Holiday	
\A/V1.4	12/02	Quiz #10: Start, Stop, Continue	
vv N14	112/02	Lab: 6.1 & 6.4 Excel Pivot Table Sparklines and Splicers	
WK14 12/04	Excel Challenge #10: IF, THEN, AND, OR		
	Lab: 6.3 Tableau Analyzing Sales Revenue with Bar Chart and Filters, 6.5 Tableau		
	Creating a Dashboard		
	-	HW #10: Real Estate Dashboard	
WK15	12/09	Group Presentations	Due Monday 12/08 @ Midnight
W/K15	12/12	Group Presentations	Sac monacy 12/00 @ miningit
		Final Exam	
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