

FD'02

**Biology 131 Human Nutrition**  
**Chaminade University of Honolulu**  
**Fall 2002**  
**Mrs. Patricia Lee-Robinson**  
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**Office Hours: MWF 10:30-11:00 am and TR 11:00-11:30 am**  
**Or by appointment**

**Course Description:** BI 131 is a 3-credit beginning level biological science course that integrates basic concepts of science with the study of human nutrition. It is designed for the person who wants an introduction to nutrition and who may later choose a major in it. No college-level science background is required; rather the course will provide elementary aspects of the several biological sciences that are needed. Concurrent registration in Biology 131L is required.

Course content includes information on what nutrients are and what nutrients and foods do for humans; how healthy people can best get the amounts of nutrients and foods they need throughout their lifetime; how people and the environment change foods and their nutrient content; and nutrition issues of current interest.

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:

- 1) identify factors that influence why you eat as you do and how to make changes in your diet.
- 2) compare the various types of nutrition research with respect to type and reliability of information produced.
- 3) use the U.S. Dietary Guidelines and Food Guide Pyramid to evaluate the nutrient adequacy of your diet.
- 4) use and understand the components of a food label.
- 5) describe what nutrients are and state basic information about each of six categories of nutrients (e.g.; functions in the body, risks of excesses/deficiencies, sources, guideline for intake).
- 6) identify which nutrients are sources of energy for the body and how an excess or a deficiency of energy can affect the body.
- 7) define malnutrition as over-and undernutrition and discuss its causes, cures, and associated health effects.
- 8) discuss current issues related to the safety of the food supply using concepts from toxicology.
- 9) describe physiological changes that occur during the life span and explain the changes in nutrient needs that accompany these changes.
- 10) discuss how alcohol and other drugs interact with nutritional processes.
- 11) evaluate nutrition information in popular media critically, with respect to its correctness.

**HELP** is available when you need or want it. If you are having trouble with the course or have questions or comments, please arrange an appointment.

**Required Text:** G.M. Wardlaw. Contemporary Nutrition: Issues and Insights, Brown and Benchmark Publishers, 2003, 5<sup>th</sup> Edition (abbreviated GMW).

**Recommended Text:** G.M. Wardlaw. Study Guide, Contemporary Nutrition: Issues and Insights, Brown and Benchmark Publishers, 2002, 5<sup>th</sup> Edition (also available on publisher's website).

**Course Grade:** The final grade for the course will be based on three components:

Four 40-minute examinations (35 points each)	140
Average of 3 written assignments	40
Final Examination (mandatory)	<u>100</u>
Total Points	280

Specific information about grading will be discussed during the first week of classes. Letter grades will **NOT** be assigned to individual assignments or exams; however, approximate grades for score ranges will be discussed in class.

**Examinations:** Four 40-minute in-class exams and a 120-minute in-class final will be given to provide the majority of the input for evaluating your learning in the course. Mark your calendars for the correct dates and times.

NO MAKEUP EXAMS are given. If you miss an exam and bring a written doctor's (MD's) excuse for illness, your exam score will be figured on the three remaining exams. If you do not bring a medical excuse within two class periods after missing the exam, no credit will be given and that portion of your exam grade will be figured on 4 exams, with the unexcused, missed exam entered as a "zero". **NO student may miss 2 or more examinations; NO student will pass the course without taking the final examination.**



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 inappropriate/unallowed sources of information during an examination; altering answers after an examination has been submitted; and altering the record of any grade. (Refer to the Chaminade University student handbook for further information.)

**Assignments:** Three written homework exercises will be assigned during the semester. Assignments must be turned in during the class period on the day they are due, not after the class; they will not be accepted later in the day. No credit will be given for an assignment turned in after its due time and date.

Before you begin each assignment, you may want to make a photocopy of the pages you will be handing in. This way, if you make a mistake, it will be easier to redo your work on a clean page.

Topics/Readings for Semester

Date	Topic	Reading
Week #1 26-28 Aug.	Syllabus and Introduction What you eat and why	GMW Preface to the student, pp XXV - XXVI GMW Chapter 1, pp 1 – 30
30 Aug	NO CLASS: Spiritual Convocation 11:00 am – 1:00 pm	
M 2 Sept.	Holiday: Labor Day	
Week #2 3-6 Sept.	What you eat and why (continued) Tools for designing a healthy diet	GMW Chapter 2, pp 31 - 70
Week #3 9-13 Sept.	Tools for designing a healthy diet (continued) The human body: A nutrition perspective	GMW Chapter 3, pp 71 – 108
Week #4 16-20 Sept	ASSIGNMENT #1 DUE September 16: Assessing Dietary Intake The human body: A nutrition perspective (continued) Water	GMW Chapter 8, pp 289 - 296
Week #5 23-27 Sept.	Carbohydrates September 25: EXAMINATION #1 (covering topics through “The human body: A nutrition perspective”)	GMW Chapter 4, pp 109 - 142

Date	Topic	Reading
Week #6 30 Sept.- 4 Oct	Carbohydrates (continued) Lipids	GMW Chapter 5, pp 143 - 186 GMW Chapter 8, pp 282 - 288
Week #7 7-11 Oct.	Lipids (continued) Proteins	GMW Chapter 6, pp 187 - 216
Week #8 14-18 Oct.	Proteins (continued) Energy balance and weight control	GMW Chapter 10 pp 339 - 382 GMW Chapter 11, pp 389 - 395
<b>October 18: EXAMINATION #2</b> (covering "Water" through "Proteins")		
Week #9 21-25 Oct.	Energy balance and weight control (continued) Eating disorders: Anorexia nervosa, bulimia nervosa, and other conditions	GMW Chapter 12, pp 415 - 442
<b>ASSIGNMENT #2 DUE October 25:</b> Determining a daily "fat budget"		
Week #10 28 Oct. -1 Nov.	Undernutrition throughout the world Vitamins	GMW Chapter 17, pp 567 - 597 GMW Chapter 8, pp 239 - 288
Week #11 4- 8 Nov.	Vitamins (Continued)	
<b>November 6: EXAMINATION #3</b> (covering "Weight control" through "Undernutrition throughout the world")		
8 Nov	<b>Last Day to withdraw from classes</b>	
<b>M 11 Nov</b>	<b>Holiday: Veterans' Day</b>	
Week #12 12-15	Vitamins (continued) Minerals	GMW Chapter 9, pp. 297 - 338
Week #13 18-22 Nov.	Food safety Pregnancy and breastfeeding	GMW Chapter 16, pp 539 - 566 GMW Chapter 13, pp 443 - 474
<b>ASSIGNMENT #3 DUE: November 18</b> Current food safety issues		



Date	Topic	Reading
Week #14 25-27 Nov.	Nutrition from infancy through adolescence	GMW Chapter 14, pp. 475 – 512
	<b>November 25: EXAMINATION #4</b> (40 minutes) (covering topics “Vitamins” through “Food preservation and safety issues”)	
<b>R-F 28-29 Nov.</b>	<b>Holiday: Thanksgiving</b>	
Week #15 2-6 Dec.	Nutrition: Fitness and sports Alcohol Nutrition during adulthood Future Food	GMW Chapter 11, pp 383 - 414 GMW Chapter 7, pp 217 - 238 GMW Chapter 15, pp 513 - 538 To be announced
Week #16 9-11 Dec.	Final Exam Week <b>Final Examination: Wednesday, December 11, 2002, 10:30 AM-12:30 PM</b> (part comprehensive and part covering “Nutrition for pregnancy and breastfeeding through “Future food”)	

**Note:** Every effort has been made to insure that the material in this syllabus is accurate and complete. However, occasionally changes must be made in the printed schedule. Thus the instructor reserves the right to make any changes in the contents of this syllabus that she deems necessary or desirable. These changes, if any, will be announced as soon as the need for them becomes apparent.