# BIO 1005/1005L | Ecology and Conservation (FE) | Fall 2022 4 Units: 3 hours of lecture + 2.5 hours of lab, weekly

Lectures: Mondays, Wednesdays, and Fridays | 11:00 am - 11:55 am | Rohr Hall 108\* Labs: Wednesdays | 2:45 pm - 5:15 pm (Section 1) or 5:30 pm - 8:00 pm (Section 2) | Rohr Science 40\*

**Instructor:** Dr. Andrew Nosal (he/him) | anosal@pointloma.edu | 619-849-2656 | Rohr Science 140\* **Office Hours:** Mondays and Fridays, 9:00 am - 10:00 am | Thursdays, 10:00 am - 12:00 pm | Rohr Science 140\* **Final Exam:** Wednesday, December 14, 2022 | 10:30 am - 1:00 pm | Rohr Hall 108\*

\*Please note the difference between Rohr Hall (lecture) and Rohr Science (lab and office hours).

## **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 their impact on society, public policy, wise management of natural resources, consumerism, and ethical choices encountered in everyday life. Focus topics include biodiversity, habitat destruction, exotic species introductions, human harvesting, protected areas, and climate change. Course approach emphasizes the process of science, critical thinking, active learning, social relevancy, and building connections between case studies and general concepts. An inquiry-based laboratory (BIO 1005L) is a co-requisite for BIO 1005.

### **Course Learning Outcomes**

By the end of this course, students will be able to:

- 1. Describe how interactions between organisms and their environment influence populations, communities, and ecosystems;
- 2. Identify and evaluate strategies for conserving biodiversity and protecting or restoring ecosystems;
- 3. Analyze the social, political, and economic dimensions of achieving environmental sustainability;
- 4. Design and conduct an experiment and/or observational investigation to test hypotheses and generate scientific knowledge relevant to ecology and conservation;
- 5. Analyze data using appropriate scientific methods and make valid and reliable interpretations;
- 6. Develop and defend a position (worldview) on environmental stewardship.

# **Foundational Explorations Learning Outcomes (FELO)**

Foundational Exploration (FE) courses are required to assess a FELO. In this course, we will assess FELO 1D: **Critical Thinking** – "Students will be able to examine, critique and synthesize information in order to arrive at reasoned conclusions." This FELO will be assessed by means of a few questions embedded into the final exam.

#### **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 4-unit class delivered over 15 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend an estimated 150 total hours meeting the course learning outcomes.

### Textbooks, Readings, and Other Materials

### Required Equipment:

*iClicker remote (iClicker+ or iClicker2)* OR *iClicker student app on a smartphone, tablet, or laptop* (see important information below about using iClicker, <u>including registering your iClicker remote or app account</u>)

## Required Text (must use FOURTH EDITION):

Environmental Science for a Changing World (Fourth Edition), by Karr, Interlandi, and Houtman

You may purchase (new or used) or rent a hard copy of the textbook, or the online e-book. You are encouraged to check the <u>PLNU Bookstore</u>, <u>Amazon</u>, and <u>Macmillan Learning</u> websites, and others, to find the best option for you. You are NOT required to have access to the textbook's online supporting material (e.g., an access code). However, the textbook <u>MUST be the fourth edition</u> (the one with ducks on the front cover).

Supplementary readings and videos may also be assigned; these will be posted on Canvas or e-mailed to you.

### **Important iClicker Information**

I will be using iClicker to make our class time more engaging. This will show me what you know, give everyone a chance to participate, and increase how much you learn in class. This will also provide you with feedback on how well you are comprehending course concepts and help you master challenging concepts. Participating in my iClicker activities will be counted towards your final grade (see section on Assessments and Grading below).

You are required to bring a device to participate in my iClicker activities during every class. I will be allowing participation with iClicker remotes (iClicker+ or iClicker2) or the iClicker student app on a smartphone, tablet, or laptop. Please note that the PLNU Bookstore indicates that the iClicker2 remote specifically is required for this course. However, if you prefer, you are indeed allowed to use the iClicker+ remote (cheaper) or the iClicker student app on a smartphone, tablet, or laptop. It is your responsibility to follow the steps below to properly register your iClicker remote or iClicker app account in a timely fashion.

In order to participate in my iClicker activities and ensure that your grades are properly reflected in the gradebook, please follow the steps below:

*Instructions for iClicker remotes (proceed to next section if using the iClicker student app):* 

- 1. Purchase (new or used) or rent an iClicker remote (iClicker+ or iClicker2) from the PLNU Bookstore, Amazon, or Macmillian Learning websites, among others.
- 3. Bring your remote to each class. Make sure your <u>remote frequency is set</u> to "AA" (the default). When I ask a multiple-choice question, use your remote to respond.

*Instructions for the iClicker student app (ignore if using an iClicker remote):* 

1. If you do not already have an iClicker account, <u>create one</u>. You can do this by downloading and opening the iClicker student mobile app via the App Store or Google Play, or by visiting <u>iclicker.com</u> and creating an account as a student. If you already have an account, DO NOT create a new one. You can only receive credit from one account. When creating your iClicker account, make sure you enter your name and PLNU email

exactly as they appear in Canvas. Add your Canvas username (the part of your PLNU email address before the @ symbol) in the "Student ID" field.

2. Log in to your iClicker account and use the + sign to search for my course. In the "Find Your Institution" field, enter Point Loma Nazarene University. In the "Find Your Course" field, enter BIO 1005. Double-check the details you see to make sure you select this course (see below) and select "Add This Course."

• Institution: Point Loma Nazarene University

• Course Name: BIO 1005: Ecology and Conservation

Instructor: Andrew Nosal
Start Date: August 30, 2022
End Date: December 16, 2022

- 3. Upon signing up with iClicker you will have a two-week free-trial period for using the app to participate in class activities. Before the free trial ends, you need to <u>purchase an iClicker subscription or obtain an access code</u> to continue participating in class with iClicker on your smartphone, tablet, or laptop. To <u>redeem an access code</u>, you must visit the Subscriptions section of <u>the iClicker student web app</u> (NOT the mobile app). iClicker will let you know when your free trial is ending. If your free trial ends without completing this step, you will be unable to participate in class activities until you purchase a subscription or enter an access code.
- 4. Set up the device you will use to participate in my class sessions. You can download the iClicker student mobile app via the App Store or Google Play, or you can use the iClicker web app by signing in as a student at <u>iclicker.com</u>. Connect to our classroom's WiFi ("PLNU-WIFI") with your PLNU credentials.
- 5. During class, make sure you have selected my course from the main screen of your iClicker account. When I start a session, select the Join button that appears on your screen, and answer the iClicker questions.

Academic Integrity Information:

iClicker activities fall under the provisions of our campus academic honesty policy. Students must not engage in academic dishonesty while participating in iClicker activities. This includes but is not limited to:

- Answering polling questions while not physically in class
- Looking at other students' devices while answering live questions
- Using more than one iClicker remote or account at a time

Violation of these rules will be handled according the the PLNU Academic Honesty Policy (see below).

Need help with your iClicker remote or the iClicker student app?

- If you are having trouble with your iClicker access code, check out this guide to access code errors.
- If you are having issues connecting to the iClicker student app, check out these iClicker Connectivity Tips.
- If you are having issues seeing your iClicker points, check out this troubleshooting guide.
- Find answers to many of your questions and contact the iClicker Tech Support Team by visiting iclicker.com/support at any time.

#### Course Format

This course consists of highly interactive 'lecture' sessions that will employ Socratic dialogue, using probing questions to guide classroom discussion. Students are expected to come to class <u>prepared</u>, <u>having completed the scheduled readings and homework questions</u>, ready to participate in classroom activities. 'Lecture' sessions will

regularly consist of class discussions, PowerPoint presentations, iClicker questions, board work, videos, breakout groups, and student sharing. The goal of 'lecture' sessions is to review and highlight elements of assigned readings, answer students' questions, and apply concepts learned to new issues. A co-requisite laboratory session will apply concepts learned in 'lecture' to real-world situations.

# **Your Expectations of Me**

My goal is to maintain a warm and inclusive learning environment. Teaching and learning are inherently interactive and thus social and emotional; thus, I will never intentionally intimidate or embarrass you. Instead, I will try to challenge, empower, and inspire you. I will be friendly, fun, and approachable, but never at the expense of integrity, thoroughness, and fairness. I invite your questions and challenges (I make mistakes too) whenever they arise. In addition to your teacher, I am also your mentor and advocate; feel free to approach me with any question or concern about this class or otherwise. I am committed to mastery of the material I am teaching, to punctuality, accountability, organization, and preparedness. I will have assignments and exams graded and e-mails answered in short order, and I will make myself as available to students as possible.

#### My Expectations of You

I expect you to attend every lecture and lab session, arriving slightly *early* so we can begin on time. You should arrive prepared, having completed any assignments due as well as the scheduled readings. I expect a certain decorum in the classroom. Please respect your fellow students and me, as I will respect you. Your cell phones should be turned off or silenced and put away (out of sight, out of your hands) during class, unless you have prior approval from me (e.g., you have a child in daycare, a relative in hospice, etc.).

To succeed in this course, you must attend every lecture and lab, complete all assigned readings by their due date, and submit assignments on time. When completing assigned readings, read *actively* and *do not ignore the figures*. That means not merely skimming and/or highlighting. Reading actively means taking notes and drawing concept maps while reading and developing insightful questions you can bring to class. Most importantly, COME TO OFFICE HOURS *EARLY* AND *OFTEN*! I love helping students and office hours are perfect for me to work with you individually or in small groups. Coming to office hours early and often is bound to improve your grade! I am personally invested in your success; however, you must be proactive and seek out help as needed. You must take ownership of your education! Lastly, use this general rule of thumb to self-assess your learning: if you truly understand the material, you should be able to teach it (explain it) clearly and concisely to another student.

I prefer that you take notes by hand, as several recent studies have shown that handwriting notes improves learning and retention over typing notes on a computer. One reason is that using your computer can be distracting, with countless temptations to engage with social media, e-mail, etc. The other reason is that handwriting notes is slower, which means you must actively distill in real time the lecture material to the most important points. This vital processing step is lost when you type notes because you can probably type fast enough to write every word being said. Nevertheless, if, for whatever reasons, you feel typing your notes in class works best for you and your learning style, I will be happy to accommodate this. Please just talk to me.

If you know ahead of time you will miss class for a valid reason (e.g., interview for graduate/medical school, competing in an intercollegiate athletic event, etc.), please notify me AT LEAST TWO WEEKS ahead of time. Alternative arrangements *may* be possible, but are not guaranteed. If you unexpectedly miss class for a valid reason (e.g., severe illness, family emergency, etc.), contact me as soon as possible; you may be asked to provide proof of absence (e.g., a doctor's note). Note that other travel plans (e.g., leaving PLNU early for Spring Break, Easter Break, or similar) DO NOT count as a valid reason to miss class and may not be accommodated.

I take academic integrity seriously and will not tolerate cheating or any other kind of dishonesty. Refer to the University's Academic Honesty Policy by clicking <a href="https://example.com/here">here</a>. Please be aware that many assignments will be submitted

through Canvas and these will be automatically scanned by advanced plagiarism detection software against material published online and material submitted by other students (both current and past students).

## Land Acknowledgement

I want to acknowledge that the land on which we gather is the traditional and unceded territory of the Kumeyaay Nation. I want to pay respect to the citizens of the Kumeyaay Nation, both past and present, and their continuing relationship to their ancestral lands.

Tentative Course Schedule (SUBJECT TO CHANGE – changes will be announced in class and on Canvas) Note: Assigned textbook chapter modules (e.g., 1.1, 1.2, 2.1, etc.) are indicated in parentheses and should be completed before lecture begins (11:00 am) on the date indicated.

Day	Date	Topics Covered
TUE WED FRI	8/30 8/31 LAB: 9/2	Introduction to Course Wicked Environmental Problems, Sustainability, Social Traps, Environmental Ethics (1.1) Introduction to Lab and Excel Tutorial Scientific Method, Correlation vs. Causation (1.2)
MON WED FRI	9/5 9/7 LAB: 9/9	NO CLASS – LABOR DAY Ecological Hierarchy, Ecosystem Components, Biomes, Ecological Niches (2.1) Classic Plant Experiments Energy Flow in Ecosystems, Matter Cycles and Sinks (2.1)
MON WED FRI	9/12 9/14 LAB: 9/16	Population Distribution Patterns, Population Size and Density, Population Growth (2.2) Life-History Strategies, Top-Down and Bottom-Up Regulation (2.2) Ecospheres Community Ecology, Food Webs, Trophic Levels, Species Diversity (2.3)
MON WED FRI	9/19 9/21 LAB: 9/23	Habitat Structure, Keystone Species, Species Interactions, Ecological Succession (2.3) Genetic Diversity and Natural Selection, Bottleneck and Founder Effects, Extinction (3.1) Flex Canyon Field Trip Measuring Biodiversity, Valuing Biodiversity, Biodiversity Stakeholders (3.2)
MON WED FRI	9/26 9/28 LAB: 9/30	Factors Affecting Biodiversity, Biodiversity Hot Spots, Threats to Biodiversity (3.2, 3.3) Single-Species Conservation Strategies, IUCN, CITES, US Endangered Species Act (3.3) Biodiversity  Ecosystem-Based Conservation Strategies, Protected Areas, CA Marine Life Protection Act (3.3)
MON WED	10/3 10/5 LAB: 10/7	Catchup and Review for Exam 1 Human Population Size and Distribution, Factors that Affect Human Population Growth (4.1)  Exam 1 (covers material from 8/30 through 10/3) Human Population Age Structure, Demographic Transition (4.1)
MON WED FRI	10/10 10/12 LAB: 10/14	Urbanization, Suburban Sprawl, Green Building and City Planning (4.2) Environmental Health, Toxicology, Biomagnification, Bioaccumulation (4.3) Conserving Biodiversity Ecological Footprint, True Cost Accounting, Linear vs. Circular Economic Systems (5.1)

MON WED	10/17 10/19 LAB: 10/21	
MON WED	10/24 10/26 LAB:	Freshwater Distribution, Hydrologic Cycle, Causes and Consequences of Water Scarcity (6.1) Addressing Water Shortages with Technology and Conservation (6.1) Microplastics
FRI	10/28	Water Pollution, Watersheds and Runoff, Eutrophication, Dead Zones (6.2)
MON WED	10/31 11/2 LAB:	Marine Ecosystems, Ocean Acidification, Coral Bleaching (6.3) Mineral Resources, Balancing Green Technology with Environmental Costs (7.1) Dead Zones
FRI	11/4	Ecosystem Services of Forests, Threats to Forests, Sustainable Forest Management (7.2)
MON WED	11/7 11/9 LAB: 11/11	Catchup and Review for Exam 2 World Hunger, Green Revolution, Industrial Agriculture, Fertilizer and Pesticides, GMOs (8.1)  Exam 2 (cumulative, but focusing on material from 10/5 through 11/7)  Systematics Agriculture, Agreed Logy, Sail Health, Boot Management (8.2)
FRI	11/11	Sustainable Agriculture, Agroecology, Soil Health, Pest Management (8.2)
MON WED FRI	11/14 11/16 LAB: 11/18	Affluence and Diet, Meat Production, Environmental Impacts of Raising Livestock (8.3) Industrial and Artisanal Fishing, Aquaculture, Sustainable Practices (8.4) Millennium Ecosystem Assessment Nonrenewable Energy Sources I: Coal (9.1)
MON WED FRI	11/21 11/23 11/25	Nonrenewable Energy Sources II: Oil and Natural Gas (9.2)  NO CLASS – THANKSGIVING BREAK  NO CLASS – THANKSGIVING BREAK
MON WED	11/28 11/30 LAB:	Air Pollution, Acid Rain, US Clean Air Act, Approaches to Reducing Air Pollution (10.1) Weather vs. Climate, Evidence for Climate Change, Greenhouse Effect, Feedback Loops (10.2) Air Pollution
FRI	12/2	Causes and Consequences of Climate Change (10.2)
MON WED	12/5 12/7 LAB:	Nonrenewable Energy Sources III: Nuclear (11.1) Renewable Energy Sources I: Hydropower, Wind, Geothermal, Solar (11.2) Climate Change
FRI	12/9	Renewable Energy Sources II: Biofuels, Revisiting Two Types of Sustainability (11.3)
WED	12/14	Exam 3 (cumulative, but focusing on material from 11/9 through 12/9) During final exam time slot, 10:30 AM – 1:00 PM, in <u>lecture classroom (Rohr Hall 108)</u>

#### **Assessments and Grading**

Assessment		Percentage of Final Grade	
Exam 1		15%	
Exam 2		15%	
Exam 3 (Final Exam)		15%	
Reading Homework Questions		10%	
Reading In-Class iClicker Questions		10%	
Environmental Stewardship Reflection Paper		5%	
Lab Assignments and Reports		25%	
Lecture and Lab Participation		5%	
•	Total	100%	

The following scale will be used to determine your final course letter grade (students will receive the same grade for lecture and lab):

$97.0\% \ge$	A+		77.0% ≥	C+	< 80.0%
$93.0\% \ge$	A	< 97.0%	73.0% ≥	C	< 77.0%
$90.0\% \ge$	A-	< 93.0%	70.0% ≥	C-	< 73.0%
$87.0\% \ge$	B+	< 90.0%	67.0% ≥	D+	< 70.0%
$83.0\% \ge$	В	< 87.0%	63.0% ≥	D	< 67.0%
$80.0\% \ge$	В-	< 83.0%	60.0% ≥	D-	< 63.0%
				F	< 60.0%

### Exams 1 - 3 (45%):

This course has three exams. The first exam covers material from the first third of the semester. The second exam focuses on material from the middle third of the semester, but, because the course constantly builds on prior knowledge, will make some connections with previously tested material and thus is technically cumulative. The first two exams will take place during regularly scheduled lab time in the lab classroom (Rohr Science 40). The third exam will take place during finals week in the lecture classroom (Rohr Hall 108). Like the second exam, it will focus on material from the last third of the semester, but will also make connections with previously tested material and thus is technically cumulative. Exams consist mostly of multiple choice and true/false questions. Grading questions and corrections must be completed within two weeks of graded exams being returned.

### Reading Homework Questions (10%):

For each assigned chapter (module) of the textbook, there will be a brief, 5-point homework assignment consisting of several questions to assess students' understanding. These questions will be posted on Canvas, which is where you will submit your responses before the start of the relevant 'lecture' class. Late reading homework will be accepted, but with a penalty of 1 point (20%) per day late (or fraction thereof, including weekends).

### Reading In-Class iClicker Questions (10%):

Most lectures will consist of several iClicker questions (multiple choice and true/false) about the assigned reading, to assess students' understanding. Students who miss these questions due to an unexcused absence or tardy will get 0 points. Students who are present, but answer incorrectly, will receive 0.5 points for each response. Correct answers will earn the full 1 point each. At the end of the semester, the bottom 10 questions, or 10% of the total number of questions, whichever is greater, will be dropped from each student's grade calculation.

## Environmental Stewardship Reflection Paper (5%):

Students will write a 500-word reflection paper that describes and defends their position (worldview) on environmental stewardship. Students are encouraged to incorporate their religious beliefs, if applicable. This paper should be thoughtful, personal, specific, and engage material covered during the semester. An "A" paper will go well beyond material covered in class. Detailed instructions about this assignment, including a specific prompt and due date, will be provided in class and posted on Canvas. Late papers will be accepted, but with a penalty of 20% per day late, or fraction thereof.

Lab Assignments and Reports (25%):

Each lab exercise will include questions to be answered, graphs to be completed, and/or reports to be written and submitted. Students who miss a lab due to an unexcused absence are not permitted to submit the associated assignment or report and will receive 0 points for that assignment or report. Detailed instructions and due dates will be posted on Canvas. Late lab assignments and reports will be accepted, but with a penalty of 20% per day late, or fraction thereof.

*Lecture and Lab Participation (5%):* 

Students are expected to arrive to lecture and lab on time and prepared, and be engaged with in-class activities (i.e., not distracted by cell phones or asleep), listening respectfully to others, answering questions, and asking questions. All students are expected to contribute their fair share to group work.

#### **PLNU Institutional Policies**

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.

Foundational Explorations (formerly GE) 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.

State Authorization:

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on State Authorization to view which states allow online (distance education) outside of California.

#### 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. 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 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. 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 <a href="Academic Policies">Academic Policies</a> in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted. 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.

## *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 <u>Technology and System Requirements</u> 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 <u>student-tech-request@pointloma.edu</u>. Problems with technology do not relieve you of the responsibility of participating, turning in your assignments, or completing your class work.

### 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 Final Examination Policy:

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted in this syllabus on the following pages. No requests for early examinations or alternative days will be approved unless you have 3 final exams scheduled on the same day or another compelling reason.

### 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 Office of Spiritual Development.