

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

## **Fall 2022 - Section 2**

Meeting days: Mon/Wed	Instructor title and name: Prof Cindy Swann, MS, RD, CDE	
<b>Meeting times:</b> 12:30 – 2:25 am	Phone: 619-849-2351	
Meeting location: Evans 112	E-mail: cindyswann@pointloma.edu	
Final Exam: Friday, 12/16 1:30 -4 pm	Office location and hours: Evans 134	
	Mon/ Wed 9:45-10:45; Tues/Thurs 9-9:45 am, 1:00-1:25 pm 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.
- 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.

#### **NUT 1010 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 2022 Standards:

KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRON 4.6: Explain the processes involved in delivering quality food and nutrition services.

## **ESSENTIAL INFORMATION:**

#### **REQUIRED TEXTS:**

Brown, A. (2019) Understanding Food: Principles and Preparation, 6<sup>th</sup> ed. Wadsworth, Cengage Learning, Belmont, CA.

Walter, J. and Beathard, K. (2015) Lab Manual for Brown's Understanding Food: Principles and Preparation, 5<sup>th</sup> ed. Wadsworth, Cengage Learning, Belmont, CA. This manual is out of print, but it looks like Cengage has it available through their website. **Cengage Unlimited** has a 4-month subscription that gives students all their Cengage course materials for a one-time payment.

#### **LECTURE NOTES:**

Available on Canvas. Please print out and bring to lecture class or follow along on your laptop.

#### **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 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. 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.

## **COURSE REQUIREMENTS AND STANDARDS:**

<b>Grading:</b>			<u>POINTS</u>
	19 Canvas Quizzes	(10 pts each)	190

5 Exams (50 pts each)	250
10 Laboratory Assignments (20 pts each)	200
Participation/Clean-up/Attendance	
TOTAL POINTS	

#### **Grade Distribution:**

GRADE	PERCENTAGE RANGE	GRADE	PERCENTAGE RANGE
Α	<u>&gt;</u> 93%	С	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
В	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	<u>&lt;</u> 59%

<u>Quizzes</u>: 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. Exams will be given in the first hour of the two hour class, followed by the next lecture topic. 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 #1,6,7; 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, hygiene, clean-up responsibilities, and adherence to dress code during labs.

## **WEEKLY SCHEDULE:**

Week	Dates	Lecture Topics	Laboratory Topics	Reading	Assignments	Learning
					Due	Outcome
1	8/30	Intro/Nutrition		Text,		
		Introduction		Chp 3		
	8/31	Food Sanitation &		Text,	Quiz 1	S3
	_	Safety		Chp 4	Quiz 2	
2	9/05	Holiday				
	9/07	Prep Basic &		Text,	Quiz 3	S1
		Chemistry of		Chp 5,		
		Food		and 3		
3	9/12		Weighing &	Lab,		S2, S4
			Measuring	Unit 2		
	9/14	Sensory		Text,	Quiz 4	S6
		Evaluation		Chp 2		
4	9/19		Sensory	Lab,		
				Unit 1		
	9/21	EXAM 1		Text,		S1
		Fats/Emulsions		Chp 22		
5	9/26		Emulsions	Lab,	Quiz 5	S2, S4, S5,
				Unit 15		S6
	9/28	Proteins/Enzymes		Text,	Quiz 6	S1
		/Milk & Dairy		Chp 10		
				and 11		
6	10/03	Cheese	Milk/Cheese	Lab, 6	Quiz 7	S1, S2, S4,
				and 7		S5, S6
	10/05	Exam 2 / Eggs		Text,		S1
		and Foams		Chp 12		
7	10/10		Eggs	Lab,	Quiz 8	S2, S4, S5,
				Unit 8		S6
	10/12	Meat/Poultry		Text,	Quiz 9 and	S1
				Chp 7	10	
				and 8		
8	10/17		Meat	Lab,		S2, S4, S5,
				Unit 3		S6
	10/19	Fish/Shellfish		Text,	Quiz 11	S1
				Chp 9		
9	10/24		Poultry/Fish	Lab,		S2, S4, S5,

				Unit 4		S6
				and 5		
	10/26	Exam 3		Text,		S1
		Fruits & Vegs.		Chp 13		
				and 14		
10	10/31		Fruit/Veg/Pigments	Lab,	Quiz 12 & 13	S2, S4, S5,
				Unit 9		S6
	11/02	Apples, Legumes		Text,	Quiz 14	S1
		& Starches		Chp 13		
				and 18		
11	11/07		Legumes/Starches	Lab,		S2, S4, S5,
				Unit 10		S6
				and 12		
	11/09	Cereals & Flours		Text,	Quiz 15 & 16	S1
				Chp 16		
				and 17		
12	11/14		Cereals & Flours	Lab,		S2, S4, S5,
				Unit 11		S6
	11/16	Exam 4		Text,		S1
		Leavening Agents		Chp 17		
		& Quick Breads		and 19		
13	11/21		L.A. & Quick Breads	Lab,	Quiz 17	S2, S4, S5,
				Unit 13		S6
	11/23	Thanksgiving		Text,		S1
		Holiday		Chp 23		
				and 24		
14	11/28	Cakes & Pastry		Lab,		S2, S4, S5,
				Unit 16		S6
				and 17		
	11/30		Cakes & Pastry	Text,	Quiz 18	S1
				Chp 20		
15	12/05	Yeast Breads		Lab,		S2, S4, S5,
				Unit 14		S6
	12/07		Yeast Breads		Quiz 19	
16	12/12	Exam 5 1:30-4	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 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 governs 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 workstation 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 <u>documentation</u> 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 intoxification
    - 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

#### **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 <a href="State Authorization">State Authorization</a> to view which states allow online (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.

#### 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 <u>Academic Policies</u> 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.

#### SEXUAL MISCONDUCT AND DISCRIMINATION

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. 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 help and support are available through the Title IX Office at <a href="mailto:pointloma.edu/Title-IX">pointloma.edu/Title-IX</a>. Please be aware that under Title IX of the Education Amendments of 1972, it is 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 at <a href="mailto:counselingservices@pointloma.edu">counselingservices@pointloma.edu</a> or find a list of campus pastors at <a href="mailto:pointloma.edu/title-ix">pointloma.edu/title-ix</a>

## 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.