

# Fermanian School of Business BBU 3010-1- Data-Driven Decision Making

3 Units

## Spring 2024

Meeting days: Tuesday	Instructor title and name: David Zarraonandia, MBA
Meeting times: 6:00 PM- 8:45 PM	<b>Phone:</b> (805) 297-5375
<b>Meeting location:</b> Southwestern College, Room	E-mail: dzarraon@pointloma.edu
Final Exam: N/A	Office location and hours: Available upon request
Additional info: N/A	Additional info: N/A

## 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. Herkenhoff, L., & Fogli, J. (2017). *Analytics boot camp: basic analytics for business students and professionals* (Ser. Big data and business analytics collection). Business Expert Press. January 2, 2024.
- 2. Knaflic, C. N. (2015). Storytelling with data: a data visualization guide for business professionals. Wiley. January 2, 2024,
- 3. Loth, A., Vogel, N., & Sparkes, S. (2019). *Visual analytics with tableau*. John Wiley & Sons. January 2, 2024,
- 4. Microsoft Excel Available through PLNU
- 5. Tableau Student Edition Available online

## **ASSESSMENT AND GRADING ★**

**Note:** Clearly define a grading policy to avoid any confusion concerning expectations. It is most helpful if at least two things are present: 1) a point distribution and 2) a grading scale.

Sample assignment distribution by percentage:		Sample grade scale:		
<ul> <li>Reading infographics</li> <li>Tableau Reference Guide</li> <li>In class Participation</li> <li>In-Class Presentation</li> </ul>	40% 8% 6% 26% 10%	A=93-100 A-=90-92 B+=87-89 B=83-86 B-=80-82 C+=77-79	C=73-76 C-=70-72 D+=67-69 D=63-66 D-=60-62 F=0-59	

#### **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.

## **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 [class name], 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. These

topics include [list topics]. 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 [subject/major], 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 [class name], we will cover a variety of topics, some of which you may find triggering. These topics include [list topics]. 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 [subject/major], 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 <u>Bias Incident Reporting Form</u>.

#### **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.

#### 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 <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.

#### **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.

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.

#### 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 <u>Academic Policies</u> 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. 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

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 <u>Academic Policies</u> for additional detail.

#### **USE OF TECHNOLOGY**

In order to be successful in your course, 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 for any online or hybrid classes. Please note that any course with online proctored exams require 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. The final examination schedule is posted on the <u>Class 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.

## **COURSE SCHEDULE AND ASSIGNMENTS**

DATE	CLASS CONTENT OR ASSIGNMENT	ASSIGNMENT
PRESENTED	CLASS CONTENT OR ASSIGNIVIENT	DUE DATE
	Assignment: What is your experience with Business Analytics	
Week 1	View and Complete the following videos: What is data Literacy	1/22/2024
1/9/2024	and Getting Started	1/22/2024
	Download Tableau for students	
	Please read over chapters 1 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 2	Professionals Links to an external site.	
1/16/2024	-Storytelling with data: a data visualization guide for business	
1/10/2024	professionals Links to an external site.	
	-Visual analytics with Tableau	
	Assignment: Week 3 In Class Exercise	
	Please read over chapters 2 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 3	Professionals Links to an external site.	1/23/2024
1/23/2024	-Storytelling with data: a data visualization guide for business	1/23/2024
	professionals Links to an external site.	
	-Visual analytics with Tableau	
	Assignment: Week 5 Assignment	
	Please read over chapters 3 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 4	Professionals Links to an external site.	2/11/2024
1/30/2024	-Storytelling with data: a data visualization guide for business	2/11/2024
	professionals Links to an external site.	
	-Visual analytics with Tableau	
Week 5	Please read over chapters 4 in each:	
2/6/2024		

	-Analytics Boot Camp: Basic Analytics for Business Students and	
	Professionals Links to an external site.	
	-Storytelling with data: a data visualization guide for business	
	professionals Links to an external site.	
	-Visual analytics with Tableau	
	Please read over chapters 5 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 6	Professionals Links to an external site.	
	-Storytelling with data: a data visualization guide for business	
2/13/2024	professionals Links to an external site.	
	-Visual analytics with Tableau	
Week 7	Review	
2/20/2024	Review	
Week 8	Assignment: Week 8 In Class Exercise Midterm	2/27/2024
2/27/2024	Assignment weeks in class Exercise materin	_,_,,
Week 9	Spring break	
3/5/2024	Spring at som	
	Please read over chapters 6 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 10	Professionals Links to an external site.	
3/12/2024	-Storytelling with data: a data visualization guide for business	
3, 12, 202 <del>-1</del>	professionals Links to an external site.	
	-Visual analytics with Tableau	
	Assignment: Week 11 In class Exercise- Hospital Analysis 1	
	Please read over chapters 7 in each:	
	-Analytics Boot Camp: Basic Analytics for Business Students and	
Week 11	Professionals Links to an external site.	3/19/2023
3/19/2023	-Storytelling with data: a data visualization guide for business	3/ 13/ 2023
	professionals Links to an external site.	
	-Visual analytics with Tableau	
	Assignment: Week 12 In Class Exercise- Hospital Analysis 2	
Week 12	Please read over chapters 8 in each:	3/26/2024
Week 12 3/26/2024		3/26/2024

Week 16 4/23/2024	In Class Final Exam	4/23/2024
	Extra Credit: Extra Credit 2- Idea Evaluation	4/28/2024
4/16/2024	Extra Credit: Extra Credit 1	4/23/2024
Week 15	Week 16 Final Exam Prep	4/23/2024
	Assignment: Week 14 Assignment- Global Superstore Part II	4/14/2024
	-Visual analytics with Tableau	
4/9/2024	professionals Links to an external site.	
Week 14	-Storytelling with data: a data visualization guide for business	4/9/2024
	Please read over chapters 10 in each:	_
	part 2	
	Assignment: Week 14 In Class Exercise- Hospital Dashboard	
	Assignment: Week 13 Assignment- Global Superstore Part I	4/7/2024
Week 13 4/2/2024	-Visual analytics with Tableau	
	professionals Links to an external site.	
	-Storytelling with data: a data visualization guide for business	
	Professionals Links to an external site.	4/2/2024
	-Analytics Boot Camp: Basic Analytics for Business Students and	
	Please read over chapters 9 in each:	
	Assignment: Week 13 In Class Exercise- Hospital Dashboard Part 1	
	Assignment Week 42 to Class Francisco Heavital Dockhood	
	-Visual analytics with Tableau	
	professionals Links to an external site.	
	-Storytelling with data: a data visualization guide for business	