

FDNS 4530/6530  
MEDICAL NUTRITION THERAPY  
Spring 2007

Instructor: Dr. Richard D. Lewis  
Office: 281 Dawson Hall  
Office Hours: MW 1:30-3:30  
Phone: 542-4901  
Class Location: 162 Dawson Hall  
Class Time: 9:00 – 10:45, TR  
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The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary. In addition, all academic work must meet the standards contained in “A Culture of Honesty.” Students are responsible for informing themselves about those standards before performing any academic work. The link for more detailed information about academic honesty can be found at: <http://www.uga.edu/ovpi/honesty/acadhon.htm>.

Course Objectives:

Following the completion of this course, the student will:

- show a working knowledge of pathophysiology, abnormal biochemistry, and altered nutrient metabolism in various disease states. Students will demonstrate the ability to use appropriate medical terminology when discussing various disease states.
- know and understand disease prevention guidelines for the major chronic diseases.
- know and be able to discuss the principles of nutrition screening, assessment, and medical nutrition therapy for various disease states. Medical nutrition therapy knowledge will include knowledge of how nutrient, fluid, electrolyte needs and feeding techniques are altered for each disease state.
- be able to develop nutrition care plans and define dietary modifications that are medically, culturally and aesthetically acceptable for individuals with various disease states.
- be knowledgeable about health behaviors exhibited by clients, and their typical educational needs.
- will demonstrate the ability to interpret nutrition screening and assessment data, including dietary intake data and laboratory parameters, and develop a nutrition care plan by completing case studies.
- demonstrate the ability to use library databases to research topics related to medical nutrition therapy. By preparing and presenting a poster on a research paper, students will demonstrate the ability to interpret basic statistics and research on medical nutrition therapy.
- enhance computer communication skills through the use of WebCT.

Texts and other materials:

- Mahan, K.L and Escott-Stump, S. **Food, Nutrition, & Diet Therapy**, 11<sup>th</sup> edition, W.B. Saunders Company, 2004.
- Nutrition Diagnosis and Intervention: Standardized Language for the Nutrition Care Process, Am Diet Assoc, 2007
- Nelms, M.N., and Anderson, S.L. Medical Nutrition Therapy: A Case Study Approach. 2<sup>nd</sup> Ed. Belmont, CA: Wadsworth/Thomson Learning, 2004.
- Stedman's Medical Dictionary; not required, but highly recommended.
- American Dietetic Association Exchange Lists for Weight Management (distributed in class)
- American Diabetes Association Basic Carbohydrate Counting pamphlet (distributed in class)
- American Diabetes Association Advanced Carbohydrate Counting pamphlet (distributed in class)
- Thom T, Haase N, Rosamond W, et al. Heart disease and stroke statistics--2006 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*. Feb 14 2006;113(6):e85-151.
- National Institutes of Health (NIH); National Heart L, and Blood Institute (NHLBI); North American Association for the study of Obesity (NAASO). The Practical Guide: Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. *National Institutes of Health*. 2000;NIH Publication Number 00 - 4084. Rockville, MD.
- Kushi, L.H., Byers, T., Doyle, C., Bandera, E.V., McCullough, M., Gansler, T., Andrews, K.S., Thun, M.J. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the risk of cancer with health food choices and physical activity. *CA Cancer J Clin* 2006;56:254-281.
- Doyle, C., Kushi, L.H., Byers, T., Courneya, K.S., Demark-Wahnefried, W., Grant, B., McTiernan, A., Rock, C.L., Thompson, C., Gansler, T., Andrews, K.S. Nutrition and Physical Activity During and After Cancer Treatment: An American Cancer Society Guide for Informed Choices. *CA Cancer J Clin* 2006; 56:323-353.
- Jensen, G.L. Inflammation as the key interface of the medical and nutrition universes: A provocative examination of the future of clinical nutrition and medicine. *Journal of Enteral and Parenteral Nutrition*. 2006; 30:453-463.

TENTATIVE LECTURE SCHEDULECHAPTER ASSIGNMENTS

Tues	Jan	9	Introduction; Syllabus; Nutrition for Exercise and Sports	Chapter 26
Thurs		11	Sports Nutrition; Obesity	Chapter 26, 24
Tues		16	Obesity, Weight Management	Chapter 24
Thurs		18	Obesity, Exchange Lists;	Chapter 24
Tues		23	Cardiovascular Disease; Case Study 1	Chapter 35
Thurs		25	Cardiovascular Disease; Quiz 1	Chapter 35
Tues		30	Cardiovascular Disease	Chapter 35
Thurs	Feb	1	Diabetes Mellitus:	Chapter 33
Tues		6	Diabetes Mellitus:	Chapter 33
Thurs		8	Diabetes Mellitus	
Tues		13	Hypertension	Chapter 36
Thurs		15	Hypertension	Chapter 36
Tues		20	Exam I	
Thurs		22	Diseases of Gastrointestinal Track; Dr. Joan Fischer; Case Study 2	Chapter 29, 30
Tues		27	Diseases of Gastrointestinal Track; Dr. Joan Fischer	Chapter 29, 30
Thurs	Mar	1	Diseases of Gastrointestinal Track; Dr. Joan Fischer	Chapter 29, 30
Tues		6	Liver, Pancreatic & Gall Bladder Disease;	Chapter 31
Thurs		8	Liver, Pancreatic & Gall Bladder Disease; Quiz 2	Chapter 31
Tues		13	Spring Break	
Thurs		15	Spring Break	
Tues		20	Osteoporosis; Case Study 3	Chapter 27
Thurs		22	Osteoporosis	Chapter 27
Tues		27	Osteoporosis	Chapter 27
Thurs		29	Nutrition & Cancer; Dr. Joan Fischer	Chapter 42
Tues	Apr	3	Exam II	
Thurs		5	Nutrition & Cancer; Dr. Joan Fischer	Chapter 40
Tues		10	Nutrition & Cancer; Dr. Joan Fischer	Chapter 40
Thurs		12	Hypermetabolic Stress: Sepsis, Trauma, Burns & Surgery; Dr. Joan Fischer	Chapter 40
Tues		17	Renal Disease; Case Study 4; Quiz 3	Chapter 39
Thurs		19	Renal Disease	Chapter 39
Tues		24	Renal Disease	Chapter 39
Thurs		26	Graduate Student presentations	
Thurs	May	3	FINAL EXAM (8:00 am – 11:00 am)	

Attendance Policy - Attendance is expected and will be monitored daily since exam material will come from lectures, the text, case studies and poster presentations. Two tests will be given in addition to the final exam and quizzes. There will be no make-up quizzes or exams unless the student provides documented justification of the need to miss the quizzes or exams.

Evaluation:

Student performance will be measured on the basis of tests, case studies, quizzes and assignments listed below and the percentage of the final grade for each assignment will differ based on the status of the student (4530 vs. 6530).

<u>Assignments</u>	<u>Percent of Grade</u>		<u>Grading</u>
	<u>4530</u>	<u>6530</u>	
Two Tests	50	30	A = 93-100%
Final Exam	25	20	A- = 90-92%
Poster Presentation	-	15	B+ = 87-89%
Summary Paper	-	10	B = 83-86%
Case Studies	15	15	B- = 80-82%
Quizzes	<u>10</u>	<u>10</u>	C+ = 77-79%
	100	100	C = 70-76%
			D = 60-69%
			F = below 60%

Note: Undergraduate students (FDN 4530) grades are based on the tests, final exam, and quizzes.

Assignments:

- 1) **Case Studies:** Each student will be responsible for completing the assigned case studies which are real-life situations addressing specific diseases. The case studies will require you to assess the nutritional status of an individual, including interpretation of anthropometric, dietary, clinical and biochemical data and make the appropriate nutrition recommendations. Material addressed in the case studies will be covered on the quizzes and tests. You will work in groups of 4. Each member must work together as a group and contribute to the case study.
  
- 2) **Graduate Student Project –**
  - a) **Paper:** students should succinctly review the literature on the role of a nutrient or food component in the management and/or prevention of a specific disease. Utilize 15-20 references, dated no earlier than 1985, and write a summary paper (3 pages, single spaced not including references). Use the format of the American Journal of Clinical Nutrition (See Guideline to Authors). The summary paper should include:
    - Brief introduction to topic
    - Background of disease/altered metabolism
    - Background of nutrient/food component
    - Metabolic basis for treatmentHand in two copies of your summary paper; one of which I will keep for my files and the other I will return to you graded.
  
  - b) **Lecture:** A 20 minute lecture related to the above-selected topic will be given to the class. The class will then have the opportunity to ask questions. Two or three short answer questions related to the presentation should be submitted to the instructor. Information from the poster presentation will be covered on the final exam.