Summer 2024

Meeting days: Monday	**Instructor title and name:** Thea Copeland, MBA
Meeting times: 6 to 8:45 pm	**Phone:** (760) 653-6140
Meeting location: Southwestern College, Room TBD	**E-mail:** tcopelan@plnu.edu
Final Exam: Monday, August 19th @ 6 pm	**Office location and hours:** Available 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.

COURSE LEARNING OUTCOMES

Upon completion of this course, students 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 the processes of gathering, analyzing, visualizing, and communicating data (PLO 1, 2).
4. Demonstrate an understanding of the principles of analytics using examples from a variety of organizational functions and industries (PLO 2).
5. Recognize the ethical implications of collecting, managing, and using data for managers and leaders (PLO 4).

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

1. This course uses a digital textbook, *Business Analytics: Data Analysis and Storytelling for Business*, 2024 Version by Brennan Davis. Go to https://join.stukent.com/join/B75-EAB to purchase the online course and materials.
2. Microsoft Excel – Available through PLNU How to Access and Install MS Office 365.
3. Tableau Student Edition – Available through Tableau for Students.

ASSESSMENT AND GRADING

Activities and Point Distribution

Item	Qty.	Pts./Each	Total Points
Quizzes	13	10	130
Homework	13	30	390
Participation	16	5	80
Data Viz Presentation	1	100	100
Data Project Presentation	1	100	100
Midterm Exam	1	100	100
Final Exam	1	100	100
Total			**1000**

Grading Scale

Points	Grade	Points	Grade
930-1000	A	730-769	C
900-929	A-	700-729	C-
870-899	B+	679-699	D+
830-869	B	630-669	D
800-829	B-	600-629	D-
770-799	C+	0-599	F

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.

ARTIFICIAL INTELLIGENCE (AI) POLICY

You are allowed to use Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski) 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.

CONTENT WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive various types of information. In Data-Driven Decision Making, all of the class content, including that which may be intellectually or emotionally challenging, has been intentionally curated to achieve the learning goals for this course. The decision to include such material is not taken lightly. If you encounter a topic that is intellectually challenging for you, it can manifest in feelings of discomfort and upset. In response, I encourage you to come talk to me or your friends or family about it. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the area of business analytics, and I will support you throughout your learning in this course.

TRIGGER WARNING

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive several types of information. In Data-Driven Decision Making we will cover a variety of topics, some of which you may find triggering. Each time this topic appears in a reading or unit, it is marked on the syllabus. The experience of being triggered versus intellectually challenged are different. The main difference is that an individual must have experienced trauma to experience being triggered, whereas an intellectual challenge has nothing to do with trauma. If you are a trauma survivor and encounter a topic in this class that is triggering for you, you may feel overwhelmed or panicked and find it difficult to concentrate. In response, I encourage you to take the necessary steps for your emotional safety. This may include leaving class while the topic is discussed or talking to a therapist at the Counseling Center. Should you choose to sit out on discussion of a certain topic, know that you are still responsible for the material; but we can discuss if there are other methods for accessing that material, and for assessing your learning on that material. Class topics are discussed for the sole purpose of expanding your intellectual engagement in the area of business analytics, and I will support you throughout your learning in this course.

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.

You may report an incident(s) using the [Bias Incident Reporting Form](#).

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.

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.

PLNU strives to be a place where you grow as a whole person. To this end we provide resources for our Graduate and Adult Undergraduate 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, desire to meet or share a prayer request please email mvchaplain@pointloma.edu.

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

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!
- **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 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. Faculty should follow and students may appeal using the procedure in the university Catalog.

See Adult Undergraduate 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. 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 issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

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 and/or if they do not wish to utilize some or all of the elements of their AP in that course.

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.

COURSE MODALITY DEFINITIONS

1. In-Person: Course meetings are face-to-face with no more than 25% online delivery.

2. Online: Coursework is completed 100% online and asynchronously.

3. Online Synchronous: Coursework is completed 100% online with required weekly online class meetings.

4. Hybrid: Courses that meet face-to-face with required online components.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Face-to-Face BBA/BAOL Courses:

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal

requirements.

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 withdrawal date or, after that date, receive an "F" grade.

Students who anticipate being absent for an entire week of a course should contact the instructor in advance for approval and make arrangements to complete the required coursework and/or alternative assignments assigned at the discretion of the instructor. Acceptance of late work is at the discretion of the instructor and does not waive attendance requirements.

Refer to Academic Policies for additional detail.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination on its scheduled day.

COURSE SCHEDULE AND ASSIGNMENTS

DATE PRESENTED	CLASS CONTENT OR ASSIGNMENT	ASSIGNMENT DUE DATE
WK1 - 5/6	Read Ch 1: Business Analytics Overview Quiz Ch 1	5/12
WK2 – 5/13	Read Ch 2: Spreadsheet and Programming Tools Business Analytics Quiz Ch 2 HW #1	5/19
WK3 – 5/20	Read Ch 11: Storytelling through Visualization Quiz Ch 11 HW #2 Data Viz Presentations Assigned (Due dates weeks 6 & 7)	5/26
WK4 – 5/27	Read Ch 3: Unstructured Data and NoSQL Read Ch 4: Structured Data and SQL Quiz Ch 3 & 4 HW #3 & #4	6/2
WK5 – 6/3	Holiday Memorial Day - All assignments completed virtually. Read Ch 5: Data Mining with Cluster Analysis Quiz Ch 5 HW #5	6/9
WK6 – 6/10	Read Ch 6: A/B Testing Essential Business Factors Quiz Ch 6 HW #6	6/16
WK7 – 6/17	Midterm Review	6/23

	HW #7	
WK8 – 6/24	Midterm	6/24
WK9 – 7/1	No Class – Holiday Independence Day	n/a
WK10 – 7/8	Read Ch 7: Machine Learning and Deep Learning Quiz Ch 7 HW #8 Data Project Presentations Assigned (Due date week 15)	7/14
WK11 – 7/15	Read Ch 9: Web Analytics Quiz Ch 9 HW #9	7/21
WK12 – 7/22	Read Ch 10: Analytics for the Internet of Things Quiz Ch 10 HW #10	7/28
WK13 – 7/29	Read Ch 12: Predictive Analytics with Regression Quiz Ch 12 HW #11	8/4
WK14 – 8/5	Read Ch 13: Prescriptive Analytics with Optimization Quiz Ch 13 HW #12	8/11
WK15 – 8/12	Final Exam Review HW #13	8/18
WK16 – 8/19	Final Exam	8/19

Quizzes (13; 10 pts. each):
Throughout the semester there will be weekly quizzes that students will complete via
Canvas during the first 15 minutes of each class period. The purpose of these quizzes is to ensure that students have read and understood the textbook chapters. There are NO makeup quizzes. All weekly quizzes are taken in class and students must be on time and present in order to take the quiz and receive credit (see Canvas for due dates).

Homework (13; 30 pts. each):
The homework assignments are a critical component of building foundational skills for business analytics. Homework assignments will provide hands-on application of concepts from textbook readings. Midterms and final exams will be based on skills learned and practiced in homework assignments. Homework assignments will be previewed and discussed in class, and then due by midnight before the next class.

Class Activities-Participation-Attendance (80 pts. total):

This course is interactive, and your insight enhances the classroom experience for all. Your presence and participation is vital to the learning experience. Students will engage in in-class activities. Throughout the semester and must follow the Professor's instructions to receive full credit. Attendance in this class is important and valuable to the overall learning experience of each student. Students will not receive credit for the in-class activity if they are absent that day and will not be able to make up the points. Students will only receive participation points if they are on time, engage during class and remain in class for the entire duration. All exercises, reflections and in-class assignment points are only available to students who attend class on time and are present for the entire duration.

Data Viz Presentation (100 pts.)

All students will be provided with a data set and business case scenario. Based on the provided information, students will present a simple data visualization in their business analytics tool of choice demonstrating best practices for storytelling with data. The total presentation will be 20 minutes, which includes 15 minutes to tell a story with data followed by five minutes of questions and answers with the class. Presentations should be engaging with compelling data visualizations to demonstrate their business use case. Students should dress professionally; a blazer and collared shirt are preferred. Late presentations will receive a zero, no exceptions.

Data Project Presentation (100 pts.)

All students will be provided with a relational data set and set of business scenarios to analyze and propose solutions. Each data set will be unique to an organizational function within a business - finance, sales, marketing, supply chain, human resources, etc. Students will present their outcomes to the class using Tableau to visualize the results of their analysis. Other tools such as MS Excel, SQL, R, and Python can also be used to analyze the data. The total presentation will be 30 minutes, which includes 20 minutes of presentation and ten minutes of questions and answers. Students should dress professionally; a blazer and collared shirt are preferred. Late presentations will receive a zero, no exceptions.

Midterm (100 pts.)

The midterm will allow students the opportunity to demonstrate their fluency in MS Excel. The midterm must be taken in person on the date and time stated in this course syllabus.

Final Exam (100 pts.)

The final exam will allow students the opportunity to demonstrate their fluency in MS Excel and Tableau. The final exam must be taken in person on the date and time stated in this course syllabus.