

**BIO 6082: Research Proposal and Pilot Study (1 unit)**

**Biology Department**

**Dr. Dianne Anderson**

**Spring 2026**

**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 becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

***Course description for BIO6082***

Students identify a biology-related research problem, then prepare a brief literature review, research question, and research design, then carry out the pilot study with abbreviated analysis. For students planning to complete a thesis, the pilot study provides a chance to do important groundwork before launching into the actual thesis work. For students choosing the non-thesis option, the pilot study provides a glimpse into the research process used to generate knowledge.

***Course learning outcomes***

1. Develop a research question and construct a methodology to answer the question (continuation of BIO 6043).
2. Carry out the research by collecting and analyzing the data to answer the question.
3. Create and present both a written report and an oral presentation of the research study.

***Course credit hour information***

It is expected that the completion of the independent research & presentation required for this course will take approximately 38 hours, therefore, this class meets the PLNU credit hour policy for a 1-unit class.

***Instructor and contact information***

Due to the independent nature of this course, it will be important to contact me on an individual basis when you need assistance. Let's set up appointments at times that works well for you!

Dianne Anderson, Ph.D.    [dianneanderson@pointloma.edu](mailto:dianneanderson@pointloma.edu)    Rohr Science 146, (619) 849-2705

***Class sessions and attendance***

This course will only have 1 in-person group meeting for student presentations of pilot studies. However, 2 zoom meetings early in the semester will be scheduled at a time that works for everyone.

***Assignments and grading***

Grading scale: A 90% B 80% C 70% D 60% F 50%

Final course grades will be recorded with – added to the lowest 2% and + added to the highest 2% within each range. For example, 91% = A- and 88% = B+

All assignments must be submitted to Canvas by midnight on the due date in order to earn full credit. Let me know if there are serious extenuating circumstances that would warrant an extension on a deadline. Incompletes will only be assigned in extremely unusual circumstances that come up at the end of the semester. Last day to add or drop the course: January 25, 2026

## Spring 2026 BIO 6082 Course schedule and assignments

Dates	Activities and Assignments (see details on Canvas)	Points
<b>Zoom #1</b> <i>First week of class</i>	Zoom discussion about the transitions from the research design class to the pilot study class, and an explanation of the first assignment before the revised lit review and methodology are due.	
<i>January 19</i>	"Getting ready to revise your intro, literature review, and methods from last semester" assignment	25
<i>January 31</i>	Revised Introduction, lit. review, methodology and references	75
<b>Zoom #2</b> <i>Early February</i>	Discussion about planned data collection and analysis	
<i>February 28</i>	Data collection summary	25
<i>March 14</i>	Peer review of data analysis (set up your own zoom or in-person session)	25
<i>April 4</i>	Methods, results and conclusions sections	100
<i>April 11</i>	Peer review of PPT slides (set up your own zoom or in-person session)	25
<i>April 20, 21, or 22</i>	<b><i>In-Person</i></b> - Pilot Study Oral Presentation	200
<i>May 4</i>	Pilot Study Written Report	500
	<b>TOTAL POINTS</b>	<b>975</b>

### PLNU GENERAL POLICIES AND INFORMATION

#### PLNU Spiritual Care

##### Balboa Campus:

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our graduate students to encounter God and grow in their Christian faith. At the Balboa campus, we have an onsite chaplain, Rev. Kevin Portillo, who is available during class break times across the week. If you have questions, a desire to meet or share any prayer requests with Rev. Portillo, you may contact him directly at [KevinPortillo@pointloma.edu](mailto:KevinPortillo@pointloma.edu).

##### Liberty Station Campus:

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our Graduate students to encounter God and grow in their Christian faith. At the Liberty Station campus we have an onsite chaplain who is available during class break times across the week. If you have questions, a desire to meet or share any prayer requests with Dr. Sylvia Cortez Masyuk, you may contact her directly at [scortezm@pointloma.edu](mailto:scortezm@pointloma.edu).

##### Mission Valley:

PLNU strives to be a place where you grow as a whole person. To this end, we provide resources for our Graduate 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 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. It 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 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 [Graduate Academic and General Policies](#) 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 and to find sources (research articles), 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](mailto: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](http://www.pointloma.edu/nondiscrimination).

### 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](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 <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)

### PLNU Course Modality Definitions

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1. Online Courses: These are courses with class meetings where all instruction and interaction is fully online.

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    - a. Synchronous Courses: At least one class meeting takes place at a designated time.
    - b. Asynchronous Courses: All class meetings are asynchronous.

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  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).
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### 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](#) 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.

#### 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](#) 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) 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.

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- [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

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  - [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.
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We are here to support you! Contact us anytime: [GPSWritingCenter@pointloma.edu](mailto:GPSWritingCenter@pointloma.edu)

