

# **BIO 1005**

# **Ecology and Conservation**

## Fall 2021

# Professor Kyle VanMeter

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Be kind and compassionate to one another, forgiving each other, just as in Christ God forgave you. Ephesians 4:32 (NIV)

## **SCHEDULE**

Lectures: M/W/F from 11:00am - 11:55am in Taylor Hall 106
Lab Section 1 will meet on Mondays from 5:00pm - 7:30pm in Latter Hall 102
Lab Section 2 will meet on Wednesday from 5:00pm - 7:30pm in Latter Hall 102

## **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.

## Foundational Explorations Mission

PLNU provides a foundational course of study in the liberal arts informed by the life, death, and resurrection of Jesus Christ. In keeping with the Wesleyan tradition, the curriculum equips students with a broad range of knowledge and skills within and across disciplines to enrich major study, lifelong learning, and vocational service as Christ-like participants in the world's diverse societies and culture.



## **COURSE DESCRIPTION**

A wide-ranging exploration of major topics in ecological science relating to current issues in conservation biology. Drawing from academic and applied fields, the course examines major concepts in conservation biology and how they impact society, public policy, wise management of natural resources, and ethical choices encountered in everyday life. Focus topics include biodiversity, habitat destruction, exotic species introductions, human harvesting, protected areas, and future prospects. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts.

What will we do in this course? The course lecture and lab activities are structured in a way that allows students to develop biology knowledge through problem solving and group interaction. We will explore how an understanding of different concepts in biology are essential to explain the delicate balance between the living and nonliving world.

This course is one of the components of the General Education Program at Point Loma Nazarene University, under the category of *Exploring an Interdependent World*. By including this course in a common educational experience for undergraduates, the faculty supports an introduction to the natural and social sciences as tools for exploring the world, with emphasis on collecting and interpreting data.

## **COURSE LEARNING OUTCOMES**

Upon completion of the course, each student will be able to:

- describe how interactions between organisms and their environment influence populations, communities, and ecosystems
- explain strategies for conserving biodiversity and protecting or restoring ecosystems
- articulate and defend a position on environmental stewardship drawing on both biological and world views
- design and conduct an independent investigation applying the processes and tools of scientific inquiry (both hypothesis testing and discovery science) to test biological hypotheses
- prepare and analyze graphs drawing valid scientific conclusions

#### REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

There will not be a traditional textbook for this course.

A computer with access to the internet is recommended to ensure success in this course. You will need to sign into Canvas to turn in homework and lab assignments and you will also be assigned various websites to read from throughout the course.



## ASSESSMENT AND GRADING

Assignments, Activities, Projects, and Participation (30%): Throughout the semester there will be homework assignments that are assigned and activities in class that will be graded. There will also be a few special projects throughout the semester. (i.e., formal lab reports, service-learning project, presentations, etc.)

Quizzes (10%): Quizzes will be assigned throughout the semester and will cover content from lecture, lab and reading material.

Labs (30%): You are required to attend all lab sessions. Attendance, participation, and lab work will determine your lab grade for the semester.

Exams (30%): You will have 3 exams and a final exam

Grades will be given based on earned points as a percentage of total points possible.

#### Grading scale:

Α	90%	A "+" will be assigned to the upper 2% in each range		
В	80%	(except for A+ which can't be used)		
С	70%	Examples: 88.3% = B+	77.9% = C	
D	60%			
F	50%			

## **INCOMPLETES AND LATE ASSIGNMENTS**

To receive full credit for assignments, discussion boards, quizzes, and exams, you MUST turn it in on time. All late assignments will be given a 10% grade reduction per day, with a maximum of 50% taken off. You will not be able to take makeup exams. If you miss an exam for any reason, you will get a 0. If you will be unable to take an exam on the date that it is given, please **contact me ASAP!** Makeups may be permitted if the student can provide a reasonable, verifiable reason. (i.e., hospitalization, funeral, etc.)

## **IMPORTANT DATES**

First Day of Class	 Tuesday, Aug 31 <sup>st</sup> – Monday Schedule
Labor Day (No Class)	 Monday, Sep 6 <sup>th</sup>
Fall Break (No Class)	 Friday, Oct 22 <sup>nd</sup>
Last Day to Drop Class	 Friday, Nov 5 <sup>th</sup>
Thanksgiving (No Class)	 Wednesday – Friday, Nov 24 <sup>th</sup> – 26 <sup>th</sup>
Final Exam	 Monday, Dec 13 <sup>th</sup> @ 10:30 – 1:00pm



## 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 <a href="Academic Policies">Academic Policies</a> 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.

## PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. 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 drop date or, after that date, receive the appropriate grade for their work and participation.

## SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the <u>Office of Spiritual Development.</u>