

FDNS 4510/6510
NUTRITION RELATED TO THE HUMAN LIFE CYCLE
FALL 2007

Instructor: Dr. Richard D. Lewis
Office: 279 Dawson Hall
Office Hours: M, W 1:30 to 3:30
Phone: 542-4901
Class Location: Room 116
Class Time: T, R 9:30-10:45 AM
Office Hours: Monday, Wednesday 1:30-3:30
Teaching Assistant: Norman Pollock (E-mail: norm@uga.edu), Room 266

If you have not added this class, late adds to this class will not be approved unless there is an exceptional circumstance. 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:

- 1) To increase your understanding and knowledge of the stages and physiological changes in the human lifecycle.
- 2) To increase your understanding and knowledge of the nutritional needs associated with each stage of the lifecycle and what makes each stage unique.
- 3) To be able to assess nutritional needs of clients from different age groups and make the appropriate nutrition recommendation.
- 4) To be able to apply this knowledge through the use of applicable case studies.
- 5) To become familiar with the scientific literature related to nutritional needs during the human life cycle.
- 6) To increase the use of electronic media as a resource tool to enhance the understanding of lifecycle nutrition.

Text:

- Brown, J.E. **Nutrition Through the Lifecycle**, 3rd Edition, Thompson-Wadsworth Publishing, 2007.

Required Reading:

The following readings are available on WebCT or can be accessed on campus using search engines such as PubMed (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed>) or Google Scholar (<http://scholar.google.com>). You should become proficient in searching for and obtaining scholarly articles by the end of this class. Case studies will require that you research sources other than the textbook.

1. Johnson K, Posner SF, Biermann J, et al. Recommendations to improve preconception health and health care--United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR Recomm Rep.* Apr 21 2006;55(RR-6):1-23.
2. Nichols JF, Rauh MJ, Lawson MJ, Ji M, Barkai HS. Prevalence of the female athlete triad syndrome among high school athletes. *Arch Pediatr Adolesc Med.* Feb 2006;160(2):137-142.
3. ACOG Committee Opinion number 315, September 2005. Obesity in pregnancy. *Obstet Gynecol.* Sep 2005;106(3):671-675.

4. ACOG committee opinion. Exercise during pregnancy and the postpartum period. Number 267, January 2002. American College of Obstetricians and Gynecologists. *Int J Gynaecol Obstet.* Apr 2002;77(1):79-81.
5. James DC, Dobson B. Position of the American Dietetic Association: Promoting and supporting breastfeeding. *J Am Diet Assoc.* May 2005;105(5):810-818.
6. Jensen CL. Effects of n-3 fatty acids during pregnancy and lactation. *Am J Clin Nutr.* Jun 2006;83(6 Suppl):1452S-1457S.
7. Nicklas T, Johnson R. Position of the American Dietetic Association: Dietary guidance for healthy children ages 2 to 11 years. *J Am Diet Assoc.* Apr 2004;104(4):660-677.
8. Lewis RD, Meyer MC, Lehman SC, et al. Prevalence and degree of childhood and adolescent overweight in rural, urban, and suburban Georgia. *J Sch Health.* Apr 2006;76(4):126-132.
9. Kuczmarski MF, Weddle DO. Position paper of the American Dietetic Association: nutrition across the spectrum of aging. *J Am Diet Assoc.* Apr 2005;105(4):616-633.
10. McMahon JA, Green TJ, Skeaff CM, Knight RG, Mann JI, Williams SM. A controlled trial of homocysteine lowering and cognitive performance. *N Engl J Med.* Jun 29 2006;354(26):2764-2772.
11. Stein K. Polycystic ovarian syndrome: what it is and why registered dietitians need to know. *J Am Diet Assoc.* Nov 2006;106(11):1738-1741.

Evaluation:

Student performance will be measured on the basis of exams and quizzes and assignments listed below and the percentage of the final grade for each assignment will differ based on the status of the student (4510 vs 6510).

<u>Assignments</u>	<u>Percent of Grade</u>	
	<u>4510</u>	<u>6510</u>
Two Tests	50	30
Final Exam	25	20
Lecture		15
Summary Paper	-	10
Quizzes	10	10
Case Studies	15	15
	100	100

Grading:

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	70-76
D	63-69
F	59 and below

Note: Undergraduate students (FDN 4510) grades are based on the tests, case studies, final exam, and quizzes only.

Assignments:

All Students

Case Studies: Each student will be responsible for completing the assigned case studies which are real-life situations addressing each stage of the lifecycle. The case studies will require you to assess the nutritional status of the individual and make the appropriate nutrition recommendation. Quizzes will include material related to each case study. You will work in groups of 4. Each member must work together as a group and contribute to the case study, and case studies will be due one week after the assigned date indicated on the syllabus.

Graduate Students

Summary Paper- Students should succinctly review the literature on a topic related to nutrition and the human lifecycle and write a summary paper supported by the scientific literature (15-20 references, dated no earlier than 1985). The summary paper should be single-spaced (not including references) and no longer than two-three pages in length. Papers should cover the following: Introduction to topic; Background information, identifying why the topic is controversial or important (1/2 - 3/4 page); Summary and synthesis of pertinent literature (1 1/2 - 1 3/4 pages); Conclusion (1/4 - 1/2 page) and; References (not included in page limit)

Hand 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. The information from the summary paper will provide the basis for the class lecture.

Lecture: A 30-minute lecture related to the above-selected topic will be given to the class. I highly encourage you to use some interactive strategies in your presentation. The class will have the opportunity to ask questions. Two or three short answer questions related to the presentation should be submitted to the instructor, since information from your lecture will be covered on the final exam.

TENTATIVE LECTURE SCHEDULE

			Reading Assignment: <u>Chapter</u>
August			<i>Nutrition in Pregnancy & Lactation</i>
Thurs.	16	Introduction to class; Preconception care	2
Tues.	21	Preconception care; nutrition, fertility and family planning	2, 3
Thurs.	23	Guest lecturer: Dr. Emma Laing; Physiology of pregnancy; Case study 1	4
Tues.	28	Physiology of pregnancy cont.; Maternal research	4
Thurs.	30	Quiz 1; Nutritional needs during pregnancy; Case study 1 review	4
September			
Tues.	4	Nutrition needs cont.; Lifestyle concerns	4
Thurs.	6	Guest lecturer: Dr. Alexander Anderson; Lactation	
Tues.	11	Lifestyle concerns; Nutritional assessment	4
Thurs.	13	Management of pregnancy complications	5
Tues.	18	Exam 1	
Thurs.	20	Management of pregnancy complications; Pregnant adolescent	5
Tues.	25	Anatomy and physiology of lactation; Case Study 2	6, 7
Thurs.	27	Promotion and support of breastfeeding	6
October			
Tues.	2	Promotion and support of breastfeeding	6
		<i>Nutrition in Infancy & Childhood</i>	
Thurs.	4	Quiz 2; Growth and development	8, 9
Tues.	9	Nutrition needs of infants and children; Assessment of food intake	8
Thurs.	11	Infant feeding; Low birth weight	8
Tues.	16	Food patterns in young children; Factors shaping food patterns	10
Thurs.	18	Childhood obesity; Case Study 3	10
Tues.	23	Exam 2	11, 12, 13
Thurs.	25	Fall Break	
Tues.	30	Nutrition for preschool and school age children	10, 12, 13, 14
November			
Thurs.	1	Nutrition for preschool and school age children cont.; Nutrition for adolescence	15
Tues.	6	Eating disorders; The adolescent athlete; Case Study 4	
			<i>Nutrition in Aging</i>
Thurs.	8	Aging; Population trends, theories of aging	18
Tues.	13	Longitudinal studies of aging	18
Thurs.	15	Physiological changes with aging	18
Tues.	20	Quiz 3; Nutrition needs; Vitamins and minerals in aging	18
Thurs.	22	Thanksgiving Day—Holiday	
Tues.	27	Case Study 5; Nutritional needs cont.	18
Thurs.	29	Food selection patterns; Nutritional status	18, 19
December			
Tues.	4	Nutrition assessment; Nutritional problems with aging; Nutritional problems; poster sessions	18, 19
Thurs.	6	Reading Day—No classes	
Thurs.	13	FINAL EXAM (8:00 – 11:00 AM)	

Attendance Policy - **Attendance is expected 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 exams.**