



Department of Sociology, Social Work and Family Sciences
NUT 4015/4017 – Medical Nutrition Therapy
4 units

Spring 2020

Meeting days: Mon/Wed	Instructor title and name: Prof Cindy Swann, MS, RD, CDE
Meeting times: 11:00-1:20	Phone: 619-849-2351
Meeting location: Evans 113	E-mail: cindyswann@pointloma.edu
Final Exam: Wed., 5/06, 10:30 – 1:00	Office location and hours: Evans 134 Mon/ Wed 1:30-2:20; Tues/Thurs 2:00-2:25 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

A study of nutrition status and assessments, nutrition care strategies, and the modification of normal food intake with an emphasis on dietary adjustments necessitated by certain diseases and disorder processes and conditions focusing on the hospitalized and/or ambulatory patient. Lecture plus practicum are four (4) semester units.

DIETETIC PROGRAM LEARNING OUTCOMES

1. PLO 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. PLO 3. Identify and assess scientific research evaluating current evidence-based research related to dietetics.
3. PLO 4. Evaluate the effects of societal, cultural, ethical and financial dynamics upon diet trends, dietary choices, and food preparation methods among individuals, families and societies.

FCS 415/417 COURSE STUDENT EARNING OUTCOMES:

1. Given a disease or condition treatable with diet therapy, be able to explain:
 - a. the general description of dietary management.
 - b. it's nutritional adequacy.
 - c. indication and rationale.
 - d. goals of dietary management.
 - e. the appropriate dietary recommendation.
2. Prescribe and explain the rationale of the appropriate diet order.
3. Calculate common therapeutic diets.

4. Negotiate AND's Evidence Analysis Library to find updated answers to current diet therapy regimens.
5. Prepare a complete, individualized diet instruction to meet a patient's nutritional/therapeutic needs.
6. Utilize "ADIME" note format to communicate nutritional information in a medical chart.
7. Apply culturally sensitive language when writing chart notes and responding to assigned case studies.
8. Attend guest speaker class lectures and network with professionals.

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

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

KRDN 1.2: Use 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 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics; and describe interprofessional relationships in various practice settings.

KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.

KRDN 2.7: Demonstrate identification with the nutrition and dietetics profession through activities such as participation in professional organizations and defending a position on issues impacting the nutrition and dietetics profession.

KRDN 2.8: Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.

KRDN 3.1: Use the Nutrition Care Process to make decisions, identify nutrition-related problems and determine and evaluate nutrition interventions.

KRDN 3.5: Describe basic concepts of nutritional genomics.

KRDN 4.3: Describe the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.

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

ESSENTIAL INFORMATION:

REQUIRED TEXTS:

Nelms M, Sucher K, & Long S. Nutrition Therapy and Pathophysiology, 3rd ed. Thompson Publishing Co., 2016.

Pronsky, Z. Food Medication Interactions, 18th ed., 2015.

Leonard, P. Quick and Easy Medical Terminology, 8th ed., Saunders, 2017.

Student Member of AND to gain access to the Evidence Analysis Library.

OPTIONAL RESOURCE:

Annual subscription to AND's Nutrition Care Manual: <https://www.nutritioncaremanual.org/>

CANVAS LEARNING MANAGEMENT SYSTEM

Please use **Chrome** as your browser.

1. Go to canvas.pointloma.edu.
2. Create a shortcut or bookmark to this site.
3. Log in with your PLNU username and password.
4. All lecture notes, chapter quizzes and most assignments are located here.

COURSE REQUIREMENTS AND STANDARDS:

COURSE GRADING CRITERIA:	Pts.
5 Term Exams @ varying points	~260
4 MNT Case Studies @ varying points	125
4 EAL study questions w/ each case study @ 10 pts ea	40
Ethics Case Study	20
Interprofessional Reflection Paper	30
2 Reflection papers (speaker/meeting/preceptor) @ 15 pts	30
Chp Review on Nutritional Genomics or Abstract/presentation	30
Medical Terminology Chapters; 15 @ 10 pts each	150
Comprehensive Final Exam	<u>100</u>
TOTAL	~785

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.

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%

EXAMS:

The four exams given during the semester will assess knowledge in the areas covered since the last exam and up to the new exam dates. The final exam will cover material from the entire semester. The majority of exam questions will cover lecture material. However, exam questions from the text, medical terminology, case study information or assigned reading material not discussed in lecture may also be used. Students arriving late will NOT be given any additional time to complete the exam. Emergencies forcing a student to miss an exam must be notified to the instructor PRIOR to the exam, and written documentation of health or other emergency situations must be provided to the instructor.

CASE STUDIES:

During most class periods, students will work on case studies related to recent lecture material. The objective of the case study is to give students the opportunity to apply nutrition theory to "dietetic practice". At least four case studies will be assigned, collected and graded (see class schedule for dates). These individual reports will be discussed in the following class period. NO make-up case studies will be given for those not attending class without documentation of illness or emergency situations.

MEDICAL TERMINOLOGY CHAPTERS:

Each week one chapter from the Leonard text will be due. Read the chapters and complete all exercises by either writing the answers on a separate sheet or in the text. Due dates are listed on the schedule below.

AND'S EVIDENCE ANALYSIS LIBRARY:

AND has an Evidence Analysis Library on-line that members can use to research topics relating to dietetics. Students will need to become AND members, if they are not already, to gain access to the library. Students should have completed the tutorial section to learn how to navigate through the information last semester. (If you have not, please

complete the tutorial and forward the certificate of completion to me). For each case study topic assigned to turn in, develop a research question related to the topic, research the library, and print the summary evidence (paragraph, not pages), conclusion and grade for your research question. Write a *brief* paragraph stating the value of the information you found. Is there evidence to support your question? Did you need to formulate a new question to find adequate evidence?

NUTRITIONAL GENOMICS:

This is your choice. You can either do the chapter exam on Nutrition Genomics or write a summary of a journal article or newsletter article on the topic, and *briefly* present it orally in class.

REFLECTION PAPERS:

Write a one page reflection paper on one of our speakers or tours, indicating how this person or place may influence your career path. **Write a second reflection paper** on a speaker who provides training to dietetic interns as a preceptor, OR, write a reflection paper after attending one local dietetics meeting (off campus). This can be through either CAND-SD, ASPEN, or one of CAND practice groups that has a local chapter.

INTERPROFESSIONAL REFLECTION:

Write a reflection paper that identifies and describes the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services. Name and explain the other medical professionals that should interact with the dietitian when working with a patient newly diagnosed with diabetes. See Canvas for Position Paper to read on the topic.

DAILY SCHEDULE:

TENTATIVE CLASS SCHEDULE

Week of	Lecture Topic	Text Chapter
1/14, 1/15	Nutrition Care Process / Nutrition Assessment Practicum: Ethics / Sample PES and Calculations	2,3
1/20, 1/22	Holiday / Nutrition Intervention Practicum: Case Study #1 DUE: Case Study: Ethics (1/22) Due: Med. Terminology – Chp 1	4
1/27, 1/29	Reimbursement / Charting Practicum – UCSD RD – Malnutrition Assessment (LS) Charting / Malnutrition Case Study Due: Med. Terminology – Chp 2 Assessment Case Study (1/29)	1,6
2/03, 2/05	Exam 1 / Fluid Balance review / Nutrition Support Practicum: EN and PN calculations / Malnutrition Case Study	7,5
2/10, 2/12	Speaker: Kristy Binda, RD, CNSD, CSO (LS) / Acid-Base Balance Review Practicum – Nutrition Support Case Study Due: Med. Terminology – Chp 3 + 4	8
2/17, 2/19	Injury Response / Exam 2 Practicum: RA Case Study Due: Med. Terminology – Chp 5	9
2/24, 2/26	Pharmacology / Body Weight (on own) / CV disease	11,12,13

	Practicum: Exchange Diets; Obesity Case Study Due: Interprofessional Reflection Paper (2/26) Due: Med. Terminology – Musculoskeletal	
3/02, 3/04	CV Disease / Exam 3 Practicum: CV Case Study DUE: Metabolic Case Study (3/02) Due: Med. Terminology – Circulatory	13
3/09, 3/11	Spring Break	
3/16, 3/18	Catch-up / Nutritional Genomics / Upper GI DUE: Nutritional Genomics due 3/16 Practicum: GERD Case Study #11 Due: Med. Terminology – Digestive	10, 14
3/23, 3/25	Lower GI / Liver, GB, Pancreas Practicum: Speaker: Hadley and Susan (11-12) Practicum: IBD Case Study Due: Med. Terminology – Urinary	15, 16
3/30, 4/01	Liver, GB, Pancreas / Endocrine Practicum: Case Study DUE: Cholecystitis Case Study (4/01) Due: Med. Terminology – Reproductive	16, 17
4/06, 4/08	Diabetes / Exam 4 (no diabetes) Practicum: Case Study #16 Due: Med. Terminology – Integumentary + Nervous	17
4/13, 4/15	Easter Break / Renal Practicum– Renal Case Study; renal diet Speaker: Richard Griffin, RD (4/15) DUE: Diabetes Case Study (4/15) Due: Med. Terminology – Endocrine	18
4/20, 4/22	Neoplastic / Metabolic Stress Practicum – Esophageal Cancer and Chemotherapy Due: Med. Terminology –End of book test	24,22
4/27, 4/29	Tour of Sharp Hospital (no date set yet)/ EXAM 5 Practicum – Final review DUE: Reflection Papers 4/27	
5/06 (Wednesday)	Final Exam (10:30 am -1:00 pm)	

POLICIES AND PROCEDURES:

ATTENDANCE: Class attendance and participation are expected since they are part of your integrated experience in nutrition. Attendance and punctuality is important here, as in your future professional life. If absent: You are required to obtain information from your peers.

LATE POLICY: There is a **25%** penalty for any work turned in late. Due dates are enforced.

EXAMS: No makeup exams are given. Emergencies will be processed on an individual basis.

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.

COURSE OUTLINE:

I. Health Care Systems and Reimbursement

- A. Introduction
- B. Financing the Health Care Industry

II. The Nutrition Care Process

- A. Framework
- B. Purpose
- C. ADA's Standardized Process
- D. The Model
- E. Steps of NCP
 - 1. Assessment
 - 2. Diagnosis
 - 3. Intervention
 - 4. Monitoring & Evaluation

III. Assessment of Status & Risk

- A. Overview
- B. Dietary Methods
- C. Analysis of Food/Intake
- D. Evaluation & Interpretation of Information
- E. Anthropometric/Body Composition Assessment
- F. Biochemical Assessment
- G. Energy & Protein Requirements

IV. Documentation

- A. Overview
- B. Charting: NCP
- C. Other Methods

V. Methods of Nutrition Support

- A. Overview
- B. Oral Diets
- C. Oral Supplements
- D. Appetite Stimulants
- E. Specialized Nutrition Support
- F. Enteral Nutrition
- G. Parenteral Nutrition

VI. Fluid & Electrolyte Balance

- A. Normal Anatomy & Physiology
- B. Body Solutes
- C. Physiology Regulation
- D. Disorders of Fluid Balance

VII. Acid-Base Balance

- A. Review
- B. Regulation of pH Balance
- C. Assessment of Balance
- D. Acid-Base Disorders

VIII. Cellular and Physiological Response to Injury

- A. Defining Disease and Pathophysiology
- B. Disease Process

C. Cellular Injury

IX. Immunology

- A. Introduction
- B. Antigens
- C. Immune System Overview
- D. Cells of Immune System
- E. Organs of Immune System
- F. Soluble Mediators
- G. Antigen Recognition Molecules
- H. Immune Response
- I. Tumors and Transplants
- J. Immunization
- K. Immunodeficiency
- L. Tolerance
- M. Attack on Harmless Antigens

X. Pharmacology

- A. Introduction
- B. Administration of Drugs
- C. How Foods and Dugs Interact

XI. Energy Balance and Body Weight

- A. Energy Balance
- B. Regulation of Energy Balance
- C. Body Comp, Obesity & Overweight
- D. Epidemiology of Obesity
- E. Etiology of Obesity
- F. Treatment of Obesity
- G. Eating Disorders

XII. Diseases of Cardiovascular System

- A. Anatomy & Physiology of the Cardiovascular System
- B. Hypertension
- C. Atherosclerosis
- D. Ischemic Heart Disease
- E. Peripheral Arterial Disease
- F. Heart Failure

XIII. Diseases of the Upper Gastrointestinal Tract

- A. Normal Anatomy & Physiology
- B. Pathophysiology of Upper GI Tract
- C. Nutrition Therapy of the Oral Cavity
- D. Esophagus
- E. Stomach

XIV. Diseases of the Lower Gastrointestinal Tract

- A. Normal Anatomy & Physiology
- B. Pathophysiology of Lower GI Tract
 - a. Diarrhea
 - b. Constipation
 - c. Malabsorption
 - d. Celiac Disease
 - e. IBS
 - f. Inflammatory Bowel Disease
 - g. Diverticulosis/Diverticulitis
 - h. Surgeries
 - i. Short Bowel Syndrome
 - j. Bacterial Overgrowth

- XV. Diseases of the Liver, Gallbladder, Pancreas
 - A. Normal Anatomy & Physiology of the Liver
 - B. Pathophysiology of the Liver
 - C. Gallbladder
 - D. Pancreas
- XVI. Diseases of the Endocrine System
 - A. Normal Anatomy & Physiology of Endocrine System
 - B. Endocrine Disorders
 - C. Diabetes Mellitus
 - a. Type 1
 - b. Type 2
 - c. Gestational
 - D. Hypoglycemia
- XVII. Diseases of the Renal System
 - A. Anatomy & Physiology of the Kidney
 - B. Nephrotic Syndrome
 - C. Chronic Kidney Disease
 - D. Acute Renal Failure
 - E. Nephrolithiasis
- XVIII. Diseases of the Hematological System
 - A. Anatomy & Physiology of the Hematological Systems
 - B. Homeostatic Control
 - C. Nutritional Anemias
 - D. Hemochromatosis
 - E. Hemoglobinopathies
 - F. Clotting and Blood Disorders
 - G. Diseases Involving WBC Types and Bone Marrow
- XIX. Diseases of the Respiratory System
 - A. Normal Anatomy & Physiology of the Respiratory System
 - B. Nutrition and Pulmonary Health
 - a. Asthma
 - b. Brochopulmonary Disease
 - c. Chronic Obstructive Pulmonary Disease
 - d. Cystic Fibrosis
 - e. Pneumonia
 - f. Respiratory Failure
 - g. Transplantation
 - h. Upper Respiratory Infection
- XX. Neoplastic Disease
 - A. Epidemiology/Etiology
 - B. Pathophysiology
 - C. Treatments
 - D. Nutrition Therapy
- XXI. Metabolic Stress
 - A. Physiology Response to Starvation
 - B. Physiology Response to Stress
 - C. Burns
 - D. Surgery
 - E. Others
- XXII. HIV and AIDS
 - A. Normal Anatomy & Physiology
 - B. Etiology
 - C. Pathophysiology

- D. Diagnosis
- E. Clinical Manifestations
- F. Treatment
- G. Nutrition Therapy

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.
