



**Department of Sociology, Social Work and
Family Sciences
NUT 1010 - Fundamentals of Food
2 units**

Fall 2019

Meeting days: Tues/Thurs	Instructor title and name: Prof Cindy Swann, MS, RD, CDE
Meeting times: 10:00 – 11:50 am	Phone: 619-849-2351
Meeting location: Evans 112	E-mail: cindyswann@pointloma.edu
Final Exam: Tues, 12/17 10:30 am	Office location and hours: Evans 134 Mon/Wed 12- 1 pm; Tues 9:00-10:00 am or by appt.

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.

SSWF DEPARTMENT STUDENT 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.

FCS 110 COURSE LEARNING OUTCOMES

1. Recognize the scientific physical and chemical properties of food systems
2. Practice safe food handling principles
3. Develop an overall comprehension of foodborne illnesses
4. Develop skills in the culinary preparation of a wide variety of foods
5. Practice efficient use of time, energy, equipment, and food ingredients in the preparation of food.
6. Conduct sensory evaluation of products for achievement of quality standards.

AND's KRDN Didactic Course Core Knowledge for the RDN in DPD Programs based on 2017 Standards:

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

KRDN 4.6 Analyze data for assessment and 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 17 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

ESSENTIAL INFORMATION:

REQUIRED TEXTS:

Brown, A. (2015) Understanding Food: Principles and Preparation, 5th ed. Wadsworth, Cengage Learning, Belmont, CA.

Walter, J. and Beathard, K. (2015) Lab Manual for Brown's Understanding Food: Principles and Preparation, 5th ed. Wadsworth, Cengage Learning, Belmont, CA.

LECTURE NOTES:

Available on Canvas. Please print out and bring to lecture class, or follow along on class computers.

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 lecture notes and chapter quizzes are located here.

COURSE REQUIREMENTS AND STANDARDS:

Grading:

POINTS

19 Canvas Quizzes (10 pts each).....	190
5 Exams (50 pts each).....	250
10 Laboratory Assignments (20 pts each).....	200
Participation/Clean-up/Attendance	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 book chapter has a corresponding quiz in Canvas. The chapter is to be read, and the quiz taken prior to the lecture on that chapter. Once the chapter has been lectured, the quiz will no longer be available on Canvas. It is the student's responsibility to keep organized and meet the due dates.

Exams:

There will be five term exams, worth 50 points each. They will consist of multiple choice, true/false, matching and short answer questions. Exams will cover all lecture and laboratory information. No make-up exams will be allowed unless permission is received BEFORE the exam time.

Laboratory Assignments:

At the end of each laboratory section, questions pertaining to the lab experiences are assigned. You must turn in ten (10) laboratory assignments, answering the questions assigned to that section. You may choose any ten laboratory assignments. The lab assignments are due to class following the lab experience. If you miss a lab class, you may not turn in the assignment for that lab.

The questions assigned from each lab experience are as follows: (Questions may change if lab experiments are altered.)

1. Measuring Techniques – pre-lab #2,4,6; post-lab # 1,2,3,4,6
2. Sensory Evaluation – pre-lab #6,7; post-lab # 3,5,6,10,11
3. Fats/Emulsions – pre-lab # 2,3; post-lab # 8,10,19,21,25,26
4. Milk - # pre-lab 1,2; post-lab 6,8,9,11,12
5. Cheese - # pre-lab 1,5,6; post-lab 3,4,6,13,14
6. Eggs – pre-lab #1,2,5; post-lab # 3,13,14,15,16,17,20,21
7. Meat - # pre-lab 1,2,4,5; post-lab 1,2,3,5
8. Seafood and Poultry - # pre-lab 1,2,4 (pg 51-52) pre-lab 1,2,3,4(pg 59-60)
9. Fruits and Vegetables – pre-lab# 1,4,5; post-lab # 1,2,5,6
10. Fruits and Vegetable Pigments – post-lab # 7,8,9,11,12,15
11. Legumes - # pre-lab 1,2,3,4,5
12. Cereals and Flours - # pre-lab 1,2,4; post-lab 1,5,6
13. Starch – pre-lab #1,3,4; post-lab # 1,16
14. Pastry - # pre-lab 1,3,4; post-lab 1,2,8
15. Quick Breads - # pre-lab 1,2,3,4,5; post-lab 2,6,14
16. Cakes - # pre-lab 1,3,4; post-lab 5,7,9,13
17. Yeast Breads - # pre-lab 1,2,5; post-lab 1,2,5

Participation:

Participation points are earned throughout the semester. They are based on attendance, participation during lab experiments, clean-up responsibilities, and adherence to dress code during labs.

WEEKLY SCHEDULE:

Week	Dates	Lecture Topics	Laboratory Topics	Reading	Assignments Due	Learning Outcome
1	9/05	Intro/Nutrition Introduction		Text, Chp 3		
2	9/10	Food Sanitation & Safety		Text, Chp 4	Quiz 1 Quiz 2	S3
	9/12	Prep Basic & Chemistry of Food		Text, Chp 5, and 3	Quiz 3	S1
3	9/17		Weighing & Measuring	Lab, Unit 2		S2, S4
	9/19	Sensory Evaluation		Text, Chp 2	Quiz 4	S6
4	9/24		Sensory	Lab, Unit 1		
	9/26	EXAM 1 Fats/Emulsions		Text, Chp 22		S1
5	10/01		Emulsions	Lab, Unit 15	Quiz 5	S2, S4, S5, S6
	10/03	Proteins/Enzymes /Milk & Dairy		Text, Chp 10 and 11	Quiz 6	S1
6	10/08	Cheese	Milk/Cheese	Lab, 6 and 7	Quiz 7	S1, S2, S4, S5, S6
	10/10	Exam 2 / Eggs and Foams		Text, Chp 12		S1
7	10/15		Eggs	Lab, Unit 8	Quiz 8	S2, S4, S5, S6
	10/17	Meat/Poultry		Text, Chp 7 and 8	Quiz 9 and 10	S1
8	10/22		Meat	Lab, Unit 3		S2, S4, S5, S6
	10/24	Fish/Shellfish		Text, Chp 9	Quiz 11	S1
9	10/29		Poultry/Fish	Lab, Unit 4 and 5		S2, S4, S5, S6
	10/31	Exam 3		Text,		S1

		Fruits & Veggies.		Chp 13 and 14		
10	11/05		Fruit/Veg/Pigments	Lab, Unit 9	Quiz 12 & 13	S2, S4, S5, S6
	11/07	Apples, Legumes & Starches		Text, Chp 13 and 18	Quiz 14	S1
11	11/12		Legumes/Starches	Lab, Unit 10 and 12		S2, S4, S5, S6
	11/14	Cereals & Flours		Text, Chp 16 and 17	Quiz 15 & 16	S1
12	11/19		Cereals & Flours	Lab, Unit 11		S2, S4, S5, S6
	11/21	Exam 4 Leavening Agents & Quick Breads		Text, Chp 17 and 19		S1
13	11/26		L.A. & Quick Breads	Lab, Unit 13	Quiz 17	S2, S4, S5, S6
	11/28	Thanksgiving	Holiday			
14	12/03	Pastry/Cakes		Text, Chp 23 and 24	Quiz 18	S1
	12/05		Pastry & Cakes	Lab, Unit 16 and 17		S2, S4, S5, S6
15	12/10	Yeast Breads		Text, Chp 20	Quiz 19	S1
	12/12		Yeast Breads	Lab, Unit 14		S2, S4, S5, S6
16	Final T 12/17	Exam 5 10:30-1:00	Clean-up/Inventory			

POLICIES AND PROCEDURES:

These policies are provided to help you be successful in this class:

LATE POLICY: There is a 10% penalty for lab reports turned in late. If lab reports are turned in after the exam is done on the lab reports' topic, there will be a 20% late penalty. Due dates are enforced.

EXAMS: No makeup exams are given. Emergencies will be processed on an individual basis. Quizzes are on Canvas, and usually open for a week and due before class starts. They cannot be re-taken.

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.

PREPARATION: Students are expected to come to class having read the laboratory exercise, be ready to answer questions regarding procedures for the lab exercise, and be mentally organized to conduct his/her's group assignment in a systematic fashion.

SAFETY: Proper use of equipment and lab facilities is expected. The instructor will demonstrate equipment use, when appropriate. Foods are to be tasted only with clean utensils that are not to be used for food preparation. **All products should be presented with serving utensils. Do not taste, stir, and taste again!!**

DRESS CODE: The following rules have been established for safety and sanitation purposes. Wear flat heeled shoes with closed toes and a laboratory coat that is to be used only for this class (lab coats are available in class). Place the lab coat in wash when it is dirty. Wash your hands before handling food. Short, clean unpolished fingernails are preferred. Restrain long hair. If you have a cold and are well enough to attend class, wear a surgical mask while you are handling food. You may feel awkward doing this, but your consideration for others govern your actions. **Failure to adhere to the dress code will result in loss of participation points.**

CLEAN-UP: Students are to clean ALL work areas and return equipment or supplies to their proper storage places at the end of class. All students are expected to participate in cleaning their work station and common areas (work islands, refrigerator, floor, etc.) **Please ask permission to be released from class following a laboratory session. Failure to clean your work area will result in loss of participation points.**

PARTICIPATION POINTS: Points can be lost if you are making poor choices. What are examples?

- Arriving late to class, especially lab classes
- Using the computers during *lecture* for personal reasons
- Using electronics during lecture
- Inappropriate dress code during labs
- Poor hygiene when preparing food in labs
- Failure to clean your lab space, dishes, sinks, common areas, etc.

PASS/NO PASS: Non-major students taking class Pass/No Pass must receive a grade of C (73%) or higher in order to pass this class.

LAB COMPUTERS: Checking email or using the computers is limited to before or after class, or during lab when your assignment is finished. 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!

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

DIETARY ACCOMMODATIONS:

Part of being a dietetics/nutrition student is learning sensory evaluation regarding foods and recipes. This requires trying all foods. You do not need to eat a lot, or even swallow everything, but you are encouraged to try dishes, and especially new foods. Of course, some of you have allergies, intolerances or sensitivities to some foods that prevents you from eating them.

If you want to have medical clearance from trying certain foods, please go to the Disability Resource Center (DRC). Qualified students with dietary restrictions may be eligible to receive accommodations. DRC applicants must provide the DRC with documentation verifying the nature and extent of the allergy/intolerance/ sensitivity prior to receiving accommodations. Once documentation is approved, DRC will notify your food lab instructor and accommodations can be discussed with him/her.

COURSE OUTLINE:

- I. Nutrition Overview
- II. Safety and Sanitation

- A. Bacteria
 - 1. Foodborne infections
 - 2. Foodborne intoxication and intoxicification
 - 3. Conditions present for bacterial growth
 - 4. Principles of storage
 - B. Mold and Yeasts
 - C. Parasites and Viruses
 - D. Sanitation techniques for safe food preparation
- III. Food Preparation Skills
- A. Measuring techniques
 - B. Abbreviations and equivalents
 - C. Food equipment
- IV. Fats and Oils
- A. Types of fats and oils
 - B. Role of fat in food preparation
- V. Dairy
- A. Types of milk products
 - B. Milk safety and milk modifications
 - C. Milk substitutes
 - D. Cheese classification
 - E. Principles of cooking cheese
- VI. Proteins
- A. Eggs
 - B. Meats
 - C. Poultry
 - D. Fish
 - E. Legumes
- VII. Fruits and Vegetables
- A. Fruit and vegetable classification
 - B. Storage of fruits and vegetables
 - C. Cooking preparation
- VIII. Cereals, Grains, Starches, Flours
- A. Structure of cereal grains
 - B. Types of cereals
 - C. Starch Cookery
 - D. Types of Flours
- IX. Quickbread Principles and Preparation
- A. Functions of ingredients
 - B. Variety of quick breads
- X. Yeast Bread Principles and Preparation
- A. Functions of ingredients
 - B. Mixing process

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. No requests for early examinations or alternative days will be approved.

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 [Academic Policies](#) 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 Undergraduate Academic Catalog.