

	Department of Kinesiology and Health Sciences NUT 3065 - Advanced Nutrition Number of Units: 3
Fall 2026	

Meeting days: Mon/Wed/Fri	Instructor title and name: Dr. Heidi Lynch, PhD, RDN
Meeting times: 8:30-9:25 am	Phone: 619-849-3306
Meeting location: Evans 122	E-mail: hlynch@pointloma.edu
Final Exam: Wednesday, December 16th 7:30-10:00 am	Office location and hours: Main Kinesiology & Health Sciences office building (between tennis courts & gym) MWF 10:30-11:30 am (note: 2nd & 4th Fridays only) Tues/Thurs 9:00-10:00 am Or by appointment

[Download Course Syllabus Here](#)

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.

GOALS AND OUTCOMES:

Course Description:

Theories are integrated from physiology, biochemistry and nutrition to provide an in-depth study of nutrients and their role in human metabolism. Current research on human metabolic processes is analyzed. Laboratory applications. Three (3) semester unit credits.

Dietetic Learning Outcomes:

1. Demonstrate content knowledge of food and nutrition as well as concepts and theories of nutrition across a broad range including: lifecycle stages, cellular nutrition, disease prevention and medical therapy; food and food systems; development, modification, and evaluation of recipes, menus and food products.
2. Identify and assess scientific literature to evaluate current evidence-based research related to dietetic topics.
3. Evaluate the effects of societal, cultural, ethical and financial dynamics upon diet trends, dietary choices, and food preparation methods among families and societies.

NUT 3065 Course Student Learning Outcomes:

1. Define in-depth nutrient roles.
2. Describe how macronutrients are digested and absorbed.
3. Outline major biochemical pathways.
4. Explain specific reactions for vitamins and minerals as cofactors.
5. Draw the nutrient chemical structures.
6. Distinguish the relative importance of various foods as sources of nutrients.
7. Examine recent scientific literature in refereed journals.
8. Analyze reports concerning research findings on various nutrients.
9. Interpret and report data in a research paper.

AND's Didactic Course Core Knowledge for the RDN in DPD Programs based on 2022 Standards covered in this course: (*indicates that the KRDN is being assessed in this course)

*KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.

KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence- based guidelines and protocols.

KRDN 1.3: Apply critical thinking skills.

*KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.

*KRDN 2.9: Defend a position on issues impacting the nutrition and dietetics profession.

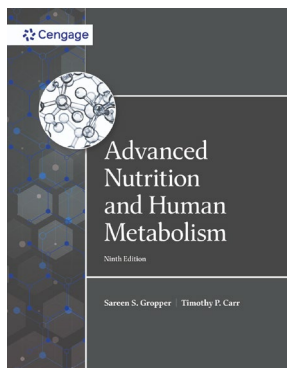
*KRDN 3.4: Practice routine health screening assessments, including measuring blood pressure and conducting waived point-of-care laboratory testing (such as glucose or cholesterol).

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 3 unit class delivered over 17 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

REQUIRED TEXT AND RECOMMENDED STUDY RESOURCES

Gropper, S.S., Smith, J.L. and Groff J.L. Advanced Nutrition and Human Metabolism, 9th ed. Cengage Learning, 2026.



Students are responsible for having access to the required course textbooks prior to the first day of class (buy, rent, borrow, share, etc).

COURSE REQUIREMENTS AND STANDARDS:

Grade Distribution:

A	B	C	D	F
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A 93-100	B+ 87-89	C+ 77-79	D+ 67-69	F Less than 59
A- 90-92	B 83-86	C 73-76	D 63-66	
	B- 80-82	C- 70-72	D- 60-62	

TENTATIVE SCHEDULE:

***NOTE: Quizzes are due by 11:59 pm the night before the class by which they are listed!**

Week	Date	Lecture Topic	<u>Chapter Readings</u> (complete <i>prior to class</i>)	Assignment Due
Week 1	Mon 8/31	Course Intro; Cell Review	1	
	Wed 9/2	Digestive System	2	Quiz on Ch 1
	Fri 9/4		2	Quiz on Ch 2
Week 2	Mon 9/7	LABOR DAY: NO CLASS!		
	Wed 9/9	Carbohydrates	3	Quiz on Ch 3
	Fri 9/11	Carbohydrates	3	
Week 3	Mon 9/14	Glucose Lab	3	

		Carbohydrates		
	Wed 9/16	Fiber	4	Quiz on Ch 4
	Fri 9/18	Fiber		Glucose lab report due Sunday night
Week 4	Mon 9/21	Review for Exam 1		
	Wed 9/23	Exam 1 (ch 1-4)		
	Fri 9/25	Lipids	5	Quiz on Ch 5 Annotated bibliography due Sunday night
Week 5	Mon 9/28	Cholesterol lab		
	Wed 9/30	Lipids	5	
	Fri 10/2	Lipids	5	Cholesterol lab report (due Sunday night)
Week 6	Mon 10/5	Protein	6	Quiz on Ch 6
	Wed 10/7	Protein	6	

		Start recording diet & activity info		
	Fri 10/9	Protein	6	Diet & Activity report (due Sunday night)
Week 7	Mon 10/12	Integration of Metabolism & Impact of Exercise	7	Quiz on Ch 7
	Wed 10/14		7	
	Fri 10/16	NO CLASS: ADVISING DAY		1st draft due Sunday night
Week 8	Mon 10/19	Debate on current topic, Metabolism	7	References for debate due night before
	Wed 10/21	Energy Expenditure & Body Composition	8	Quiz on Ch 8
	Fri 10/23	NO CLASS: FALL BREAK!		
Week 9	Mon 10/26	Test Blood (Start diet change: iron, glucose, cholesterol, OR vitamin D) Energy Expenditure & Body Composition	8	

	Wed 10/28	Review for Exam 2		
	Fri 10/30	Exam 2 (ch 5-8)		
Week 10	Mon 11/2	Oral Presentations: vitamins & minerals	9	Quiz on Ch 9
	Wed 11/4	Oral Presentations: vitamins & minerals	10	Quiz on Ch 10
	Fri 11/6	Finish oral reports		
Week 11	Mon 11/9	Re-test blood		
	Wed 11/11	Finish Vitamins		
	Fri 11/13	Major minerals	11	Quiz on Ch 11
Week 12	Mon 11/16	Major minerals	11	
	Wed 11/18	Water & Electrolytes	12	Quiz on Ch 12
	Fri 11/20	Water & Electrolytes	12	Diet change (iron or vitamin D) lab report due (Sunday night)

Week 13	Mon 11/23			Peer review due Monday night
	Wed 11/25	Happy Thanksgiving! NO CLASS :)		
	Fri 11/27			
Week 14	Mon 11/30	Review for Exam 3		
	Wed 12/2	Exam 3 (ch 9-12)		
	Fri 12/4	Essential trace & ultra-trace minerals	13	Quiz on Ch 13 Blood Glucose Journal (due Sunday night)
Week 15	Mon 12/7	Essential trace & ultra-trace minerals	13	
	Wed 12/9	Go over exam 3		
	Fri 12/11	Final Exam review		Research Paper & Writing Center due (Sunday night)
Finals Week!	Final exam: Wednesday, December 16th 7:30-10:00 am			

POLICIES AND PROCEDURES:

Note: Failure to abide by the rules will negatively affect your grade.

1. **CLASS ATTENDANCE:** *Class attendance is essential for success in this class.*
Students are expected to work efficiently and respectfully
2. **ELECTRONICS IN CLASSROOM:** Ipads and laptops are fine for viewing and taking notes; however, there is much research proving writing notes BY HAND creates synthesis, thereby increasing your learning and promoting long-term retention. I highly recommend you try it!
3. **EMAIL:** Check PLNU email regularly for any new postings or communications from the instructor.
4. **CANVAS ANNOUNCEMENTS:** Ensure that your Canvas account is set to receive notifications about announcements posted.
5. **LATE POLICY:** Due dates are enforced rigorously. 25% deducted for each day late. Please reach out to me if you have concerns with getting your assignments completed; communication helps your professors know what you need.
6. **EXAMS:** No makeup exams or quizzes given. Emergencies processed on an individual basis.
7. **EMERGENCIES:** Everyone has them. Be responsible, communicate promptly and privately, tell the truth, don't take advantage of the instructor's goodwill. Each will be evaluated on its merits. Documentation may be requested.

SPIRITUAL CARE

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

If you have questions, a desire to meet with the chaplain, or if you have prayer requests, you can contact the Office of Student Life and Formation.

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 distance education outside of California.

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.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the [Class Schedules](#) site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

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 BEHAVIOR POLICY

Both faculty and students at Point Loma Nazarene University have the right to expect a safe and ordered environment for learning. Students are expected to take the initiative to learn and conduct themselves in a mature and civil manner in the classroom environment. Any student behavior that is disruptive or threatening is a serious affront to Point Loma Nazarene University as a learning community. Students who fail to adhere to these behavioral standards may be subject to disciplinary action, including removal from class or further university sanctions. For a full definition of disruptive behavior, response procedures, and the appeal process, please consult the [Academic Behavior Policy](#) in the [University Catalog](#).

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. For all student appeals, faculty and students should follow the procedures outlined in the University Catalog. See [Academic Policies](#) 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 in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center, [by email](#) or phone at 619-849-2533. Once a student's eligibility for an accommodation has been determined, the EAC will work with the

student to create an Accommodation Plan (AP) that outlines approved accommodations. Professors are able to view a student's approved accommodations through Accommodate.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their approved accommodations in that particular course. Accommodations are not retroactive; as such, clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability-related need should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. In accordance with ADA, accommodations cannot constitute a fundamental alteration to course outcomes; therefore, planning ahead is vital in establishing appropriate accommodations for equal access to this course. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC eligibility process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

LANGUAGE AND BELONGING

Point Loma Nazarene University faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice-free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA, APA, and Chicago, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality.

If you (or someone you know) has experienced other forms of discrimination, you can find more information on reporting and resources via the [Nondiscrimination and Anti-harassment Policy](#).

SEXUAL MISCONDUCT AND DISCRIMINATION

In support of a safe learning environment, 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 accommodations and resources are available through the [Title](#)

[IX Office](#). Please be aware that under Title IX of the Education Amendments of 1972, faculty and staff are 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](#) or [consult the list of campus pastors](#).

If you (or someone you know) has experienced other forms of discrimination or bias, you can find more information on reporting and resources via the [Nondiscrimination and Anti-harassment Policy](#).

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 withdrawal date or, after that date, receive an “F” grade.

ARTIFICIAL INTELLIGENCE (AI) POLICY

You are allowed to use Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro, GrammarlyGo, Perplexity, etc.) to generate ideas, as a learning tool, or in some cases generate portions of work you will submit. I will specify in individual assignments what constitutes appropriate use of AI for that assignment. Please use this [Purdue resource](#) to guide your citations when using AI.

LOMABOOKS INSTRUCTIONS FOR STUDENTS

For both digital and print materials, please add these student instructions to your syllabus and Canvas Course. Prior to the start of class, the PLNU Bookstore will also be sharing student instructions in a standalone email on how to access their content.

This course is part of our course material delivery program, [LomaBooks](#). The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into Canvas.

You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your [LomaBooks](#) materials.