USC Dornsife College of Letters, Arts and Sciences

HBIO360 - Nutrition and Disease (4 units)

Fall 2019

Lectures-Discussions: Monday and Wednesday

10:00-11:50

Location: VKC 252

Instructor: Gioia Polidori, PhD

Office: AHF B40

Office Hours: Tuesday and Thursday 2-4pm

Contact Info

Email: gpolidor@usc.edu **Telephone**: 213.740.3337

Course Description

Principles of diet therapy for the prevention and treatment of human disease.

Prerequisite: BISC 220L

Learning Objectives

- Identify, locate, and describe the structure/function of major organ systems of the human body
- Illustrate the relationship between nutritional imbalances and disease
- Correlate molecular, cytological and histological changes with manifestations of selected human diseases
- Compile relevant sources of scientific evidence to solve case studies and effectively present to peers selected topics in human disease
- Evaluate how nutritional concepts may be used for the resolution of sociocultural issues

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I. Text Required

Nutrition Therapy & Pathophysiology; Nelms M, Sucher KP, Lacey K, Roth SL (eds). Wadsworth Cengage Learning. 3rd Edition.

II. Description and Assessment of Assignments

- Class material will be evaluated via quizzes, exams and case studies.
- **Quizzes** will be given during lectures and will be based on the material presented on the same day.
- Case studies: Case studies will be completed throughout the semester and will focus on the pathophysiology and nutritional requirements in different diseases. Students will be guided to perform literature searches to discover and develop their own solutions to real case problems related to human disease and placed within sociocultural contexts. Students will work on case studies in groups of 3-5 and each group will submit the answers at the end of class.

III. Grading Breakdown

Assignment	Points	% of Grade
Midterm 1	250	25
Midterm 2	250	25
Final Exam	300	30
Case Studies	150	15
Quizzes	50	5
TOTAL	1000	100
JEP (Extra Credit)	25	2.5

IV. Additional Policies

• The grading scale is based on the traditional scale as follows:

	A (≥93%)	A- (≥90%)
B+ (≥87%)	B (≥83%)	B- (≥80%)
C+ (≥77%)	C (≥73%)	C- (≥70%)
D+ (≥67%)	D (≥63%)	D- (≥60%)
F (≤59.9%)		

- A midterm exam can be taken after the specified date **ONLY** if the student has a **documented** medical excuse.
- A request to take a make-up exam must be accompanied by evidence of necessity (ie: letter from a doctor, interview email...) and must be made before the date of the scheduled exam.
- Lecture slides will be posted on blackboard. Class notes and textbook information will form the basis of the material that will be on the exams. If you attend class regularly, you will be updated on the status of lecture notes and course material/announcements.
- Case Studies: Attendance to case studies is mandatory. Students should contact the course instructor via email if they have to miss a case study. If a student has to miss a case study because of medical reason, interviews, or for any other reasonable excuse, he/she may be allowed to submit the work from home. If the student misses a case study without a reasonable excuse there will be a 20% penalty (first offense) 40% penalty (second offense) and 60% penalty (third offense). Students that arrive more than 15 minutes late on case study days will be considered absent for the case study.
- Late Work Policy: Case studies are due at the end of class period. No late work will be accepted unless the student receives prior approval from the course instructor.

V. Tentative Lecture Schedule

Date	Lecture Topic	Nelms	Case Study
Aug 26	Introduction & Nutrition Care Process		
Aug 28	Nutrition Assessment	2	Intro
Sep 02	Labor Day	3	1. Dietary
Sep 04	Nutrition Intervention (CS 1)	4	Assessment
Sep 09	Enteral & Parenteral Nutrition	5	
Sep 11	Energy Balance I	5	2. Obesity
Sep 16	Energy Balance II (CS 2)	12	3. Peptic Ulcer
Sep 18	Pathophysiology of the Upper GI tract I	12	Disease
Sep 23	Pathophysiology of the Upper GI tract II (CS 3)	13	
Sep 25	Review	13	
Sep 30	Exam I	13	
Oct 2	Pathophysiology of the Lower GI tract I		4. Celiac Disease
Oct 7	Pathophysiology of the Lower GI tract II (CS 4)	14	
Oct 9	Pathophysiology of the Liver & Gallbladder I	14	5. Hepatitis C
Oct 14	Pathophysiology of the Liver & Gallbladder II (CS 5)	15	•
0ct 16	Diabetes I	15	6. T1DM
Oct 21	Diabetes II (CS 6)		
Oct 23	Diabetes III (CS 7)		7. T2DM
Oct 28	Review	16	
Oct 30	Exam II	16	
Nov 4	Pathophysiology of the Cardiovascular System I	17	8. Myocardial
Nov 6	Pathophysiology of the Cardiovascular System II (CS8)	17	Infarction
Nov 11	Pathophysiology of the Cardiovascular System III (CS9)	17	
Nov 13	Pathophysiology of the Hematological System I	18	9. Hypertension
Nov 18	Pathophysiology of the Hematological System II (CS 10)	19	
Nov 20	Cancer I	19	10. Anemia
Nov 25	Cancer II (CS 11)	22	
Nov 27	Pathophysiology of the Musculoskeletal System I	22	11. Cancer
Dec 2	Pathophysiology of the Musculoskeletal System II (CS 12)	25	
Dec 4	Review	25	12. Osteoporosis
Dec 9	Study Days		
	Final Exam (see schedule of classes)		

VI. Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs*

http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html_provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information http://emergency.usc.edu/*will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

VII. Academic Conduct

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

VIII. Academic Integrity Violations

Students who violate University standards of academic integrity are subject to disciplinary sanctions, including failure in the course and suspension from the University. Since dishonesty in any form harms the individual, other students and the University, academic integrity policies will be strictly enforced.

IX. Disruptive and Threatening Behavior

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ **Public** or to the *Department* of Safetv http://capsnet.usc.edu/department/department-public-safety/online-forms/contactus. This is important for the safety whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

X. Additional Support:

Student Health Counseling Services - (213) 740-7711 – 24/7 on call engemannshc.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 – 24/7 on call

engemannshc.usc.edu/rsvp

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) | Title IX - (213) 740-5086 equity.usc.edu, titleix.usc.edu

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

Bias Assessment Response and Support - (213) 740-2421 studentaffairs.usc.edu/bias-assessment-response-support

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

The Office of Disability Services and Programs - (213) 740-0776 dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710 studentaffairs.usc.edu/ssa

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101 diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.