

**HUN4445**  
**Nutrition and Disease – Part I: Fall 2023**  
**Class # 14169**

**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**

Sofia Acevedo

Office Hours TBA

**Course Location & Meeting Times**

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

Location: 100% online in Zoomland ☺

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 will be audio visually recorded for students to refer back to. 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.

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: Fundamentals of Human Nutrition (HUN2201) and Organic Chemistry 2 (CHM2211)

Corequisites: Biochemistry (BCH3025 or BCH4024) and Physiology (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

### **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.

### **Attendance**

Attendance is required for this course. “Attendance” is more than just logging into class on Zoom. It means being attentive and engaged, and not working on other tasks. Come to class in a quiet space without distractions. You should not be working at a job, traveling, “multitasking”, etc. **You must have your camera on in order to be counted as “present”**. If there is a day that you must keep your camera off for some reason, communicate with Sofia and Dr. Acosta about this ahead of time.

Each student is allowed 3 absences that will not count against your grade. After that, there will be a 5 point deduction for each absence. Tardiness is unacceptable in the workplace and therefore also inappropriate in the classroom. Students who are more than 10 minutes late will lose **2 points** from their attendance grade each time they are tardy.

### **Student Evaluation**

Final grades will be based on attendance, in-class activities, weekly online quizzes, one case study, one PICO project, and three unit exams.

Quizzes: Quizzes will be given in Canvas. They will open on Thursday afternoons, and close on Wednesdays at 11:59pm.

Case Study and PICO Project: Due on the date indicated on the syllabus. Late assignments 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 minutes. However, everyone will be given double time (120 minutes) for exams. Failure to take an exam will result in a score of 0.

**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
Case Study	30
PICO Project	30
Exams 1, 2 & 3 @ 150 points each	450
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/>

### 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: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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.

### 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.

Service	Phone	Web site	Services provided
University Counseling and Wellness Center	352-392-1575	<a href="https://counseling.ufl.edu/">https://counseling.ufl.edu/</a>	<ul style="list-style-type: none"><li>• Counseling Services</li><li>• Groups and Workshops</li><li>• Outreach and Consultation</li><li>• Self-Help Library</li><li>• Wellness Coaching</li></ul>
U Matter We Care	<a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> 352-392-1575	<a href="http://www.umatter.ufl.edu/">http://www.umatter.ufl.edu/</a>	Support for students in distress
Career Connections Center	352-392-1601	<a href="https://career.ufl.edu/">https://career.ufl.edu/</a>	Career development assistance and counseling

### Services for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center (DRC). The DRC coordinates needed accommodations, including accommodations within the classroom, adaptive computer equipment, interpretation services, and mediation for faculty-student disability related issues. Here is the link to get started with the DRC: <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructors and discuss their access needs as early as possible in the semester.

### Online Course Evaluation Process

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/>.

### **Writing Studio**

The Writing Studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Individual assistance is provided and students of all levels and disciplines are welcome (<https://writing.ufl.edu/writing-studio/>). Their main office is 302 Tigert Hall, and their office phone is (352) 846-1138.

### **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.

### **Filing a Complaint**

The University of Florida believes strongly in the ability of students to express concerns regarding their experiences at the University. The University encourages its students who wish to file a written complaint to submit that complaint directly to the department that manages that policy.

A student who is unsure as to the official responsible for handling his or her particular complaint may contact the Ombuds office or the Dean of Students Office. For complaints that are not satisfactorily resolved at the department level or which seem to be broader than one department, students are encouraged to submit those complaints to one of the following offices:

Ombuds: <http://www.ombuds.ufl.edu/>  
352-392-1308

The purpose of the Ombuds office is to assist students in resolving problems and conflicts that arise in the course of interacting with the University of Florida. By considering problems in an unbiased way, the Ombuds works to achieve a fair resolution and works to protect the rights of all parties involved.

Dean of Students Office: <http://www.dso.ufl.edu/>  
352-392-1261

The Dean of Students Office works with students, faculty, and families to address a broad range of complaints either through directly assisting the student involved to resolve the issue, working with the student to contact the appropriate personnel, or referring the student to resources or offices that can directly address the issue. Follow up is provided to the student until the situation is resolved.

Additionally, the University of Florida regulations provide a procedure for filing a formal grievance in Regulation 4.012: <http://regulations.ufl.edu/regulations/uf-4-student-affairs/>

**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.

	Date	Topic	Optional Textbook Readings (Nelms, Sucher) 3 <sup>rd</sup> = Third Edition 4 <sup>th</sup> = Fourth Edition Additional supplemental readings will be posted on Canvas	Major Assignments and Exams
Week 1: Wednesday Aug 23 – Tuesday Aug 29	Wednesday August 23	Syllabus and Expectations Introduction to The Nutrition Care Process	3 <sup>rd</sup> : Chapter 2 4 <sup>th</sup> : Chapter 2	
	Watch for Tuesday...	Nutrition Screening		
	Tuesday August 29	Nutrition Screening Activity and Review		
Week 2: Wednesday Aug 30 – Tuesday Sept 5	Week 1 Quiz Due by 11:59pm on Wednesday, August 31			
	Wednesday August 30	Nutrition Screening Activity and Review		
	<b>Watch for Tuesday...</b>	Anthropometrics and Body Composition		
	Tuesday September 5	The Nutrition Care Process (continued)		
Week 3: Wednesday Sept 6 – Tuesday Sept 12	Week 2 Quiz Due by 11:59pm on Wednesday, September 7			
	Wednesday September 6	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 12	Energy Needs Activity and Review		
Week 4: Wednesday Sept 13 – Tuesday Sept 19	Week 3 Quiz due by 11:59pm on Wednesday, September 14			
	Wednesday September 13	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 19	Protein, Fluids, and Labs Activity and Review		
Week 5: Wednesday Sept 20 – Tuesday Sept 26	Week 4 Quiz due by 11:59pm on Wednesday, September 21			
	Wednesday September 20	Review for Unit 1 Exam		
	<b>Complete By Monday...</b>	<b>Unit 1 Exam: Nutrition Assessment (Due Monday, September 26 at 11:59pm)</b>		<b>UNIT 1 EXAM</b>
	Tuesday September 26	Introduction to Enteral Nutrition, GI Anatomy/Physiology Review		
Week 6: Wednesday Sept 27 – Tuesday Oct 3	No quiz due this week			
	Wednesday September 27	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 3	Enteral Nutrition Activity and Review		

Week 7: Wednesday Oct 4 – Tuesday Oct 10	Week 6 Quiz due by 11:59pm on Wednesday, October 5		
	Wednesday October 4	Introduction to Parenteral Nutrition	3 <sup>rd</sup> : Chapter 5 4 <sup>th</sup> : Chapter 5
	<b>Watch for Tuesday...</b>	Parenteral Nutrition (Part 2)	
	Tuesday October 10	NO CLASS MEETING TODAY (Dr. Acosta at a conference) Complete Parenteral Nutrition Practice Problems	
Week 8: Wednesday Oct 11 – Tuesday Oct 17	Week 7 Quiz due by 11:59pm on Wednesday, October 12		
	Wednesday October 11	Parenteral Nutrition Activity and Review	
	<b>Watch for Tuesday...</b>	TBA	
	Tuesday October 17	Introduction to Interprofessional Case Study	
Week 9: Wednesday Oct 18 – Tuesday Oct 24	No quiz this week		
	Wednesday October 18	Interprofessional Case Study	
	<b>Complete By Monday...</b>	<b>Unit 2 Exam: Nutrition Support (Due Monday, October 24 at 11:59pm)</b>	<b>UNIT 2 EXAM</b>
	Tuesday October 24	Interprofessional Case Study	
Week 10: Wednesday Oct 25 – Tuesday	No quiz this week		
	Wednesday October 25	Nutritional Genomics	

	<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 October 31	Nutrition and Cancer Discussion and Review		
Week 11: Wednesday Nov 1 – Tuesday Nov 7	Week 10 Quiz due by 11:59pm on Wednesday, November 2			
	Wednesday November 1	Nutrition and Cancer Part 3		<b>INTERPROFESSIONAL CASE STUDY 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 7	Nutrition and Pharmacology Activity and Review		
Week 12: Wednesday Nov 8 – Tuesday Nov 14	Week 11 Quiz due by 11:59pm on Wednesday, November 9			
	Wednesday November 8	Introduction to Critical Care	3 <sup>rd</sup> : Chapter 22 4 <sup>th</sup> : Chapter 22	
	<b>Watch for Tuesday...</b>	Nutrition and Critical Care		
	Tuesday November 14	Critical Care Activity and Review		

Week 13: Wednesday Nov 15 – Tuesday Nov 21	Week 12 Quiz due by 11:59pm on Wednesday, November 16			
	Wednesday November 15	Evidence-Based Practice + Introduction to PICO Project		
	Tuesday November 21	<b>NO CLASS: THANKSGIVING</b>		
Week 14: Wednesday Nov 22 – Tuesday Nov 28	No quiz this week			
	Wednesday November 22	<b>NO CLASS: THANKSGIVING</b>		
	<b>Watch for Tuesday...</b>	TBA		
	Tuesday November 28	Evidence-Based Practice (continued)		
Week 15: Wednesday Nov 29 – Tuesday Dec 5	Week 14 Quiz due by 11:59pm on Wednesday, November 30			
	Wednesday November 29	Evidence-Based Practice (continued)		
	<b>Watch for Tuesday...</b>	TBA		
	Tuesday December 5	TBA		<b>PICO Project Due</b>
Week 16: Wednesday Dec 6	Week 15 Quiz due by 11:59pm on Wednesday, December 7			
	Wednesday December 6	Review for Exam 3		
	LAST DAY OF CLASSES			

EXAM 3	Wednesday December 13	<b>You will have 2 hours to complete this exam. It will be open from 8am to 8pm.</b>		<b>EXAM 3</b>
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