POINT 1902 LOMA
NAZARENE UNIVERSITY

Biology Department

BIO 6083 Thesis A,B,C,D,E,F (6 units)

2026

Meeting day/times: TBA – individual meetings as needed	**Instructor title and name:** Dianne Anderson
Meeting location: TBA	**Phone:** 619-849-2705
Final exam: N/A	**E-mail:** dianneanderson@pointlome.edu
Office: Rohr Science 146	**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 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

In BIO 6083, students write a thorough literature review and bibliography related to their chosen biology education problem, then design, carry out, and analyze the results of their original research, draw conclusions, and propose implications of their findings. This process culminates with the completion of the student's written thesis, as well as a public presentation of the research. Students register for each thesis unit (6083 a through f) in sequence corresponding to the 6 units necessary to complete the thesis requirement. Students may register for as many as three thesis units in a single semester (i.e., 6083a, 6083b, and 6083c) or as few as one unit. At the end of each semester a grade of Credit/No Credit is issued reflecting the student's satisfactory progress toward thesis completion. If in the final semester (BIO 6083f) of thesis enrollment the student

has not completed all requirements for the thesis, the student is automatically enrolled in thesis extension status for each subsequent semester until the thesis is completed. Graded Credit/No Credit. A thesis extension fee is charged (see fee schedule) for each semester of thesis extension.

This course involves a great deal of independent work by the student, as well as periodic meetings with the thesis advisor for direction. Each student will be assigned 2 additional faculty members to serve on the thesis committee. These committee members will read and comment on the thesis proposal as well as the final thesis draft, and will attend and provide feedback on the oral defense of the thesis. Together, the three professors will determine if the student earns the credit and is awarded the final thesis unit.

COURSE LEARNING OUTCOMES (one for each unit of BIO 6083)

BIO6083a: Prepare proposal (including purpose, question(s), theory, methodology, and lit review), and clear project proposal with committee
BIO6083b: Finalize protocols and write, then submit IRB proposal
BIO6083c: Collect data
BIO6083d: Analyze data, and write results section
BIO6083e: Write conclusions and finalize thesis report
BIO6083f: Prepare and submit journal manuscript, and give oral defense of project

PROGRAM LEARNING OUTCOMES ASSESSED IN THIS COURSE

Three of the four PLO's will be assessed by three professors using the rubric at the end of this document upon completion of the thesis project:

1. Discuss major concepts and theories in biology.
2. Carry out and communicate various experimental methods and types of data analysis.
3. Demonstrate knowledge and skills in critical thinking, such as analysis and synthesis, as applied to primary literature in the field of biology, as well as in science education.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

There are no required textbooks or supplies for this course, but the document "PLNU Biology Thesis Guidelines" provides detailed information as to how the thesis work should be done. It is important that students read these guidelines before beginning their thesis, and then refer to the document as their work progresses.

GRADING

Credit/No credit is assigned based on the satisfactory completion of unit as described above; no letter grades are given.

Incompletes will only be assigned under extremely unusual circumstances.

GENERAL PLNU POLICIES

General Course Concerns

If you have a concern related to the content or structure of this course, please bring your concern(s) to me (the instructor) in a timely manner, so that we have the opportunity to discuss your thoughts and work together toward a solution.

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 Accelerated 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.

In addition, the Mission Valley and Balboa campuses have a prayer chapel for use as a space set apart for quiet reflection and prayer.

Student Success

The Center for Student Success supports our Graduate and Professional Studies students throughout their academic journey. We provide student services such as academic advising and planning, resource workshops, and connect students to career services, writing support, tutorial services, and wellness resources. The Center itself is located on the first floor of the Mission Valley Campus. If you have any questions about how to access resources at PLNU, please start by reaching out to the Center for Student Success by email or by phone at 619-563-2850. Please visit myPLNU Student Success for more details. If you are in the School of Education, please contact SOE Advising.

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 to view which states allow distance education outside 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. Please consult the Academic Honesty Policy in the University Catalog 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 Behavior Policy

Both faculty and students at Point Loma Nazarene University have the right to expect a safe and ordered environment for learning. Students are expected to take the initiative to learn and conduct themselves in a mature and civil manner in the classroom environment. Any student behavior that is disruptive or threatening is a serious affront to Point Loma Nazarene University as a learning community. Students who fail to adhere to these behavioral standards may be subject to disciplinary action, including removal from class or further university sanctions. For a full definition of disruptive behavior, response procedures, and the appeal process, please consult the Academic Behavior Policy in the University Catalog.

PLNU Artificial Intelligence (AI) Policy

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro, GrammarlyGo, Perplexity, etc.) to generate ideas, as a learning tool, or in some cases generate portions of work you will submit. I will specify in individual assignments what constitutes appropriate use of AI for that assignment. Please use this Purdue resource to guide your citations when using AI.

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 on the PL campus, the first floor of the Balboa campus, and the second floor of the Mission Valley campus. For all students, including the Bakersfield campus, virtual appointments are available. You can reach the Educational Access Center (EAC) by email or phone at 619-849-2533. Students can access both requests for and evidence of disability through the Accommodate link off the main page of OneLogin. 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 approved 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 approved accommodations in that particular course. Accommodations are not retroactive; as such, 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-related need should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. In accordance with ADA, accommodations cannot constitute a fundamental alteration to course outcomes; therefore, planning ahead is vital in establishing appropriate accommodations for equal access to this course. 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 eligibility 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) has experienced other forms of discrimination, you can find more information on reporting and resources via the Nondiscrimination and Anti-harassment Policy.

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. 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 or consult the list of campus pastors.

If you (or someone you know) has experienced other forms of discrimination or bias, you can find more information on reporting and resources via the Nondiscrimination and Anti-harassment Policy.

PLNU Course Modality Definitions

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

a. Synchronous Courses: At least one class meeting takes place at a designated time.

b. 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).

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.

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 the 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.

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 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 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 the GPS Writing Center any time.

Assignments At-A-Glance/Canvas Course Summary

Note: Faculty are required to either create assignments in Canvas so that there is a record by the end of the semester OR list the assignments in the syllabus to support the Records office in dealing with possible transfer credit, etc. In the Canvas syllabus function, please use the Show Course Summary checkbox to create a course schedule. Then cut and past the schedule into the syllabus you provide for the Assessment website.