

Biology Department

BIO6092: Perspectives on Science

1 Unit

Spring 2020

Meeting days: Tuesdays	Instructor title and name: Dr. Walter Cho				
Meeting times:	Phone: 619-849-2398				
Seminars: 5-7:30PM					
Discussion Sessions: 5:30-7PM	E-mail: waltercho@pointloma.edu				
Meeting location:	Office location: Rohr Science 134				
Seminars: Fermanian Business					
Center	Office hours: Mon. 2:30-3:30PM, Thurs. 10AM-				
Discussion Sessions: Sator 116	12PM, or by appt.				
Final Exam: None					

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. This course is designed to promote translation of these lectures to the science classroom, especially to the biology classroom. May be repeated up to three times for a total of six units. Graded Credit/No Credit.

COURSE LEARNING OUTCOMES

- 1. Have a comprehensive understanding of the research which 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.

COURSE CREDIT HOUR INFORMATION

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 1 unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

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.

ASSESSMENT AND GRADING

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

- Attend 4 POS seminars
- Attend 4 Discussion sessions
- Present and lead a discussion of one primary research paper
- Complete 5 of 8 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 under extremely unusual circumstances.

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

FINAL EXAMINATION POLICY

- 1	•	C. 1			•	
Indra	IC P	า∩ tınal	avam	tor ti	าเต	course.
111616	131	io illiai	CAGIII	וטו נו	113	course.

SPIRITUAL CARE

PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our graduate students to encounter God and grow in their Christian faith. At each campus location, we have an onsite chaplain who is available during class break times across the week. If you have questions, a desire to meet with the chaplain or prayer requests you can send an email to:

- Bakersfield gradchaplainbakersfield@pointloma.edu
- Liberty Station gradchaplainlibertystation@pointloma.edu
- Main Campus and Mission Valley gradchaplainmissionvalley@pointloma.edu

In addition there are resources for your Christian faith journey available at the <u>Graduate & Professional</u> <u>Student Spiritual Life web page.</u>

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 <u>dis</u>honesty 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 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. (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.

PLNU ATTENDANCE AND PARTICIPATION POLICY

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 Academic Policies in the Graduate and Professional Studies Catalog for additional detail.

TENTATIVE COURSE SCHEDULE

Seminar_Date	Discussion & Assignment Date	Speaker and Topic
1/14/2020	1/28/2020 DUE: Article Analyses 1 & 2	Dr. Catherine "Lynn" Hedrick (La Jolla Institute for Immunology) Seminar Title: "Immune Cells in Cancer: Jekyll and Hyde!"
2/18/2020	2/25/2020 DUE: Article Analyses 3 & 4	Dr. Brian Keating (UCSD) Seminar Title: "Losing the Nobel Prize: a Cosmic Memoir of Love, Loss, and Redemption"
3/3/2020	3/17/2020 DUE: Article Analyses 5 & 6	Dr. Chris Tubbs (San Diego Zoo Global, Institute for Conservation Research) Seminar Title: "A New Recipe for Southern White Rhinoceros Breeding Success?"
4/7/2020	4/21/2020 DUE: Article Analyses 7 & 8	Dr. Vicki Lundblad (The Salk Institute) Seminar Title: "Of Bread and Wineand Chromosome Ends: Fundamental Insights Into How We Age"
5/5/2020	5/5/2020	Dr. Exequiel Ezcurra (UC Riverside) Seminar Title: "Reflections on a Life Spent Exploring Desert and Coastal Lagoon Ecology in the Gulf of California"