

[Download Course Syllabus Here](#)

 POINT LOMA NAZARENE UNIVERSITY	Department of Kinesiology and Health Sciences NUT 1010- Fundamentals of Food Number of Units: 2 Section 1
Fall 2026	

Meeting days: Tues/Thurs	Instructor title and name: Professor Crystal Karges, MS, RDN, IBCLC
Meeting times: 10:00-11:50	Phone: 619-849-2918
Meeting location: Evans 112	E-mail: ckarges1@pointloma.edu
Final Exam: TBD	Office location and hours: Office: Kinesiology and Health Sciences Department (Across from gym); Office Hours: Tuesday/Thursday, 2:30–4:00 PM; Wednesday, 2:00–4:00 PM; and 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 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:**

Development of the technique and application of fundamental scientific principles of food preparation. Establishment of quality standards for purchasing food products and establishing food safety. Two (2) semester unit credits.

PROGRAM LEARNING OUTCOMES:

1. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
2. Evaluate the effects of societal, cultural, ethical and financial dynamics upon diet trends, dietary choices, and food preparation methods among individuals, families and societies.

DIETETIC/NUTRITION & HEALTH/FOODSERVICE MGMT PROGRAM LEARNING OUTCOMES

1. Demonstrate basic skills in food preparation, sanitation and safety in working with a variety of food products.
2. Demonstrate their knowledge of food, nutrition and food systems by proper application of culinary techniques, food science principles and culturally sensitive assessments to the development, modification and evaluation of recipes, menus and food products acceptable to diverse groups.
3. Evaluate the effects of societal, cultural and financial dynamics upon diet trends, dietary choices and food preparation methods among families, and societies.

COURSE LEARNING OUTCOMES

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

1. **Explain and apply fundamental physical and chemical principles that influence food preparation and food quality.**
2. **Apply food safety and sanitation principles to reduce the risk of foodborne illness during food preparation.**
3. **Demonstrate foundational culinary techniques in the preparation of a variety of foods.**
4. **Use time, equipment, food ingredients, and other resources safely and efficiently during food preparation.**
5. **Conduct and interpret sensory evaluations using appropriate food-quality criteria and descriptive terminology.**
6. **Evaluate food products and preparation outcomes using observations, sensory evidence, and food-science principles.**

ACEND Core Knowledge for the RDN (KRDN), based on the 2022 Standards:

KRDN 4.5 Apply safety and sanitation principles related to food, personnel and consumers.

KRDN 4.7 Evaluate data to be used in decision-making for continuous quality improvement.

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 2 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 75 total hours meeting the course learning outcomes. The time estimations are provided in the Canvas modules.

ESSENTIAL INFORMATION:

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Students are responsible for having the required course textbooks prior to the first day of class.

All supplemental materials posted on this course site (including articles, book excerpts, or other documents) are provided for your personal academic use. These materials may be protected by copyright law and should not be duplicated or distributed without permission of the copyright owner.

Brown, A. (2025) Understanding Food: Principles and Preparation, 7th ed. Wadsworth, Cengage Learning, Belmont, CA. ISBN 13 : 9781337557566

Walter, Lab Manual Understanding Food, 7th ed., Cengage Learning, Belmont, CA. ISBN 13 : 9780357974193

Course Materials:

Course materials and resources will be available through Canvas. Please review the materials identified for each class session and have them available during class as needed.

CANVAS LEARNING MANAGEMENT SYSTEM

Please use **Chrome** as your browser.

- Go to canvas.pointloma.edu.
- Create a shortcut or bookmark to this site.
- Log in with your PLNU username and password.
- All course materials, assignments, quizzes, announcements, and grades will be available through Canvas..

ASSESSMENT AND GRADING

Evidence of Learning	Points
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19 Canvas Quizzes (10 points each)	190
5 Exams (50 points each)	250
10 Laboratory Assignments (20 points each)	200
Professional Laboratory Practice	50
TOTAL POINTS	690

Grade Distribution:

GRADE	PERCENTAGE RANGE	GRADE	PERCENTAGE RANGE
A	≥ 93%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	≤ 59%

Quizzes:

Each assigned textbook chapter has a corresponding quiz in Canvas. Quizzes are designed to help you prepare for class and practice retrieving foundational concepts before we apply them together. Unless otherwise noted, quizzes should be completed before the corresponding class session. Please refer to Canvas for specific due dates.

Exams:

There will be five exams worth 50 points each. Exams will assess your understanding and application of concepts from class and laboratory experiences and may include multiple-choice, true/false, matching, short-answer, and other question formats. If you anticipate missing an exam, please contact me before the scheduled exam whenever possible. Make-up exams or alternative arrangements will be considered for excused absences or extenuating circumstances in accordance with university policy.

Laboratory Assignments:

Laboratory assignments provide an opportunity to analyze observations and connect hands-on experiences to food-science principles. Students will complete ten (10) laboratory assignments during the semester and may select which ten laboratory experiences they use. Each assignment is worth 20 points. Specific questions for each laboratory are listed below and/or provided in Canvas.

Because these assignments require direct observation and participation in the laboratory experience, students generally may not submit an assignment for a laboratory they did not attend. If you must miss a laboratory due to an excused absence or extenuating circumstance, please contact me as soon as possible so we can determine an appropriate next step.

Laboratory Assignment Questions

Laboratory experiences are designed to help you apply food science concepts through hands-on investigation, observation, experimentation, and reflection. During lab, you will work collaboratively with your assigned Lab Team and use your laboratory manual as a working scientific record to document procedures, data, observations, and results.

Following designated labs, you will complete an **individual Lab Report in Canvas**. Lab Reports will ask you to interpret experimental results, explain observations using course concepts, identify possible sources of variability, apply what you learned to food preparation and/or professional practice, and reflect on what you would investigate or do differently next time.

Specific pre-lab preparation, procedures, and Lab Report questions will be provided in the corresponding weekly Canvas module. Unless otherwise instructed, laboratory manual pages do **not** need to be uploaded to Canvas.

Successful lab work is not dependent on obtaining a “perfect” experimental result. Unexpected results are part of scientific inquiry. You will be evaluated on the quality of your observation, evidence, reasoning, application, and reflection.

Because laboratory work depends on preparation, students are expected to complete assigned readings/pre-lab preparation and arrive ready to participate safely and meaningfully in the investigation.

Professional Laboratory Practice:

Fundamentals of Food is a hands-on course, and developing professional laboratory habits is an important part of your learning. Professional Laboratory Practice points are earned throughout the semester through consistent preparation and participation in laboratory experiences; safe and sanitary food-handling practices; appropriate laboratory attire; responsible use of ingredients and equipment; collaboration with your lab team; and contribution to cleaning and restoring the laboratory workspace.

Laboratory learning depends on everyone contributing to a safe, respectful, and collaborative environment. You are not expected to perform every skill perfectly the first time. You are expected to come prepared to participate, practice, ask questions, learn from mistakes, and contribute responsibly to your team.

NUT 1010 — Fall 2026 Daily Schedule

Week	Date	Class Topic/Focus	Lab/Application	Reading	Assignments Due
1	Tues 9/1	Introduction / Nutrition Introduction	—	Text, Ch. 3	—
Thurs 9/3	Food Sanitation & Safety	—	Text, Ch. 4	Quizzes 1 & 2	
2	Tues 9/8	Preparation Basics & Chemistry of Food	—	Text, Ch. 5 & 3	Quiz 3
Thurs 9/10	—	Weighing & Measuring	Lab, Unit 2	—	

3	Tues 9/15	Sensory Evaluation	—	Text, Ch. 2	Quiz 4
Thurs 9/17	—	Sensory Evaluation	Lab, Unit 1	—	
4	Tues 9/22	EXAM 1 ; Lipids	—	Text, Ch. 22	Exam 1
Thurs 9/24	—	Emulsions	Lab, Unit 15	Quiz 5	
5	Tues 9/29	Proteins/Enzymes; Milk & Cheese	—	Text, Ch. 10 & 11	Quiz 6
Thurs 10/1	—	Milk & Cheese	Lab, Units 6 & 7	Quiz 7	
6	Tues 10/6	EXAM 2 ; Eggs & Foams	—	Text, Ch. 12	Exam 2
Thurs 10/8	—	Eggs	Lab, Unit 8	Quiz 8	
7	Tues 10/13	Meat & Poultry	—	Text, Ch. 7 & 8	Quizzes 9 & 10

Thurs 10/15	—	Meat	Lab, Unit 3	—	
8	Tues 10/20	Fish & Shellfish	—	Text, Ch. 9	Quiz 11
Thurs 10/22	NO CLASS — Fall Break	—	—	—	
9	Tues 10/27	—	Poultry & Fish	Lab, Units 4 & 5	—
Thurs 10/29	EXAM 3 ; Fruits & Vegetables	—	Text, Ch. 13 & 14	Exam 3	
10	Tues 11/3	—	Fruits, Vegetables & Pigments	Lab, Unit 9	Quizzes 12 & 13
Thurs 11/5	Apples; Legumes & Starches	—	Text, Ch. 13, 16 & 18	Quiz 14	
11	Tues 11/10	—	Legumes & Starches	Lab, Units 10 & 12	—
Thurs 11/12	Cereals & Flours	—	Text, Ch. 17	Quiz 15	

12	Tues 11/17	—	Cereals & Flours	Lab, Unit 11	Quiz 16
Thurs 11/19	EXAM 4; Leavening Agents & Quick Breads	—	Text, Ch. 17 & 19	Exam 4	
13	Tues 11/24	—	Leavening Agents & Quick Breads	Lab Unit — <i>verify</i>	Quiz 17
Thurs 11/26	NO CLASS — Thanksgiving Recess	—	—	—	
14	Tues 12/1	Pastry & Cakes	—	Text, Ch. 23 & 24	Quiz 18
Thurs 12/3	—	Pastry & Cakes	Lab, Units 16 & 17	—	
15	Tues 12/8	Yeast Breads	—	Text, Ch. 20	Quiz 19
Thurs 12/10	—	Yeast Breads	Lab, Unit 14	—	

Finals Week	TBD	EXAM 5 / Final Exam	Course/Lab Clean-Up, if applicable	—	Exam 5
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POLICIES AND PROCEDURES:

Learning Environment

Our classroom and teaching kitchen are collaborative learning environments. I want this to be a space where you can ask questions, practice developing skills, make mistakes, receive feedback, and continue improving.

We will contribute to that environment by treating one another with respect, participating thoughtfully, minimizing distractions, following laboratory safety expectations, and taking shared responsibility for our learning space.

You are not expected to know everything or perform every skill perfectly the first time. Curiosity, preparation, respectful collaboration, and willingness to learn are valued here.

Late Work and Missed Assessments

Assignments are expected to be submitted by the posted due date so that you can stay engaged with the progression of the course. If circumstances arise that may prevent you from completing an assignment on time, please communicate with me as early as possible.

Because quizzes are intended to prepare you for upcoming class content, they should be completed before the corresponding class session unless otherwise arranged.

If you anticipate missing an exam, please contact me before the scheduled exam whenever possible. Make-up exams or alternative arrangements will be considered for excused absences or extenuating circumstances in accordance with university policy. If an unexpected emergency prevents advance communication, please reach out as soon as reasonably possible afterward.

Laboratory Preparation

Students are expected to arrive prepared for laboratory experiences by reviewing assigned materials and procedures in advance. Preparation helps your lab team work safely, efficiently, and collaboratively and allows class time to focus on application, observation, problem-solving, and learning from the experience.

Laboratory Safety

Safe and sanitary food handling is expected during all laboratory experiences. Students are responsible for following demonstrated equipment procedures, appropriate hand hygiene and sanitation practices, and all laboratory safety instructions. Clean utensils should always be used for tasting, and tasting utensils should not be returned to food being prepared.

Laboratory Attire & Safety

For everyone's safety and sanitation, appropriate laboratory attire is required during kitchen labs. Students should wear closed-toed, flat or low-heeled shoes; secure long hair; avoid loose or dangling clothing or jewelry that could create a safety hazard; and follow any additional attire requirements communicated for the laboratory. Lab coats will be available for use during class.

If you arrive without attire that allows you to participate safely, please speak with me before beginning the lab.

Laboratory Clean-Up

Caring for our shared laboratory space is part of professional laboratory practice. All students are expected to participate in cleaning and sanitizing their workstations, equipment, dishes, and assigned common areas and to return equipment and supplies to their proper locations before leaving the laboratory.

PASS/NO PASS: Students taking class for Pass/No Pass (non-majors) must receive a grade of C (73%) or higher in order to pass this class.

Technology Use

Technology may be used during class when it supports the learning activity. At times, I may ask you to put devices away so that we can focus on discussion, demonstration, laboratory work, or collaboration.

During laboratory activities, devices should be used only when needed for course-related purposes and should be handled in ways that support appropriate food-safety and sanitation practices.

Course materials, announcements, assignments, and grades will be available through Canvas. Students are responsible for checking Canvas and their PLNU email regularly for course communication.

Attention Students: You are required to turn in a portfolio project as a senior. Keep any and all graded work you want to showcase.

Food Allergies, Dietary Needs, and Sensory Evaluation

Sensory evaluation is an important component of this course and an essential skill in evaluating food quality. Throughout the semester, students will practice observing and describing characteristics such as appearance, aroma, texture, flavor, and overall food quality using appropriate sensory terminology.

Students are encouraged to participate in tasting when they are comfortable and able to do so; however, **you will never be required to consume a food that is unsafe or inappropriate for you.** Food allergies, intolerances, religious or cultural food practices, dietary needs, sensory considerations, and other circumstances may affect how a student participates in a particular activity.

Please communicate with me as early as possible if there are foods or ingredients you cannot safely handle or consume so that we can identify an appropriate way for you to participate while still meeting the learning objectives. Alternative forms of sensory observation or evaluation may be used when needed.

Because foods are prepared in a shared teaching kitchen, we cannot guarantee an allergen-free environment. Students with food allergies should review ingredients carefully and follow appropriate safety precautions.

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 [Traditional Undergraduate Records: Final Exam 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.

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.

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 you have questions, a desire to meet with the chaplain or have prayer requests you can contact your professor or the [Office of Spiritual 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.

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 Recording Notification

In order to enhance the learning experience, please be advised that this course may be recorded by the professor for educational purposes, and access to these recordings will be limited to enrolled students and authorized personnel.

Note that all recordings are subject to copyright protection. Any unauthorized distribution or publication of these recordings without written approval from the University (refer to the Dean) is strictly prohibited.

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

Generative AI tools can be useful for supporting learning, but they should not replace the thinking, observation, problem-solving, or skill development this course is designed to help you practice.

Unless I specifically indicate otherwise, generative AI should not be used to complete quizzes, exams, laboratory assignments, or other graded work. In particular, AI should not be used to generate observations, sensory evaluations, explanations of laboratory results, or responses to laboratory questions in place of your own reasoning.

At times, I may invite or permit the use of AI for a particular learning activity. When AI use is permitted, I will provide guidance about how it may be used and whether disclosure or citation is required.

A helpful question to ask throughout this course is: **Is this tool helping me learn the skill, or is it doing the skill for me?**

When in doubt about whether AI use is appropriate for an assignment, please ask before using it.

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.