POINT·LOMA
NAZARENE UNIVERSITY

BIO 6082: Research Proposal and Pilot Study
Biology Department
Dr. Dianne Anderson   **Spring 2021**

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 (1 unit)
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 ground work 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 and presentation required for this course will take approximately 50 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, either by e-mail, phone, zoom, or in person. Contact me to set up appointments.

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

Class sessions and attendance
This course will only have 2 synchronous meetings, and these will be for student presentations of their pilot studies. However, regular communication with me by e-mail, phone or in-person is highly recommended so that feedback can be given in time for modification before due dates.

The only in-person sessions for this course will be for presentations:
Monday, April 13, 2020 at the Mission Valley campus from 6:00-8:30PM, room TBA
Monday, April 20, 2020 at the Mission Valley campus from 6:00-8:30 PM, room TBA

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 deadlines.

Spring 2021 BIO 6082 Course schedule

Assignment	Description	Due date
Methodology *75 points*	<u>Based on feedback from BIO 6043</u>, revise and submit your introduction, literature review, methodology (including all documents needed to collect your data such interview questions, tests, etc.), and references. The methodology section must be written in paragraph form with these four subheadings: Research design and justification (quantitative, qualitative, or mixed) Study setting and participants Data collection (include descriptions of any instruments or tasks) Data analysis (what analysis you plan to do). It is essential that you collect enough data to answer your question. To do this, you must have sufficient data to work with and to show that you can analyze and summarize it effectively. Surveys must have at least 10 questions with at least 2 open ended questions. A pilot study cannot be based on a survey with only yes or no questions. It is strongly suggested that you collect some written answers or conduct interviews. Data collection minimums: 6+ interviews approximately 20 minutes long or 20+ survey responses using an instrument with 20+ MCQ or 10+ short answer <u>Submit a document showing April's comments, as well as the changes you have made. Below this "messy" version, add a "clean" version in the same document.</u>	February 1
Data collection *25 points*	Collect all of your data, then submit a summary document (1-2 paragraphs) describing <u>how</u> the data collection went (do not submit the actual data). What actually occurred? Often times what we plan, and what actually takes place are different. No analysis of results is required at this point.	March 1
Data analysis *100 points*	Transcribe/code/analyze your data then submit your data analysis section and conclusions sections. What are your results, and what do they mean? Explain your findings in detail and provide specific evidence for any claims that you make.	April 1
Pilot Study Presentation *200 points*	Create and present a PowerPoint presentation summarizing your pilot study. You will present this to your peers. See the Pilot Study Presentation rubric for details. (Submit slides to Canvas as an assignment before the actual presentation.)	PPT due April 17 Presentations Tues., April 20 or Tues., April 27
Pilot Study Report *500 points*	Create a Pilot Study Report summarizing the project and your results. approximately 8-10 pages in length, double spaced. See the Pilot Study Report rubric for scoring info and Thesis Guidelines for information on section headings, etc.	May 1

GENERAL PLNU POLICIES

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 Degree Completion students to encounter God and grow in their Christian faith. At the Mission Valley (MV) campus we have an onsite chaplain, Rev. Gordon Wong, who is available during class break times across the week. If you have questions for, desire to meet or share a prayer request with Rev. Wong you can contact him directly at mvchaplain@pointloma.edu or gordonwong@pointloma.edu. Rev. Wong's cell number is 808-429-1129 if you need a more immediate response.   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 the Academic Honesty Policy in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center, located in the Bond Academic Center (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning

needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all **synchronous** class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions (virtual or face-to-face), 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 drop date or, after that date, receive the appropriate grade for their work and participation. In some courses, a portion of the credit hour content will be delivered **asynchronously** and attendance will be determined by submitting the assignments by the posted due dates. See Academic Policies in the Graduate and Professional Studies Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

Note: Hybrid courses

At Point Loma Nazarene University, attendance is required at all scheduled classes. Adult Degree Completion courses are taught in the hybrid format, which means some class meetings will be face-to-face and some will be online. Attendance in the face-to-face classes is to be for the entire time of the class. Arriving late or leaving early will be considered a partial absence. A day of attendance in an online class is determined as contributing a substantive note, assignment, discussion, or submission that adds value to the course as determined by the instructor. Three days of attendance are required each week.

Face-to-face Portion of the Hybrid course

In blended or hybrid courses, if a student misses one face-to-face class then the faculty member will send an email to the student and the Director of Student Success warning of attendance jeopardy. There are no exceptions to this policy.

If a student misses two face-to-face classes, the faculty member or Vice Provost for Academic Administration (VPAA) will initiate the student's de-enrollment from the course without further advanced notice to the student. If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of "F" and there will be no refund of tuition for that course.

Online Portion of the Hybrid Course

If a student misses two online classes (fails to contribute to a discussion board) during the course, then the faculty member will send an email to the student and the Director of Student Success warning of attendance jeopardy. There are no exceptions to this policy.

If a student misses three online classes (fails to contribute to a discussion board by the due date) during the course, then the faculty member or Vice Provost for Academic Administration (VPAA) will initiate the student's de-enrollment from the course without further advanced notice

to the student. If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of "F" and there will be no refund of tuition for that course.

1 missed F2F class = warning

2 missed F2F classes = de-enrollment

2 missed online classes = warning

3 missed online classes = de-enrollment

Note: Hybrid/Online Courses 14 to 15 Weeks 1 Unit

Students taking hybrid/blended courses lasting over 14 weeks are expected to attend each week of the course. Attendance is defined as logging into the course each calendar week to check on updates and announcements. In addition, students must participate in the academic graded activities during the calendar week the assignments/activities are due. Students must also attend all scheduled face-to-face meetings. Students who do not attend at least once in any given calendar week will be issued an attendance warning. Students who do not attend at least once in any two consecutive weeks in the online will be dropped from the course retroactive to the last date of recorded attendance.

 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.

USE OF TECHNOLOGY

In order to be successful in the online 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 compatible with their computer available to use. If a student is in need of technological resources please contact student-tech-request@pointloma.edu.

Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.