Course Syllabus

Jump to Today

Fermanian School of Business

BUS/LDR 6025 Applied Data Analysis and Visualization

3 Units

Download Syllabus (https://canvas.pointloma.edu/courses/89836/files/9927867?location=course_syllabus_89836&wrap=1)
(https://canvas.pointloma.edu/courses/89836/files/9927867/download?location=course_syllabus_89836&download_frd=1)

Fall 2026, Quad 2

October 26 – December 20

Meeting Day/Time: Asychronous

Meeting Location: Online

Instructor: Diane Law

Email: dlaw@pointloma.edu (mailto:dlaw@pointloma.edu)

Phone: 408-472-7085

Office Location and Hours: *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. cultures.

Course Description

This course explores methods of applied data analysis, including capturing, identifying and analyzing data to inform decision making. Topics include an overview of statistical concepts, guidelines for effective data analysis, data visualization principles, and presenting and

evaluating alternative solutions. Emphasis will be placed on designing and creating data visualizations to communicate with various stakeholders.

Course Learning Outcomes

The student who successfully completes this course will be able to:

1. Identify the processes and issues associated with research problem definition, research design, question, scale and survey design, sample design, data collection, data analysis, and writing and presenting research methodology (PLO 1 & 6).
2. Determine an appropriate research methodology to achieve specific research objectives that includes quantitative and qualitative data collection/analysis techniques (PLO 3).
3. Analyze research projects to determine the appropriateness of methods (PLO 2).
4. Interpret the appropriate use of emerging business research methods (PLO 3).
5. Collaborate with a team to present current topics (PLO 6 & 7)

Program Learning Outcomes

Candidates who complete the Master of Business Administration program will be able to:

1. Exhibit mastery of the concepts, models, and theories in the core business disciplines.
2. Integrate knowledge across core business disciplines to identify key strategies and opportunities.
3. Analyze business issues and propose solutions using analytical and critical thinking skills.
4. Evaluate the impact of business decisions in a global context.
5. Analyze the ethical impacts of executive-level decision-making.
6. Present ideas and decisions clearly through effective communication.
7. Collaborate with others as an effective team member.

Students who complete the Master of Arts in Organizational Leadership will be able to:

1. Exhibit mastery of the concepts, models, and theories in the leadership discipline.
2. Integrate leadership theories and practices to identify opportunities for organizational improvement.
3. Analyze the impacts of ethical decisions on organizations and self.
4. Present ideas and decisions clearly through effective leadership communication.
5. Assess effective team leadership and collaboration.
6. Evaluate how organizations and individuals are impacted by cultural diversity.

Institutional Learning Outcomes

1. **Learning, Informed by our Faith in Christ**
   Students will acquire knowledge of human cultures and the physical and natural world while developing skills and habits of the mind that foster lifelong learning.
2. **Growing, in a Christ-centered Faith Community**
   Students will develop a deeper and more informed understanding of others as they negotiate complex professional, environmental, and social contexts.
3. **Serving, in a Context of Christian Faith**
   Students will serve locally and/or globally in vocational and social settings.

Required Texts and Recommended Study Resources

1. Camm, J.D., Cochran, J.J., Fry, M.J., & Ohlmann, J.W. (2025). ***Data visualization: Exploring and explaining with data.*** ***(https://www.cengage.com/c/data-visualization-exploring-and-explaining-with-data-2e-camm-cochran-fry-ohlmann/9780357929766/)*** Madison, OH: Cengage. Be sure to get the 2025 edition since it will have the correct assignments and software instructions.

2. You will have an assignment in which you may use this book (you may purchase or you can find this in our **Library electronic books** **(https://pointloma.on.worldcat.org/oclc/1198927745)** : **Analytics Stories** **(https://www.amazon.com/Analytics-Stories-Things-Happen/dp/1119646030)**

3. Tableau Desktop is available for free. You can acquire Tableau at **https://www.tableau.com/products/public/download (https://www.tableau.com/products/public/download)**

- You will need Tableau as both the software and the eLearning suite. Check the **technical requirements (https://www.tableau.com/products/techspecs)** to ensure you have a laptop capable of Tableau.
- Laptops will be essential for each class, along with access to the texts either electronically or physically. Unfortunately, if you are using a Chromebook or iPad, Tableau has very limited applications.

4. Be sure you have Excel updated and with the **Analysis Tool Pack (https://support.microsoft.com/en-us/office/load-the-analysis-toolpak-in-excel-6a63e598-cd6d-42e3-9317-6b40ba1a66b4)** .

5. **Student Subscription to Wall Street Journal (https://store.wsj.com/shop/us/us/wsjstudentns/?inttrackingCode=aaqsnbj7&icid=WSJ_ON_NA_ACQ_NA)**

6. Feeds/Blog Subscriptions that are useful to be aware of

- **Viz of the Day (https://public.tableau.com/en-us/gallery/?tab=viz-of-the-day&type=viz-of-the-day)** by Tableau Software
- **Perceptual Edge (http://www.perceptualedge.com/blog/)** by Stephen Few
- **Flowing Data (http://flowingdata.com/)** by Nathan Yau
- **Storytelling with Data (http://storytellingwithdata.com/)** by Cole Nussbaumer
- **Edward Tufte (https://www.edwardtufte.com/books/)**

Note: Students are responsible for having the required textbooks prior to the first day of class. Students are also encouraged to begin reading the books in preparation for the class as soon as possible.

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. 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.

Course Credit Hour Information

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 3-unit class delivered over 8 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend an estimated 112.5 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules.

Assessment and Grading

Grades will be based on the following:

Distribution of Points

Course Assignments	Points
Weekly Discussions	300
Quantitative Test Module	100
Assignments	600
Total	1000

Grading Scale

The following grading scale will be used for all exams and final course grades:

- 93-100% = A

- 90 - 92% = A-
- 87 – 89% = B+
- 84 – 86% = B
- 81 – 83% = B-
- 78 – 80% = C+
- *75 – 77% = C
- 73 – 74% = C-
- 71 – 72% = D+
- 68 – 70% = D
- Below 68% = F

Incompletes and Late Assignments

All assignments are to be submitted by the due dates. There will be a 10% reduction of possible points for **each day** an assignment is late, and assignments will **not be** accepted for credit four days after the due date. If missing assignments result in the failure to meet learning outcomes, you may receive a letter grade reduction on the final grade in addition to the loss of points for missing work. Assignments will be considered late if posted after the due date and time using Pacific Standard Time. No assignments will be accepted after midnight on Sunday night, the last day of class.

Exceptions for extenuating circumstances must be pre-approved by the instructor and the program director.

Incompletes will only be assigned in extremely unusual circumstances.

PLNU Spiritual Care

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. We have onsite chaplains at our different campuses who may be available during class break times across the week. If you have questions or a desire to meet or share any prayer requests with our chaplains, you can find them at the **Chaplain's Page via myPLNU. (https://my.pointloma.edu/pages/chaplains)**

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.

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 **State Authorization (https://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures)** to view which states allow online (distance education) outside of 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 **Adult Undergraduate Academic and General Policies** (https://pointloma-public.courseleaf.com/aug-catalog/academic-general-policies/#text) 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."

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.

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 619-849-2486). 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.

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 a bias incident regarding language, you can find more information on reporting resources at **www.pointloma.edu/bias** (http://www.pointloma.edu/bias) .

Sexual Misconduct and Discrimination

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. 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 help and support are available through the **Title IX Office** (https://www.pointloma.edu/title-ix) . Please be aware that under Title IX of the Education Amendments of 1972, it is 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.

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. 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** (https://pointloma-public.courseleaf.com/aug-catalog/academic-general-policies/) for additional details.

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.

Note: For synchronous courses with an online asynchronous week, refer to the Online Asynchronous Class Attendance policy listed below.

Online Asynchronous Attendance/Participation Definition

Students taking online courses with no specific scheduled meeting times are expected to actively engage throughout each week of the course. Attendance is defined as participating in an academic activity within the online classroom, which includes, but is not limited to:

- Engaging in an online discussion
- Submitting an assignment
- Taking an exam
- Participating in online labs
- Initiating contact with a faculty member within the learning management system to discuss course content

Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.

Course Modality Definitions

1. Online Courses: These are courses with class meetings where all instruction and interaction are fully online.
    1. Synchronous Courses: At least one class meeting takes place at a designated time.
    2. Asynchronous Courses: All class meetings are asynchronous.
2. Hybrid Courses: These are courses with class meetings that take place both in the classroom and online synchronously and/or asynchronously.

3. 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).

Use of Technology

In order to be successful in the online or hybrid environment, you'll need to meet the minimum technology and system requirements; please refer to the ***Technology and System Requirements*** (https://help.pointloma.edu/TDClient/1808/Portal/KB/ArticleDet?ID=108349) information. Additionally, students are required to have headphone speakers, microphone, or webcams compatible with their computer available to use. Please note that any course with online proctored exams requires a computer with a camera (tablets are not compatible nor allowable) 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.

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 (https://my.pointloma.edu/pages/writing-center-gps) **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 (https://my.pointloma.edu/pages/research-help) to help you start your research
  - The physical office is located on the third floor of the Mission Valley Regional Center (https://maps.app.goo.gl/CRXui8PJUnSkvokC9) off the student lounge
- Academic Writing Resources Course (https://canvas.pointloma.edu/courses/64301) **:** 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 (https://youtu.be/JB8MmVPznFI) and take time now to explore!
- Grammarly (https://www.grammarly.com/edu/point-loma-nazarene-university-graduate-professional-studies) : 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 (https://my.pointloma.edu/pages/tutoring-gps) : 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.

Assignments-at-a-Glance

The course summary below lists our assignments and their due dates. Click on any assignment to review it.

Course Summary:

Date	Details	Due
Tue Oct 27, 2026	WK1 Discussion 1: Introduce Yourself (https://canvas.pointloma.edu/courses/89836/assignments/1340769)	due by 11:59pm
Wed Oct 28, 2026	WK1 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340770)	due by 11:59pm

Date	Details	Due
	WK1 Discussion 3 (https://canvas.pointloma.edu/courses/89836/assignments/1340768)	due by 11:59pm
Sat Oct 31, 2026	WK1 Assignment: Quantitative Module Pre-Test and Study Notes (https://canvas.pointloma.edu/courses/89836/assignments/1340785)	due by 10:59pm
Sun Nov 1, 2026	Week 1 Chapter 1 Assignment (https://canvas.pointloma.edu/courses/89836/assignments/1340793)	due by 11:59pm
Wed Nov 4, 2026	WK2 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340771)	due by 11:59pm
	WK2 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340772)	due by 11:59pm
Sun Nov 8, 2026	WK2 Assignment: Course Long Analytics Project Part 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340786)	due by 11:59pm
Wed Nov 11, 2026	WK3 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340773)	due by 11:59pm
	WK3 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340774)	due by 11:59pm
Sun Nov 15, 2026	WK3 Assignment: Coarse Long Analytics Project Part 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340787)	due by 11:59pm
Wed Nov 18, 2026	WK4 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340775)	due by 11:59pm
	WK4 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340783)	due by 11:59pm
Sat Nov 21, 2026	WK4 Assignment: Quantitative Research Module Post-Test (https://canvas.pointloma.edu/courses/89836/assignments/1340788)	due by 11:59pm
Wed Nov 25, 2026	WK5 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340776)	due by [illegible]m

Date	Details	Due
	WK5 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340777)	due by 11:59pm
Sun Nov 29, 2026	WK5 Assignment: Excel Exercise (https://canvas.pointloma.edu/courses/89836/assignments/1340789)	due by 11:59pm
Wed Dec 2, 2026	WK6 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340778)	due by 11:59pm
	WK6 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340779)	due by 11:59pm
Sun Dec 6, 2026	WK6 Assignment: Tableau Exercise (https://canvas.pointloma.edu/courses/89836/assignments/1340790)	due by 11:59pm
Wed Dec 9, 2026	WK7 Discussion 1 (https://canvas.pointloma.edu/courses/89836/assignments/1340780)	due by 11:59pm
	WK7 Discussion 2 (https://canvas.pointloma.edu/courses/89836/assignments/1340781)	due by 11:59pm
Sun Dec 13, 2026	WK7 Assignment: Course Long Analytics Project Part 3 (Report) (https://canvas.pointloma.edu/courses/89836/assignments/1340791)	due by 11:59pm
Wed Dec 16, 2026	WK8 Discussion (https://canvas.pointloma.edu/courses/89836/assignments/1340782)	due by 11:59pm
Sun Dec 20, 2026	WK8 Assignment: Dashboards (https://canvas.pointloma.edu/courses/89836/assignments/1340792)	due by 11:59pm
	Academic Honesty Verification Statement (https://canvas.pointloma.edu/courses/89836/assignments/1340767)	
	IDEA Evaluation (https://canvas.pointloma.edu/courses/89836/assignments/1340784)	