

**HUN4445**  
**Nutrition and Disease – Part I: Fall 2024**  
**Class # 13863**

**Instructor**

Dr. Laura Acosta

Office: Building 120, Room 104D

Office Phone/Voicemail: 352-273-3472

**Email (preferred contact method):** [ljacosta@ufl.edu](mailto:ljacosta@ufl.edu)

**Please use my UFL email instead of Canvas email**

Office Hours:

- 3:00-4:30pm on Wednesdays by appointment (email for appointment time).
- All office hours will be held on Zoom unless otherwise arranged. (See Canvas site for Zoom link.)
- I may also be able to accommodate occasional appointments on other days. Please email if Wednesdays do not work for you and we will arrange an alternate day.

**Teaching Assistant**

Shaneice Urbina

shaneice.urbina@ufl.edu

Office Hours TBA

**Course Location & Meeting Times**

Tuesday and Wednesday 1:55-2:45pm (7<sup>th</sup> period)

Location: 100% online (Zoom)

Note: This online course is synchronous, meaning that you will need to log in to Zoom at class time, and be “present” (virtually), just as you would if the course was in-person.

See Canvas site for Zoom links.

**Recording Policies**

Note that our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Students are allowed to record their own video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A

class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### **Course Description**

Part one of a two-semester sequence that focuses on assessing the nutritional status of individuals and on the biochemical and pathophysiological bases of diseases and conditions that require specialized nutrition support or medical nutrition therapy.

Prerequisites: HUN2201 and (CHM2211 or CHM2200)

Corequisites: (BCH3025 or BCH4024) and (APK2015C or PCB4723C)

**Credits: 2**

### **Required Materials**

- Computer with reliable internet access, webcam, and microphone
- Access to e-Learning (Canvas): <https://elearning.ufl.edu/>
- Access to Zoom: <https://ufl.zoom.us>
- Google Chrome browser with the HonorLock extension for quizzes and exams
  - Chrome can be downloaded here: <https://www.google.com/chrome>
  - The HonorLock Extension can be downloaded here: <https://static.honorlock.com/install/extension>
- Access to MS Word, MS PowerPoint, and PDF reader software

### **Course Objectives**

Upon completion of this course, students should be able to:

1. Describe how to conduct a comprehensive nutrition assessment
2. Describe the etiology, symptoms, clinical findings and pathophysiology associated with diseases and conditions covered in this course.
3. Describe the nutritional management of the diseases and conditions covered in this course.
4. Differentiate between enteral and parenteral nutrition; identify appropriate situations for using these feeding modalities; calculate the energy, protein and fluid content of formulas; and make appropriate recommendations with regard to initiation and monitoring of enteral and parenteral solutions.
5. Evaluate the impact of food/nutrient-drug interactions on nutritional status and drug efficacy and recommend appropriate intervention strategies.
6. Describe research designs used in nutrition research and discuss their strengths and limitations and the features that increase confidence that results are valid.

### Recommended Text

- Nelms M, Sucher K. (2020). Nutrition Therapy and Pathophysiology, 4<sup>th</sup> Edition. Boston, MA: Cengage Learning. ISBN-13: 978-0357041710
- OR**
- Nelms M, Sucher K, Lacey K. (2016). Nutrition Therapy and Pathophysiology, 3<sup>rd</sup> Edition. Boston, MA: Cengage Learning. ISBN-13: 978-1305111967

### Readings

While there is no required text for the course, required readings from the scholarly literature will be posted on Canvas for each unit. Readings will primarily come from the following journals:

*Journal of Parenteral and Enteral Nutrition*

*Nutrition in Clinical Practice*

*Journal of the Academy of Nutrition and Dietetics*

*European Journal of Clinical Nutrition*

*Clinical Nutrition*

*Practical Gastroenterology*

### Course Format

We will use a “flipped classroom” model in this course. The general pattern will be:

- Wednesday: Lecture to introduce new concepts and set the stage for the week.
- Thursday through Monday: Online content to review independently (this may consist of videos, readings, etc.)
- Tuesday: Discuss and synthesize concepts; wrap up the week.

### Student Evaluation

Final grades will be based on attendance (see policy below), in-class activities, weekly online quizzes, two projects, and three unit exams.

**Attendance:** Attendance is required for this course. As this is an online course, “attendance” means logging onto our Zoom classroom with your camera on, and remaining attentive and engaged throughout the class period. You should not be working at a job, driving, “multitasking,” etc. If you must keep your camera off for some reason, communicate with the course TA about this ahead of time (with cc to Dr. Acosta). **We understand that life happens, and each student is allowed 3 “no questions asked” absences that will not count against your grade.** After that, beginning with the fourth absence, there will be a **2 point** deduction for each absence. If there are extenuating circumstances that result in you missing class more than 3 times during the semester, please [use the Instructor Notification process through the Dean of Students Office](#). Absences documented in this manner will be considered excused, and you will be eligible to make up any work missed as a result.

**In-Class Activities:** During certain class periods, we will complete active learning activities related to the course material for that week. These activities will be graded, and will count toward your point total for the course.

**Quizzes:** Quizzes will be given in Canvas. They will open on Fridays, and close on Wednesdays (the following week) at 11:59pm.

**Project – Nutrition Support Case Study** (Interprofessional Care for a Patient Requiring Enteral and Parenteral Nutrition): This project includes both group and individual components. It is due on the date indicated on the syllabus. Late submissions will be penalized 10% for each day late.

**Project – Evidence-Based Practice Project:** This is an individual project. It is due on the date indicated on the syllabus. Late submissions will be penalized 10% for each day late.

**Exams:** Exams will be given on Canvas, using HonorLock. In the weeks that we have exams, they will open on Fridays, and must be completed by the following Monday at 11:59pm. Exams are designed to take 60-75 minutes. However, everyone will be given double time (150 minutes) for exams. Failure to take an exam will result in a score of 0.

**While there may be opportunities for a few “bonus points” during the semester, extra credit projects will not be available.**

#### **Performance Indicators**

Attendance	10
In-class Activities	20
11 Weekly Quizzes (6 points each, lowest score dropped)	60
Nutrition Support Case Study Project	30
Evidence Based Practice Project	30
Exams 1, 2 & 3 @ 150 points each	450
<hr/>	
Total	600

**Grades are not negotiable and will be assigned according to the following scale:**

560-600	93.34-100%	A	400-419	66.68-69.9%	D+
540-559	90-93.33%	A-	380-399	63.34-66.67%	D
520-539	86.68-89.9%	B+	360-379	60-63.33%	D-
500-519	83.34-86.67%	B	<360	<60%	E
480-499	80-83.33%	B-			
460-479	76.68-79.9%	C+			
440-459	73.34-76.67%	C			
420-439	70-73.33%	C-			

#### **Grades and Grade Points**

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

#### **Absences and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

#### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the

quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

### **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>

### **Software Use**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

### **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness

Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575,  
[www.counseling.ufl.edu](http://www.counseling.ufl.edu)

- Counseling Services
- Groups and Workshops
- Outreach and Consultation
- Self-Help Library
- Wellness Coaching

U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)

Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>

Student Success Initiative, <http://studentsuccess.ufl.edu>

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>  
Online Course: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>

### **Course Material Copyright and Confidentiality**

All course material is the property of the University of Florida and the course instructor, and **may not** be posted online for any commercial or non-commercial purpose. Students found in violation may be subject to disciplinary action under the University's Student Conduct Code. Only students formally registered for the course are permitted to attend lectures and take quizzes/tests.

### **Email**

Students are required to check their email account(s) daily (at least Monday through Friday) and respond to course/program related requests, inquiries, etc. in a timely manner.

### Class Schedule

	<b>Date</b>	<b>Topic</b>	<b>Optional Textbook Readings (Nelms, Sucher)</b> 3 <sup>rd</sup> = Third Edition 4 <sup>th</sup> = Fourth Edition Additional supplemental readings will be posted on Canvas	<b>Major Assignments and Exams</b>
Week 0 (Introduction): Thursday Aug 22 – Tuesday Aug 27	Tuesday August 27	Syllabus and Expectations		
Week 1: Wednesday Aug 28 – Tuesday Sept 3	Week 0 Quiz Due by 11:59pm on Wednesday, Aug 28			
	Wednesday August 28	Introduction to The Nutrition Care Process	3 <sup>rd</sup> : Chapter 2 4 <sup>th</sup> : Chapter 2	
	Watch for Tuesday...	Nutrition Screening		
	Tuesday September 3	Nutrition Screening Activity and Review		

Week 2: Wednesday Sept 4 – Tuesday Sept 10	Week 1 Quiz Due by 11:59pm on Wednesday, Sept 4			
	Wednesday September 4	Nutrition Screening Activity and Review		
	<b>Watch for Tuesday...</b>	Anthropometrics and Body Composition		
	Tuesday September 10	The Nutrition Care Process (continued)		
Week 3: Wednesday Sept 11 – Tuesday Sept 17	Week 2 Quiz Due by 11:59pm on Wednesday, September 11			
	Wednesday September 11	The Malnutrition Diagnostic Framework	3 <sup>rd</sup> : Chapter 3 4 <sup>th</sup> : Chapter 3	
	<b>Watch for Tuesday...</b>	Estimating Energy Needs Dietary Assessment		
	Tuesday September 17	Energy Needs Activity and Review		
Week 4: Wednesday Sept 18 – Tuesday Sept 24	Week 3 Quiz due by 11:59pm on Wednesday, September 18			
	Wednesday September 18	Protein Needs	3 <sup>rd</sup> : Chapter 3 4 <sup>th</sup> : Chapter 3	
	<b>Watch for Tuesday...</b>	Fluid Needs Interpreting Labs		
	Tuesday September 24	Protein, Fluids, and Labs Activity and Review		



Week 5: Wednesday Sept 25 – Tuesday Oct 1	Week 4 Quiz due by 11:59pm on Wednesday, September 25			
	Wednesday September 25	Review for Unit 1 Exam		
	<b>Complete By Monday...</b>	<b>Unit 1 Exam: Nutrition Assessment (Due Monday, September 30 at 11:59pm)</b>		<b>UNIT 1 EXAM</b>
	Tuesday October 1	Introduction to Enteral Nutrition, GI Anatomy/Physiology Review		
Week 6: Wednesday Oct 2 – Tuesday Oct 8	No quiz due this week			
	Wednesday October 2	Enteral Nutrition (Part 1)	3 <sup>rd</sup> : Chapter 5 4 <sup>th</sup> : Chapter 5	
	<b>Watch for Tuesday...</b>	Enteral Nutrition (Parts 2 and 3)		
	Tuesday October 8	NO CLASS MEETING TODAY (Dr. Acosta at a conference)		
Week 7: Wednesday Oct 9 – Tuesday Oct 15	Week 6 Quiz due by 11:59pm on Wednesday, October 9			
	Wednesday October 9	Enteral Nutrition Activity and Review		
	<b>Watch for Tuesday...</b>	Parenteral Nutrition (Parts 1 and 2)	3 <sup>rd</sup> : Chapter 5 4 <sup>th</sup> : Chapter 5	
	Tuesday October 15	Parenteral Nutrition Activity and Review		

Week 8: Wednesday Oct 16 – Tuesday Oct 22	Week 7 Quiz due by 11:59pm on Wednesday, October 16			
	Wednesday October 16	Introduction to Interprofessional Case Study		
	<b>Watch for Tuesday...</b>	TBA		
	Tuesday October 22	Interprofessional Case Study		
Week 9: Wednesday Oct 23 – Tuesday Oct 29	No quiz this week			
	Wednesday October 23	Review for Unit 2 Exam		
	<b>Complete By Monday...</b>	<b>Unit 2 Exam: Nutrition Support (Due Monday, October 28 at 11:59pm)</b>		<b>UNIT 2 EXAM</b>
	Tuesday October 29	Interprofessional Case Study		
Week 10: Wednesday Oct 30 – Tuesday Nov 5	No quiz this week			
	Wednesday October 30	Nutritional Genomics		<b>INTERPROFESSIONAL CASE STUDY Part 1 DUE</b>
	<b>Watch for Tuesday...</b>	Nutrition and Cancer Parts 1 and 2	3 <sup>rd</sup> : Chapter 23 4 <sup>th</sup> : Chapter 23	
	Tuesday November 5	Nutrition and Cancer Discussion and Review		

Week 11: Wednesday Nov 6 – Tuesday Nov 12	Week 10 Quiz due by 11:59pm on Wednesday, November 6			
	Wednesday November 6	Nutrition and Cancer Part 3		<b>INTERPROFESSIONAL CASE STUDY Part 2 DUE</b>
	<b>Watch for Tuesday...</b>	Nutrition and Pharmacology	3 <sup>rd</sup> : Chapters 11 and 24 4 <sup>th</sup> : Chapter 11, and Chapter 22 Section 22.11 (pgs. 693-698)	
	Tuesday November 12	Nutrition and Pharmacology Activity and Review		
Week 12: Wednesday Nov 13 – Tuesday Nov 19	Week 11 Quiz due by 11:59pm on Wednesday, November 13			
	Wednesday November 13	Evidence-Based Practice + Introduction to PICO Project	3 <sup>rd</sup> : Chapter 22 4 <sup>th</sup> : Chapter 22	
	<b>Watch for Tuesday...</b>	Nutrition and Critical Care		
	Tuesday November 19	Critical Care Activity and Review		
Week 13: Wednesday Nov 20 – Tuesday Nov 26	Week 12 Quiz due by 11:59pm on Wednesday, November 20			
	Wednesday November 20	Evidence-Based Practice (continued)		
	Tuesday November 26	<b>NO CLASS: THANKSGIVING</b>		

Week 14: Wednesday Nov 27 – Tuesday Dec 3	No quiz this week			
	Wednesday November 27	<b>NO CLASS: THANKSGIVING</b>		
	Tuesday December 3	Evidence-Based Practice (continued)		
Week 15: Wednesday Dec 4 – Tuesday Dec 5	Week 14 Quiz due by 11:59pm on Wednesday, December 4			
	Wednesday Dec 4  LAST DAY OF CLASSES	Review for Exam 3		<b>PICO Project Due</b>
EXAM 3	Wednesday December 11	<b>You will have 2 hours to complete this exam. It will be open from 7:30am to 11:59pm.</b>		<b>EXAM 3</b>