

**BIOLOGY 4099: Research in Biology (1-3 units)**  
**Syllabus, 2020**

**Instructor:** Dr. Mike Dorrell  
Professor of biology  
Rohr Science 116, 849-2204  
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**Office Hours:** Open, come by any time! You can access my google calendar for office hours appointments at the link below, or simply email me to set up a time to meet:  
<https://calendar.google.com/calendar/selfsched?sstoken=UUx3UEpWcEFkcDVKfGRIZmF1bHR8NWViYzgyMmRhNGY2ZjQ1MWFiYjJhODhjOTQ3YTExNTU>

**Text:** None required.

**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:** Independent investigation, under the supervision of a member of the biology faculty. May be repeated for a total of six units, but no more three units may count toward upper-division requirements for graduation. Offered every year. Prerequisite(s): Junior or Senior standing and consent of instructor.

**Course Learning Outcomes:** Research students will be able to

1. apply skills and knowledge learned in science courses to research situations.
2. reinforce and expand previous conceptual learning through research experiences.

**Academic Accommodations:** 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. ([DRC@pointloma.edu](mailto: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 (a) 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.

**Academic Honesty:** 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 [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

***Evaluation and Grading:*** Your grade will be based on hours worked, work ethic, and a final report, as follows.

Hours worked: 25%.

You must keep track of your hours worked a report the information to your faculty mentor.

Work ethic: 50%

Work ethic includes effort, promptness, collegiality, and care in completing experiments.

Final report: 25%

This can take various forms depending on your faculty mentor. It could include a lab notebook, a poster presentation, or a short paper.

***Required hours and Academic units:*** You should enroll for the number of academic units that corresponds with the number of work hours you will devote to research. You may apply only those hours that you work during the semester for which you are receiving academic credit. The Biology Department requires that the total number of hours worked correspond with units of credit in the following manner:

150 or more hours	3 semester units
100 or more hours	2 semester units
50 or more hours	1 semester unit