

**Summer 2025**

<b>Meeting days:</b> Tuesday	<b>Instructor title and name:</b> Nora Johnson, Adjunct Instructor
<b>Meeting times:</b> 6:00 p.m. - 8:45 p.m.	<b>Phone:</b> 619-852-1598
<b>Meeting location:</b> SWC Room 29-105	<b>E-mail:</b> njohnso3@pointloma.edu
<b>Final Project:</b> Submissions due August 25th, 2025; Presentations in class on August 26th, 2025	<b>Office location and hours:</b> Via zoom by appointment

**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

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1. Sign up for [Tableau Public](#)
2. Microsoft Excel (with [data tools](#) installed) - [Available through PLNU](#)
3. Loth, A., Vogel, N., & Sparkes, S. (2019). *Visual analytics with tableau*. John Wiley & Sons. ISBN: 978-1-119-56020-3. [Purchase on Amazon here](#)
4. Richardson, V.J. & Weidenmier Watson, M. (2024). *Introduction to Business Analytics*. McGraw Hill. ISBN: 9781265212100. Purchase instructions:

*You must register for McGraw Hill Connect, as this required textbook and all integrated assignments and labs will be accessed through the Connect platform. **Do not purchase this text through Amazon or any other book sellers, as you will not gain access to the course materials that way. I recommend purchasing access through the PLNU Bookstore.***



### How to register

Use either the section registration link or the QR code, and enter your email to register.

Course: Richardson Introduction to Business Analytics 1e

Section: BBU3010 - Summer 2025 - SWC

Instructor: Nora Johnson



### Section registration link:

[https://accounts.mheducation.com/connect/section/n-johnson-olc-aligned-course-configuration-2024\\_7?app=newconnect.mheducation.com](https://accounts.mheducation.com/connect/section/n-johnson-olc-aligned-course-configuration-2024_7?app=newconnect.mheducation.com)

### Get help:

<https://www.mheducation.com/highered/support/support-at-every-step/connect/first-day-of-class/standalone>

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## 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.

SmartBook Readings (7 chapters) – 175 pts – 17.5%	A=93-100	B-=80-82	D+=67-69
5 Homework Assignments – 425 pts – 42.5%	A-=90-92	C+=77-79	D=63-66
Midterm Exam – 200 pts – 20%	B+=87-89	C=73-76	D-=60-62
Final Project – 200 pts – 20%	B=83-86	C-=70-72	F=0-59

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## 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.

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## 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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## 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.

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## 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**

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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 or bias, you can find more information on reporting and resources at [www.pointloma.edu/bias](http://www.pointloma.edu/bias).

## **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 [pointloma.edu/Title-IX](http://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](mailto:counselingservices@pointloma.edu) or find a list of campus pastors at [pointloma.edu/title-ix](http://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](http://www.pointloma.edu/bias)

## **SPIRITUAL CARE**

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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 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](mailto:scortezm@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

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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](mailto:GPSWritingCenter@pointloma.edu)**

## PLNU COPYRIGHT POLICY ☼

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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 ☼

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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 ☼

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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 [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.”

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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](mailto:EAC@pointloma.edu) or 619-849-2486). 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. The EAC makes accommodations available to professors at the student’s request.

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 ensure 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 special accommodations.

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### **COURSE MODALITY DEFINITIONS**

**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).

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### **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.

### **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.

### **FINAL EXAMINATION POLICY ☼**

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Successful completion of this class requires completing a final project by the scheduled due date.

### **COURSE SCHEDULE AND ASSIGNMENTS ☼**

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This course focuses on creating data visualizations using Tableau and Excel. Students are expected to have a basic working knowledge of Excel prior to the start of the course. While learning these tools may come more easily to some than others, your comfort with new systems will grow with practice. Attendance is essential, as class sessions will include demonstrations of tools and processes. A significant portion of each class will be dedicated to hands-on guidance and support. However, students who find the material challenging may need to spend additional time outside of class practicing or conducting independent research. Helpful instructional resources include McGraw Hill Connect, Tableau Support, Excel Support, YouTube tutorials, and other online guides.

Students who are not using up-to-date technology may encounter roadblocks due to differences in functionality across other software versions or programs. These variations may make certain processes different from what is demonstrated in class. While I will do my best to provide support, you may need to get creative and conduct your own research to figure out how to complete the work and meet the expected deliverables.

If you miss a demonstration in class, it will be your responsibility to catch up. You can do this by asking peers for help, exploring online resources, or scheduling a Zoom meeting with me to review the material.

## **MODULE 1: Descriptive Analytics**

### **Week 1: Class Tuesday, May 13<sup>th</sup> (light week – no class) – *Introduction to Tableau***

Readings:

- Loth, Chapter 1
- Loth, Chapter 2

In class:

- *No class*

To do:

- Register for the class in McGraw Hill Connect
- Register with Tableau Public
- Download Data Extension in Excel

### **Week 2: Class Tuesday, May 20<sup>th</sup> – *Data Visualization Types***

Readings:

- Loth, Chapter 3

In class:

- Confirm everyone is set up with Tableau Public
- Download Halloween Visualization Data Set and practice

To do:

- Complete/submit WK2 Homework: Data Visualization Using Tableau (due Saturday, May 24<sup>th</sup>)

### **Week 3: Class Tuesday, May 27<sup>th</sup> – *Using Analytics to address organizational questions***

Readings:

- Richardson, Chapter 1 SmartBook (due Monday, May 26<sup>th</sup>)

In class:

- Labs 1.2 and 1.3 with both Excel and Tableau

### **Week 4: Class Tuesday, June 3<sup>rd</sup> – *Business Data Sources***

Readings:

- Richardson, Chapter 2 SmartBook (due Monday, June 2<sup>nd</sup>)

In class:

- Labs 2.1, 2.2, and 2.3 with both Excel and Tableau, depending on the Lab

To do:

- Complete/submit WK4 Homework: Data Sources – Lab 2.4 (due Tuesday, June 7<sup>th</sup>)



**Week 5: Class Tuesday, June 10<sup>th</sup> – Basic Analytics Statistics**

Readings:

- Richardson, Chapter 3 SmartBook (due Monday, June 9<sup>th</sup>)

In class:

- Labs 3.1, 3.2 and 3.5 with both Excel and Tableau

**Week 6: Class Tuesday, June 17<sup>th</sup> – Exploratory Business Analytics**

Readings:

- Richardson, Chapter 4 SmartBook (due Monday, June 16<sup>th</sup>)

In class:

- Labs 4.1, 4.2 and 4.3 with both Excel and Tableau

To do:

- Complete/submit WK6 Homework: Labs 2.3 & 3.2 (due Saturday, June 21<sup>st</sup>)

**Week 7: Class Tuesday, June 24<sup>th</sup> – Midterm Exam on Descriptive Analytics**

In class:

- Midterm Exam: Creating a Dashboard for a Real Estate Project Using Tableau

To do:

- Complete/submit Midterm Exam (due by Saturday, June 28<sup>th</sup>)

**Week 8: Class Tuesday, June 30<sup>th</sup> – No class, readings, or assignments. Enjoy your break!**

**MODULE 2: Predictive Analytics**

**Week 9: Class Tuesday, July 8<sup>th</sup> - Time Series Forecasting**

Readings:

- Richardson, Chapter 5.1–5.2 on Time Series Analysis & Regression SmartBook (due Monday, July 7<sup>th</sup>)

In class:

- Labs 5.1, and 5.2 with both Excel and Tableau

**Week 10: Class Tuesday, July 15<sup>th</sup> - Regression Analysis**

Readings:

- Richardson, Chapter 5.2–5.3 on Base Rates & Prescriptive Analytics SmartBook (due Monday, July 14<sup>th</sup>)

In class:

- Labs 5.6, and 5.7 with both Excel and Tableau
- Review Final Project due Week 16

**Week 11: Class Tuesday, July 22<sup>nd</sup> – Confirmatory Analytics Case Studies**

In class:

- Work on WK 11 Homework: Confirmatory Analytics Case Studies

To do:

- Complete/submit WK 11 Homework: Lab 5.6 (due by Saturday, July 26<sup>th</sup>)

**Week 12: Class Tuesday, July 29<sup>th</sup> – Review Predictive Analytics**

In class:

- WK 12 Homework: Predictive Analytics

To do:

- Complete/submit WK 12 Homework: Labs 5.1 & 5.4 (due by Saturday, August 2<sup>nd</sup>)

**MODULE 3: Data Visualization**

**Week 13: Class Tuesday, August 5<sup>th</sup> – Reporting the Results**

Readings:

- Richardson, Chapter 6 SmartBook (due Monday, August 4<sup>th</sup>)

In class:

- Labs 6.1, 6.2, 6.3 and Tableau 6.4

**Week 14: Class Tuesday, August 12<sup>th</sup> - Creating a Dashboard in Excel and Tableau**

Readings:

- Loth, Chapter 8

In class:

- Review Dashboard creation

**Week 15: Class Tuesday, August 19<sup>th</sup> – Advanced Business Analytics**

Readings:

- Richardson, Chapter 11 SmartBook (due Monday, August 18<sup>th</sup>)

In class:

- Sections 11.1-4

**Week 16: Class Tuesday, August 26<sup>th</sup> – Comprehensive Final Exam**

To do:

- Submit Final Project (Dashboard, Written Analysis, SOAR Report) (due Monday, August 25<sup>th</sup>)

In class:

- Presentation of Final Project (Tuesday, August 26<sup>th</sup>)