

HNF 150: INTRODUCTION TO HUMAN NUTRITION
SPRING SEMESTER 2007
MICHIGAN STATE UNIVERSITY
3 CREDITS

Instructor:

Prof. Katherine Alaimo, Ph.D.
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Office: 302C G. Malcolm Trout Building (Food Science Building)
Office Hours: Thursdays, 2:30 – 4:30 pm
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Time:

SECTION 1: T Th 10:20 – 11:40 am
SECTION 2: T Th 1:00 – 2:20 pm

Location:

1281 Anthony Hall

Course Description:

Nutrition needs in life stages from a human ecological perspective. Domestic and international factors affecting the availability of a safe, nutritious food supply. Relationships of food choices to health and disease.

Course Overview:

This course is a general survey of nutrition topics including: the biochemical interaction of foods, nutrients, genetics and health; human eating behaviors; government and corporate regulation and influences on human eating behavior; ethical issues, including hunger and food security; the relationship between our food system and the environment; and domestic and international factors affecting the availability of a safe, nutritious food supply.

Objectives:

Through readings, class lectures, and the assignment, students will learn:

1. The basic constituents of food and their role in nutrition.
2. The complexity of the human body, nutrition, the eating environment, and food behavior.
3. Food labeling regulations and how they relate to health.
4. Nutrition and food choices in various life stages.
5. Current food security, food safety, and food technology issues.
6. How to incorporate healthy food choices into their own lives.

Required text and CD:

1.Sizer, F and Whitney, E. *Nutrition Concepts and Controversies*, Ninth Edition. Wadsworth/Thompson Learning, 2003. (www.wadsworth.com).

2. *My Diet Analysis* on-line software (www.mydietanalysis.com). Available at the MSU Student Book Store.

Grading:

Final grades are based on an accumulation of points up to 100 points total:

a) Dietary Assessment Assignment	10 points
b) Newspaper Analysis Assignment	10 points
c) In-class Quizzes	5 points
d) Exam 1	25 points
e) Exam 2	25 points
f) Exam 3	25 points

g) There will be an OPTIONAL COMPREHENSIVE final exam worth 25 points. The optional final can replace the lowest score of Exams 1, 2, or 3.

a) Diet Assessment Assignment (10 points) – due April 6th in class

Using *My Diet Analysis*, you will record everything you eat and drink for 3 days (2 week days and 1 weekend day). The software will automatically calculate the nutrient content of your diet records. You will be asked to turn in a copy of your nutrient analysis, and answer a series of questions about your diet. You will not be graded on how “nutritious” or “healthy” your diet is. Complete instructions for the Diet Analysis Assignment will be described in class on March 14, 2006. Forms will also be posted on ANGEL by that date.

b) Newspaper Analysis Assignments (10 points) – due April 20th

Six newspaper articles will be posted on Angel. You will be required to read each article and select one for your analysis. Specific instructions on how to analyze the articles will be described in class on April 6th. Forms will also be posted on ANGEL by that date.

c) In-class Quizzes (5 points)

Six unannounced quizzes will be given in class at various times throughout the semester. Each quiz is worth 1 point (pass-fail grading system). Your lowest quiz grade will be dropped.

d-f) Exams 1, 2, and 3

Exams are multiple choice, and will be based on lectures, readings, and the study guide questions. Each exam will be given IN CLASS, will have 50 questions and will be worth 25 points. Exam questions will cover all the material presented since the previous exam and will emphasize basic facts, concepts and relationships, your understanding of these, and your ability to apply them to new situations.

BRING PICTURE ID, SHARPENED PENCILS, AND GOOD ERASERS TO THE EXAMS. You will not be permitted to take an exam without your picture ID.

Because taking the Optional Final Exam can make up for missing any of Exams 1, 2, or 3, makeup exams will not be offered except under extreme circumstances. Extreme circumstances include missing 2 exams due to grave personal illness, funerals of close family members, University sponsored activities that require your presence, or legal proceedings at which you must appear. **WRITTEN DOCUMENTATION IS REQUIRED PRIOR TO THE EXAM** for a make-up exam to be considered. All make-up exams will consist of essay questions.

g) Optional Comprehensive Final Exam

An optional final exam will be given during the times assigned by the MSU administration. The optional final exam is comprehensive over the whole semester. It will be multiple choice, and will be based on lectures, readings, and the study guide questions. As with the other exams, exam questions will emphasize basic facts, concepts and relationships, your understanding of these, and your ability to apply them to new situations.

The optional final exam will have 50 questions and will be worth 25 points. If your score on the final is higher than your lowest score on any of the prior exams, your score for the optional final will replace your lowest score. There is no risk to you taking the final and all students are encouraged to take this opportunity to improve their grade.

Final Exam (Optional):

Section 1 (10:20 am – 11:40 am): Wednesday, May 3, 10:00 am - noon

Section 2 (1:00 pm – 2:20 pm): Tuesday, May 2, 12:45 – 2:45 pm

Corrections to Test Grading

Dr. Alaimo will make every effort to ensure that the tests are graded correctly and fairly. Students are encouraged to bring any items that appear questionable to her attention. Statistical analyses provided by the testing center will be used in an effort to detect items that were poorly written. If mistakes are found, corrections will be made to all students' test scores, so that no single student will receive an advantage. Likewise, finding and correcting mistakes in grading can also result in lower test scores. **STUDENTS HAVE ONE WEEK** after an exam to tell Dr. Alaimo of any problems identified.

Extra Credit (2 points)

An extra credit assignment will be described during class, and will be worth 2 points. The extra credit assignment will be due on April 6th in class and must be **stapled** to your **Dietary Assessment Assignment** in order for you to receive credit.

Final Grades:

Final grades are based on a total accumulation of points from the examinations, assignment and extra credit. To be fair to every student in the class, the grading scale is NON-NEGOTIABLE.

The grading scale is listed below:

<u>Points accumulated</u>	<u>Grade</u>
90.0 – 100 points	4.0
85.0 – 89.9 points	3.5
80.0 – 84.9 points	3.0
75.0 – 79.9 points	2.5
70.0 – 74.9 points	2.0
65.0 – 69.9 points	1.5
58.0 – 64.9 points	1.0
below 58.0 points	0.0

Instructional Assistance:

Teaching Assistants are available to assist you with any questions you might have about the course, exams, assignment, or course material. If you are having difficulty with the material, DON'T WAIT – we are here to help you. Email addresses and office hours for Teaching Assistants are as follows:

<u>Name</u>	<u>Email</u>	<u>Office Hours</u>
Charlotte Crotte	crottech@msu.edu	Mondays 10:30 – 11:30am
Erin Pearson	pearso87@msu.edu	Mondays 12:30-1:30 pm
Emily Mcallister	mcalli31@msu.edu	Tuesdays 12:00-1:00 pm
Katherine Peters	petersk8@msu.edu	Wednesdays 11:30 am -12:30 pm
Allison Krusky	kruskyal@msu.edu	Wednesdays 2:15-3:15 pm
Danielle Fabbri	fabbrida@msu.edu	Fridays 11:00 am - Noon

All Teaching Assistant office hours will be located in the Food Science & Human Nutrition Career Center, 106 GM Trout Building (also known as Food Science Building).

Course Communication:

Communication for this course will use the ANGEL system and the MSU pilot email system. Please check ANGEL and your MSU email regularly.

ALL EMAIL QUESTIONS should be directed to your assigned Teaching Assistant unless they are of a personal or sensitive nature. If a TA is unable to answer your question, they will contact Dr. Alaimo to make sure the issue is resolved.

Emails MUST include “HNF 150” in the subject or you will not receive a response back. This is important for us to protect ourselves from viruses, and to enable us to prioritize your questions and respond quickly.

For email questions, your Teaching Assistant assignment are as follows:

Section 1 (morning class, 10:20 – 11:40am):

<u>Last name</u>	<u>Teaching Assistant</u>	<u>Email</u>
A-G	Allison Krusky	kruskyal@msu.edu
H-O	Emily McAllister	mcalli31@msu.edu
P-Z	Katherine Peters	petersk8@msu.edu

Section 2 (afternoon class, 1:00 — 2:20pm):

<u>Last name</u>	<u>Teaching Assistant</u>	<u>Email</u>
A-G	Charlotte Crotte	crottech@msu.edu
H-O	Danielle Fabbri	fabbrida@msu.edu
P-Z	Erin Pearson	pearso87@msu.edu

Study Guides

Three forms of additional educational material are available to you to help you learn about nutrition:

1. A FREE CD comes with theSizer and Whitney textbook: *Nutrition Connections*, by Michelle Grodner.
2. Kicklighter J. *Study Guide for Sizer and Whitney’s Nutrition Concepts and Controversies*, Ninth Edition. Wadsworth/Thompson Learning, 2003. 4 copies are on reserve in the MAIN LIBRARY for 2-hour check-out.
3. Wadsworth publishing has more educational material on their website. Go to www.wadsworth.com. Click on: Nutrition. Click on: Student Book Companion Sites. Click on: Introductory Nutrition. Click on: Nutrition Concepts and Controversies. **Select a chapter to review.**

Students with Disabilities:

Students with disabilities should contact the Resource Center for Persons with Disability (RCPD) Resource Center for Persons with Disability (RCPD) [120 Bessey Hall, 353-9642 (voice) or 355-1293 (TTY)] for evaluation of need for reasonable accommodation. If accommodation for examinations or note-taking is approved, please notify Dr. Alaimo within the first week to work out arrangements.

Academic Honesty and Plagiarism:

We will adhere to the MSU policies on academic honesty for any incidents of cheating, plagiarism, or academic dishonesty. If you are unaware of these rules, please consult your Student Handbook. If you are caught cheating on an exam or an assignment, you will receive 0 points for that exam or assignment.

**COURSE SCHEDULE AND READING ASSIGNMENTS
SPRING SEMESTER 2006**

Required readings from *Nutrition Concepts and Controversies* are listed for each lecture. Students are encouraged to read the assignment prior to attending class.

- 1/10 Welcome! and Nutrition Basics
- 1/12 How Do We Know What We Know (Chapter 1)
- 1/17 Nutrition Recommendations and Labeling (Chapter 2)
- 1/19 Body Basics (Chapter 3)
- 1/24 Discussion: How to get Fat Without Really Trying, ABC News Special
- 1/26 Guest: Dr. T. Colin Campbell, Jacob Gould Schurman Professor Emeritus of Nutritional Biochemistry, Cornell University
- 1/31 Carbohydrates (Chapter 4)
- 2/2 Carbohydrates / Alcohol (Chapter 4)
- 2/7 Lipids (Chapter 5)
- 2/9 Lipids (Chapter 5)
- 2/14 Cardiovascular Disease (pp. 398 – 407) / Exam 1 Review
- 2/16 **Exam 1**
- 2/21 Protein (Chapter 6)
- 2/23 Protein (Chapter 6)/Vitamins (Chapter 7)
- 2/28 Vitamins (Chapter 7)
- 3/2 Energy Balance (Chapter 9)
- 3/6 – 3/10 SPRING BREAK! ☺
- 3/14 Healthy Weight / Fad Diets (Chapter 9)
Diet Assessment Assignment Description

- 3/16 Sports Nutrition (Chapter 10) -- Guest: Prof. Joe Carlson, Ph.D., R.D., MSU
Department of Radiology/Food Science and Human Nutrition
- 3/21 Food Insecurity / Hunger (Chapter 15) Movie: Minnesota Starvation Study
- 3/23 Healthy at Every Size -- Guests: Esther Park, MS, RD; Jon Robinson,
Ph.D., M.S.
- 3/28 Healthy Body Image/Eating Disorders (pp. 351 – 358) / Exam 2 Review
- 3/30 **Exam 2**
- 4/4 Water and Minerals (Chapter 8)
- 4/6 Minerals (Chapter 8)
**Diet Assessment Assignment Due in class/Newspaper Analysis
Assignment Description**
- 4/11 Local and Organic Food (Chapter 15) -- Guest: Dr. Laurie Thorp, MSU
Director of the Residential Initiative on the Study of the Environment
- 4/13 Food Safety (Chapter 14)
- 4/18 Pregnancy and Infant Nutrition (Chapter 12) -- Guest: Dr. Jean Kerver,
MSU Department of Epidemiology
- 4/20 Guest: Dr. Eric Hentges, Director for the Center for Nutrition Policy and
Promotion, US Department of Agriculture
Newspaper Analysis Assignment Due in class
- 4/25 Feeding Kids (Chapter 13) / Exam 3 Review
- 4/27 **Exam 3**

Final Exam (Optional):

Section 1 (10:20 am – 11:40 am): Wednesday, May 3, 10:00 am - noon
Section 2 (1:00 pm – 2:20 pm): Tuesday, May 2, 12:45 – 2:45 pm

CAATE Competencies and proficiencies covered in this class:

- NU-C2 Describe the USDA's "My Pyramid" and explain how this can be used in performing a basic dietary analysis and creating a dietary plan for a patient.
- NU-C3 Identify and describe primary national organizations responsible for public and professional nutritional information.
- NU-C4 Identify nutritional considerations in rehabilitation, including nutrients involved in healing and nutritional risk factors (e.g., reduced activity with the same dietary regimen and others).
- NU-C5 Describe common illnesses and injuries that are attributed to poor nutrition (e.g., effects of poor dietary habits on bone loss, on injury, on long-term health, and on other factors).
- NU-C6 Explain energy and nutritional demands of specific activities and the nutritional demands placed on the patient.
- NU-C7 Explain principles of nutrition as they relate to the dietary and nutritional needs of the patient (e.g., role of fluids, electrolytes, vitamins, minerals, carbohydrates, protein, fat, and others).
- NU-C9 Describe the principles, advantages, and disadvantages of ergogenic aids and dietary supplements used in an effort to improve physical performance.
- NU-C10 Explain implications of FDA regulation of nutritional products.
- NU-C11 Identify and interpret pertinent scientific nutritional comments or position papers (e.g., healthy weight loss, fluid replacement, pre-event meals, and others).
- NU-C12 Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control.
- NU-C15 Identify effects of macronutrients (e.g., saturated fats, incomplete proteins, and complex carbohydrates) on performance, health, and disease.
- NU-C16 Describe signs, symptoms, and physiological effects of mineral deficiency (e.g., iron, and calcium), and identify foods high in specific mineral content.
- NU-C17 Identify and explain food label Daily Value recommendations and common food sources of essential vitamins and minerals in using current USDA Dietary Guidelines.
- NU-C19 Explain the relationship between basal metabolic rate, caloric intake, and energy expenditure in the use of the Food Pyramid Guidelines.

NU-C20 Identify the nutritional benefits and costs of popular dietary regimen for weight gain, weight loss, and performance enhancement.

NU-P3 Provide educational information about basic nutritional concepts, facts, needs, and food labels for settings associated with physically active individuals of a wide range of ages and needs.

NU-CP2 Demonstrate the ability to recognize disordered eating and eating disorders, establish a professional helping relationship with the patient, interact through support and education, and encourage vocal discussion and other support through referral to the appropriate medical professionals.