



BIO6092: Perspectives on Science

1 Unit

Fall 2022

Meeting days: Tuesdays	Instructor title and name: Dr. Walter Cho
Meeting times: Seminars: 5-7:30PM Discussion sessions: 5:30PM-7PM	Phone: 619-849-2398
Meeting location: Seminars: Fermanian Business Center Discussion sessions: Latter 02	Email: wcho@pointloma.edu
Final Exam: None	Office location and hours (remote or outdoor only): Rohr Science 134; Zoom link on Canvas: Mon. & Fri., 12PM-1:30PM; Th., 11AM-12PM (PT); & 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.

COURSE DESCRIPTION

From the course catalog: Perspectives on Science is a monthly seminar series with speakers from research institutions and universities which address current research in their fields, including chemistry, biology, physics, astronomy, and geology. Following the seminar, students discuss research articles by the speaker. May be repeated for a total of six (6) units. Credit/No Credit.

COURSE LEARNING OUTCOMES

- 1. Have a comprehensive understanding of the research that supports a particular scientific accomplishment.
- 2. To develop an understanding of the research behind a set of significant scientific accomplishments.
- 3. To grow in the ability to identify and dissect out the key points in a body of scientific literature.
- 4. To draw out the best scientific thinking in each individual within this learning community.
- 5. To learn to distinguish that which constitutes high quality analytical thinking from that which does not.
- 6. To relate specific current scientific research into a broader context, with an understanding of its broadly reaching benefits.
- 7. To grow in the ability to effectively communicate complex scientific ideas in informal discussions as well as brief summative presentations.
- 8. To experience the communal enjoyment that comes from group exploration of scientific frontiers.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

There will be two to three primary research papers to read in association with each of the POS sessions. The papers will be posted on Canvas prior to the seminar so that you can read the work of the speaker beforehand. When possible, I will include a review article providing you with background information about the scheduled topic.

You also must register for the POS seminar series and pay the \$100 POS program subscription fee at the POS Registration/Payment website located here: https://www.pointloma.edu/news/pos [click and complete both REGISTRATION and PAYMENT]. Please do this as soon as possible as there is limited availability and the program fills quickly.

ASSESSMENT AND GRADING

The course will be graded credit/no credit. For one unit of credit, you are expected to:

- Attend 3 POS seminars
- Attend 4 Discussion sessions
- Present and lead a discussion of one primary research paper
- Complete 5 of 6 Article Analysis assignments

Article analyses will be graded **CREDIT/NO CREDIT**. Credit for these assignments will be awarded only if **ALL** of the detailed specifications required for the specific assignment are met. Assignments may be resubmitted once through the use of **TOKENS** (see below).

TOKENS: Each student starts the semester with 2 TOKENS, which can be exchanged for either: a) *an extension* (requests must be submitted BEFORE the assignment is due) or b) a *resubmission* of a revised assignment (requests for revision must be submitted within 24-hours after the graded assignment has been returned). In order to use a TOKEN, you must both email me and submit a COMMENT on the assignment in Canvas to let me know your intention of using your TOKEN. Your email and COMMENT should: 1) have "Token Request" in the Subject header 2) state whether you are using the TOKEN to request an extension or resubmission of an assignment, and 3) name the specific assignment.

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

Deadlines will be strictly adhered to. You may request an extension through the use of TOKENS (see TOKENS above)

PLNU SPIRITUAL CARE

Bakersfield 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 Bakersfield campus we have an onsite chaplain, Rev. Brent Kall, who is available during class break times across the week. If you have questions, desire to meet or share a prayer request with Rev. Brent Kall you can contact him directly at bkall@pointloma.edu. Also, there is a weekly Email Newsletter called "The Encourager" that provides a brief devotional and all his contact information.

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, Rev. Dave Hazel, who is available during class break times across the week. If you have questions, desire to meet or share a prayer request with Rev. Hazel you can contact him directly at dhazel@pointloma.edu or feel free to call or text (913-231-3975).

Mission Valley and Balboa Campuses:

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. We have an onsite chaplain, Rev. Gordon Wong, at the Mission Valley (MV) campus to service Graduate students at the Mission Valley and Balboa Campuses. Rev. Gordon Wong 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 <u>Academic Honesty Policy</u> in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. 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 issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

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 and/or if they do not wish to utilize some or all of the elements of their AP in that course.

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.

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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 at 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

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 <u>Academic Policies</u> 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.

Asynchronous Attendance/Participation Definition

A day of attendance in asynchronous content is determined as contributing a substantive note, assignment, discussion, or submission by the posted due date. Failure to meet these standards will result in an absence for that day. Instructors will determine how many asynchronous attendance days are required each week.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in 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. See <u>Academic Policies</u> in the Graduate and Professional Studies Catalog for additional detail.

TENTATIVE COURSE SCHEDULE

Seminar_Date	Discussion & Assignment Date	Speaker and Topic
	09/06/22	Introductory Class meeting
10/11/22	10/25/22 DUE: Article Analyses 1 & 2	Dr. Andrew Nosal (PLNU) Seminar Title: "Movement Ecology of Sharks off the Coast of Southern California"
11/01/22	11/15/22 DUE: Article Analyses 3 & 4	Dr. Robert Schooley (UCSD) Seminar Title: "Back to the Future: Bacteriophage Therapy for Multi-Drug-Resistant (MDR) Bacterial Infections""
12/06/22	12/06/22 or 12/13/22 DUE: Article Analyses 5 & 6	Dr. Samantha Bova (SDSU) Seminar Title: "It's Getting Hot in Here: Climate Lessons from the Deep Sea"