

THE SCIENCE OF HUMAN NUTRITION
Food Science and Hospitality Education (FSHE) 185
Spring 2012

Instructor: Grant Itomitsu

Classroom: `Ohelo 124

Tuesday-Thursday: 33292 (8:00am-9:50am), 34361 (10:00pm-11:50pm), 34362 (2:00pm-3:50pm)

Wednesday-Friday: 33294 (12:00pm-1:50pm)

Course Description: FSHE 185 is the integration of natural science concepts basic to the study of human nutrition. Emphasis is placed on the nutrient requirements of healthy individuals, nutrient categories and their characteristics, physiological functions, and food sources. Course includes the review and adaptation of dietary practices to reflect current nutritional concerns and issues.

Course Objectives: The primary objective of this course is to provide a science-based nutrition background that will help you make appropriate, informed choices from the vast array of foods available in today's marketplace. Upon completion of this course you should be able to:

- Identify factors that influence why you eat as you do and how changes can be made in your diet
- Compare the various types of nutrition studies in terms of research techniques and reliability of results.
- Evaluate the nutritional adequacy of your diet using the U.S. Dietary Guidelines, the MyPlate, the Dietary Reference Intakes, the food labels and the food composition tables.
- List and describe the six classes of nutrients, their functions, risks of excess/deficiencies, sources and guidelines for intake.
- Identify the energy producing nutrients and how an excess or a deficiency of energy can affect the body.
- Describe over and under nutrition and discuss causes, cures and associated health effects.
- Describe the effects farm production, processing, and storage have on nutrients
- Discuss current issues related to the safety of the food supply using concepts from toxicology.
- Discuss how alcohol and other drugs interact with the nutritional process.
- Describe the physiological changes that occur during the life cycle and explain the changes in nutrient needs that accompany those changes.
- Evaluate nutrition information in popular media critically.

Instructor:

Grant Itomitsu, RD

Ohelo 104

Email: gitomits@hawaii.edu

*Office hours: Tuesday/Thursday 12:45pm - 1:45pm

Wednesday 9:00am - 11:00am

Friday 2:00pm-3:00pm

Virtual Office: To be announced

Please feel free to schedule an appointment to meet with me for any concerns.

Requirements

Text:

- Nutrition: An Applied Approach. Thompson, J. & Manore, M.
Pearson Benjamin Cummings, 1301 Sansome St., San Francisco, CA 94111.

Internet Access:

- Electronic Mail: Communication with students may be done via UH mail accounts and should be checked daily.
- Lailima: laulima.hawaii.edu (Be sure not to put "www")

Scantron Sheet:

- Form 229633 (Letter Sized with 200 questions) for the Final Exam.

**Subject to change*

Course Evaluation

Course evaluation is based on a sum of 500 points as outlined below. Grading will be based on a strict scale as outlined below unless the instructor deems it appropriate to change the scale proportionately.

Grading Scale

90% above	=	A	(450+ points)
80-89.9%	=	B	(400-449 points)
70-79.9%	=	C	(350-399 points)
60-69.9%	=	D	(300-349 points)
<60%	=	F	(<300 points)

QUIZZES & EXAMINATIONS: Fifteen (15) quizzes, Three (3) module exams and one (1) final exam will be given to assess each student's mastery nutrition comprehension, knowledge.

Quizzes are worth 10 points each, equivalent to 30% of total course points. The format of quizzes may be any of the following: short answer, matching, multiple choice, calculations, and True/False. The purpose of a quiz is to help students understand key concepts highlighted in reading assignments, which is then reemphasized in class lectures and activities. Quizzes will only be focused on one or two chapters at a time. However, it is expected that the student will draw from their accumulated knowledge in developing their response and applying it to questions. Quizzes are closed book, with no notes and no dictionaries or translator books/devices. No headphones may be worn throughout class. **NO LATE QUIZZES** are given.

Module Examinations are worth 50 points each, equivalent to 30% of total course points. The format of exams will be short answer, matching, multiple choice, True/False, calculations, and may include extra credit questions. Students are expected to review each module for the respected exam. Students are expected to bring at least one sharpened #2 pencil, a picture ID and a calculator (when indicated) to every exam. Exams are closed book, with no notes and no dictionaries or translator books/devices. No headphones may be worn throughout class.

The **Final Examination** is worth 100 points, equivalent to 20% of total course points. The final exam will be a **cumulative** of Modules 1, 2 and 3. The final exam will be in multiple-choice format and computer scored. The purpose of the final exam is to assess student's mastery of the entire course. A sharpened no. 2 pencil must be used for the final exam. ID's may be collected before the exam; students without ID's may not be allowed to take the exam. Final examination must be completed in order to receive a course grade.**

NO FINAL EXAM WILL BE GIVEN PRIOR TO SCHEDULED EXAM DATES. SEE SCHEDULE.

MAKE-UP QUIZES/EXAMS

If you miss a quiz and bring a written doctor's (MD's) excuse for illness, your quiz score will be figured on the remaining quizzes. Exams will need to be made up within one week of returning from illness. If you do not bring a medical excuse within two class days after the medical return date, no credit will be given and that portion of your grade will be figured with the unexcused, missed quiz/exam entered as a "zero".

ASSIGNMENTS: Four written homework exercises will be assigned during the course worth a total of 100 points. This will comprise 20% of total course points. Assignments will be distributed during the semester. All assignments must be turned in at the beginning of class on the day they are due, not after the class. The assignment will not be accepted for full credit later in the day. Partial credit may be given for a late assignment turned in after its due time and date. You are expected to complete these assignments for discussion in class. Printing concerns are your responsibilities and are not grounds for excuse of late work. Significant amount of class time will be devoted to completing assignment 4. However, if you are having trouble completing assignment 4 it is your responsibility to take additional time (out of class) to complete this assignment prior to the due date.

PROFESSIONALISM: A set amount of points will not be given for professionalism however this may assist your final grade should it be borderline. This subjective assessment will be determined by the instructor. It is encouraged to help optimize student performance. The criteria for "Professionalism" may include student's punctuality, attendance, attentiveness in class, preparedness for class and participation during class discussions.

**Special exceptions may apply.

Assignments and Grading

As assignments, quizzes and exams are returned, please enter your points under the “Points Earned” column so you have a running total of your scores throughout the semester.

	Max Points	Points Earned	Description	Due Date	
				Tuesday Thursday	Wednesday Friday
Assignments					
1	20		Food Pyramid Assessment/ Food Frequency	Jan 24	Jan 25
2	20		Food Label	Jan 31	Feb 1
3	20		Body Composition/Energy Expenditure	Mar 6	Mar 7
4	<u>40</u>		Putting it all Together	Day of Final Exam	Day of Final Exam
Total	100				
Quizzes					
1 (Ch 1)	10		6 Classes of Nutrients	Jan 17	Jan 18
2 (Ch 3)	10		Digestion, Absorption, Transport	Jan 19	Jan 20
3 (Ch 4)	10		Carbohydrates	Jan 24	Jan 25
4 (Ch 5)	10		Fats	Jan 26	Jan 27
5 (Ch 6)	10		Protein	Jan 31	Feb 1
6 (Ch 10)	10		Metabolism	Feb 2	Feb 3
7 (Ch 11)	10		Body Composition	Feb 16	Feb 17
8 (Ch 7)	10		Fluids and Electrolytes	Feb 23	Feb 24
9 (Ch 8)	10		Antioxidants	Feb 28	Feb 29
10 (Ch 9)	10		Bone Health	Mar 6	Mar 7
11 (Ch 10)	10		Metabolism and Blood	Mar 8	Mar 9
12 (Video**)	10		Obesity **Based on Video	Mar 20	Mar 21
13 (Ch 12)	10		Fitness	Mar 22	Mar 23
14 (Ch 15)	10		Pregnancy and Lactation	Apr 3	Apr 4
15 (Ch 16-I)	10		Infancy, Children	Apr 10	Apr 11
16 (Ch 16-II)	10		Elderly	Apr 12	Apr 13
Total	150				
Exams					
Module 1	50		Chapters 1-6	Feb 9	Feb 10
Module 2	50		Chapters 7-12	Mar 13	Mar 14
Module 3	50		Chapters 15-16 and Video	Apr 17	Apr 18
Final Exam	<u>100</u>		Cumulative Multiple choice	See Schedule	See Schedule
Total	250				
Grand Total					
	500				

Grading Scale

A	90% above	500-450+ points
B	80-89.9	400-449 points
C	70-79.9	350-399 points
D	60-69.9	300-349 points
F	<60%	<300 points

Semester Day by Day Breakdown

Class Day	Date	Topic*	Reading & Assignments**
1	Jan 10 & 11	Introduction/Course Expectations	Get all required materials
2	12 & 13	Ch. 1 Introduction to Nutrition Ch. 2-I Basics of Eating Well: Part I	Read Chapter 1 & 2 Explain Assignment #1
3	17 & 18	Ch. 2-II Math and Food Labels (In Class: Basic Nutrition Calculations)	Bring Calculators Explain Assignment #2
4	19 & 20	Ch. 3 Overview of Digestion/Absorption	Read Chapter 3
5	24 & 25	Ch. 4 Carbohydrates	Read Chapter 4 (pg. 116-152) DUE: Assignment #1
6	26 & 27	Ch. 5 Lipids	Read Chapter 5 (pg. 170-203)
7	31 & Feb 1	Ch. 6 Proteins	Read Chapter 6 (pg. 210-244) DUE: Assignment #2
8	2 & 3	Ch 10 Cellular Metabolism	
9	7 & 8	PRE EXAM PREP (only for 1 st exam)	
10	9 & 10	Exam 1 (Ch.1-6)	Bring #2 pencil and a calculator
11	14 & 15	Exam Review	
12	16 & 17	Ch. 11 Body Composition	Read Chapter 11 (pg. 440-474)
13	21 & 22	In Class: Assignment #3.	Explain Assignment #3
14	23 & 24	Ch. 7 Fluids and Electrolytes	Read Chapter 7 (pg. 264-294)
15	28 & 29	Ch. 8 Antioxidants	Read Chapter 8 (pg. 302-349)
	Mar 1 & 2	Professional Development/Hookipa	
16	6 & 7	Ch. 9 Bone Health	Read Chapter 9 (pg. 360-393) DUE: Assignment #3
17	8 & 9	Ch. 10 Metabolism & Blood	Read Chapter 10 (pg. 400-430)
18	13 & 14	Exam #2 (Ch. 7-11)	Bring #2 Pencil
19	15 & 16	Exam # 2 Post Review	
20	20 & 21	Video: Obesity	
21	22 & 23	Ch. 12 Fitness	Read Chapter 12 (pg. 482-511)
	Mar 26-30	SPRING BREAK	
22	Apr 3 & 4	Ch. 15 Pregnancy	Read Chapter 15 (pg. 600-633)
	5 & 6	HOLIDAY Good Friday	
23	10 & 11	Ch. 16-I Infancy, Children, (Elderly)	Read Chapter 16 (pg. 640-660)
24	12 & 13	Ch. 16-II (Infancy, Children), Elderly	Read Chapter 16 (pg. 660-672)
25	17 & 18	Exam #3 (Video and Ch 12, 15, 16)	Bring #2 Pencil
26	19 & 20	Exam #3 Post Review	Hand out Diet Recall
27	24 & 25	Assignment #4: Input Data	Bring in Diet Recall, Hand out Assignment #4
28	26 & 27	Assignment #4: Revise and Balance	Work on Assignment #4
29	May 1 & 2	Assignment #4: Exercise	Finish In-class part on Assgn. #4
30			
31		FINAL EXAM: Modules I, II & III <i>See Next Page for Schedule</i>	DUE: Assignment #4 Bring #2 Pencil
		*Covered topics are subject to change	** Readings of each days chapter to be done before scheduled class

Final Exam Schedule: (Bring #2 Pencils)

T-Th Sections:	TUESDAY, May 8 th , 2012
33292	07:45am - 9:45am
34361	10:00am - 12:00pm
W-F Section	WEDNESDAY, May 9 th , 2012
34362	12:15am - 2:15pm
T-Th Section:	THURSDAY, May 10 th , 2012
33294	12:15pm - 2:15pm

Disability Statement

“If you are a student with a documented disability and have not voluntarily disclosed the nature of your disability and the support you need, you are invited to contact the Disability Support Services Office (DSSO) at Iliahi 113, 734-9552 (V/ITTY), or email at kapdss@hawaii.edu for assistance.”

Student responsibilities. Students are expected to:

- ◆ Read assigned course materials prior to class;
- ◆ Come to class on time, take notes, participate in class discussions and activities;
- ◆ Complete and turn in assignments on time;
- ◆ Ask questions in or after class, by appointment or via email;
- ◆ Study as needed;
- ◆ Report any academic dishonesty;
- ◆ Request assistance when needed, prior to the due date of an assignment;
- ◆ Work with other students in studying and completing assignments;
- ◆ Respectfully dispute any grades but not excessively about undesired outcomes; and
- ◆ Follow the UH student conduct code.

Academic Honesty: Because the university is an academic community with high professional standards, its teaching function is seriously disrupted and subverted by academic dishonesty. Such dishonesty includes, but is not limited to, cheating, which includes giving / receiving unauthorized assistance during an examination; obtaining information about an examination before it is given; using not allowed / inappropriate sources of information during an examination; altering answers after an examination has been submitted; and altering the record of any grade. Refer to the UH Student Conduct Code for further information. Students caught cheating once may risk receiving an F for the class.

In instructional activities, students are responsible for meeting all of the instructor’s attendance and assignment requirements. Failure to do so may affect their final grade. In all college-related activities, including instruction, they must abide by the college’s codes and regulations, refraining from behavior that interferes with the rights and safety of others in the learning environment. Finally, if they decide to file a grievance, they are full responsible for providing proof that they have been wronged.

The instructors are expected to:

- ◆ Be knowledgeable of course content;
- ◆ Provide instruction in a way that encourages learning and enjoyment of the field of nutrition;
- ◆ Be prepared for each class;
- ◆ Answer questions clearly and respectfully;
- ◆ Provide fair assignments, quizzes, etc. and otherwise be unbiased and fair;
- ◆ Be available to assist students in a timely manner and return graded materials in a timely manner;
- ◆ Listen and respect students, their suggestions, and request for assignment or quiz grading revision;
- ◆ Build on student’s academic potential and study skills.

Classroom Rules:

No eating or drinking allowed in computer room.

All computers must be **turned off** and monitors must be **turned around** at the start of class.

Turn off audio players and put them away. (NO earphones/headsets in your ear or around your neck)

Turn off all cell phones and put them away (It should not be visible while in class). NO making or taking calls, texting, Web browsing, Emailing, Use of applications, twittering, etc. (If your phone goes off in class then you will be docked 15 points automatically).

All Culinary Arts Majors please note below:

WARNING and NOTIFICATION of HAZARDS and RISKS

All occupations within the Culinary and Pastry Arts Profession have inherent risks that prospective students should be aware of. The purpose of this **Warning of Hazards and Risks** is to bring students' (parents') attention to the existence of potential dangers, to aid them in making an informed decision concerning participation in the program, and in signing the Assumption of Risk and Release of Liability Waiver form.

Occupational hazards for the field of culinary/pastry arts include, but are not limited to:

- cuts and abrasions due to handling sharp objects
- slips and falls due to wet, slippery or uneven floors
- strained muscles and backs due to lifting of heavy objects
- exposure to foods that one may be allergic to
- exposure to hazardous cleaning chemicals
- accidental injury in an internship or practicum experience or en route to or from an internship or practicum experience
- injury or illness that can affect one's personal health or the health of an unborn child
- scalding and burns that may result in permanent disfigurement, disability or death

An injury or illness can impair one's general physical and/or mental health and may hinder one's future ability to earn a living, engage in business, social, or recreational activities, or generally impair one's ability to enjoy life. There may also be risk of injury, illness, or death resulting from causes not specified in the **Warning and Notification of Hazards and Risks**.

In addition to acknowledging hazards and risks, the applicant must take responsibility regarding matters of safety involving self and others. After receiving instruction, students will be expected to demonstrate safety practices. Students must inform appropriate faculty of any relevant personal medical condition that might be hazardous or risky to self or others. A student may be required to submit permission from his/her personal physician to participate in culinary/pastry arts education activities. **The student is responsible for obtaining his/her own health insurance.** The student must also purchase his/her own liability insurance if one is required by a practicum or internship site.

Upon entering Kapi'olani Community College's Culinary/Pastry Arts program, the student will be required to sign an Assumption of Risk and Release of Liability Waiver.