BI131 – Human Nutrition

Syllabus Spring 2018

Instructor: Dr. Michael Weichhaus Address: Wesselkamper, Room 107

Phone: 440-4286

Email Address: michael.weichhaus@chaminade.edu
Office Hours: Wed: 15:00-17:00 and Thu: 9:00-11:00
Class Hours: MWF 11:30-12:20 Henry Hall, Room 225

Texts:

• Smolin & Grosvenor: "Nutrition: Science and Applications", 4th Edition 2016, Wiley

Aims of the course: This course covers the scientific basis of modern nutritional theory and practice. It will address the needs of both health professionals and anyone interested in personal nutritional requirements. Students will learn and apply these principles to diet planning for both everyday wellness, and also for the prevention and treatment of pathology. The anatomical, physiological, chemical and physical basis of this science will be explored. Student interest will determine which special topics will be emphasized. The student will be expected to apply these principles to a detailed analysis of their own diet.

At the end of the course you should be able to:

- 1. name the 6 nutrients, and further identify the energy yielding vs. the non-energy yielding nutrients
- 2. use the US Dietary Guidelines and MyPlate to evaluate the nutritional adequacy of your diet
- 3. use and understand the components of a food label
- 4. describe the role and state basic information about each of the six nutrients; such as functions in the body, risks of excesses/deficiencies, food sources, etc.
- 5. define malnutrition (as over or under nutrition) and discuss its causes, cures, and associated health effects
- 6. discuss current issues related to food safety
- 7. describe the physiological changes that occur from infancy through old age, and explain the changes in nutrient needs that accompany these
- 8. discuss how alcohol and other drugs interact with nutritional processes
- 9. evaluate nutrition information in popular media for its soundness
- 10. understand how proper nutrition effects physical exercise ability
- 11. understand the role that proper nutrition plays in averting certain illnesses
- 12. gain an appreciation for nutritional science and biological sciences in general

Lecture Assignments

- 1. Lecture topics are listed on the attached outline. Each lecture has a reading assignment to be completed by the student
- 2. Each student will be expected to complete 3 writing assignments as indicated below.
- 3. Attendance is expected in lecture sessions. A sign in sheet will be passed around during each class., and unexcused absences will reduce your grade. Excused absences will not reduce your grade.

- 4. You are expected to complete Mastering Nutrition Assignments in a timely manner as indicated below.
- 5. You will present your results of studying one nutrient that will be assigned to you in week 3.

Evaluation of Student Performance

- 1. Separate grades are given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory.
- 2. Exam grades may be curved, if class average results are below 70%. The scale used is given below.
- 3. There will be three midterm exams and one final exam for this course. Exam schedule is attached.
- 4. The final examination is a two-hour comprehensive examination including topics from the beginning of the course.
- 5. Extra credit work may be made available at the discretion of the instructor.
- 6. Missed exams can only be made up for valid excuses (to be determined by the instructor). In cases of illness, a physician's note is necessary.
- 7. The lecture grade will be determined in the following manner:

		Strict scale:	90% - 100% = A
Summaries	15 percent		80% - 90% = B
1 st Lecture Exam	12 percent		70% - 80% = C
2 nd Lecture Exam	12 percent		50% - 70% = D
3 rd Lecture Exam	12 percent		Below $50\% = F$
Presentation	10 percent		
Attendance	5 percent		
Chapter Quizzes	15 percent		
Final exam	19 percent		
	100 percent		

Class standing:

The instructor, prior to the withdrawal deadline, will notify students with grades of D or lower. Students receiving deficiency notices are required to arrange a conference with instructor.

Student Expectations

1. Disability Access

Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to

academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at 808-735-4845 for further information.

2. Title IX Compliance

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source you may contact the following:

- a. Chaminade Counseling Center 808 735-4845.
- b. Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.

3. Academic Conduct Policy

The success of the Honor Code is made possible only with the acceptance and cooperation of every student. Each student is expected to maintain the principles of the Code. Example of Honor Code violations include, but are not limited to:

- Giving or receiving information from another student during an examination;
- Using unauthorized sources for answers during an examination;
- Illegally obtained test questions before the test;
- Any and all forms of plagiarism submit all or part of someone else's work or ideas as your own;
- The destruction and/or confiscation of school and/or personal property.
- Violations of the Honor Code are serious. They harm other students, your professor, and the integrity of
 the University. Alleged violations will be referred to the Office of Judicial Affairs. If found guilty of
 plagiarism, a student might receive a range of penalties, including failure of an assignment, failure of an
 assignment and withholding of the final course grade until a paper is turned in on the topic of
 plagiarism, failure of the course, or suspension from the University.

Violations of Academic Integrity: Violations of the principle include, but are not limited to:

- Cheating: Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices in any academic exercise.
- Fabrication and Falsification: Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of inventing or counterfeiting information for use in any academic exercise.
- Multiple Submissions: The submission of substantial portions of the same academic work for credit (including oral reports) more than once without authorization.
- Plagiarism: Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source).
- Abuse of Academic Materials: Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource materials.

• Complicity in Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

Plagiarism includes, but is not limited to:

- Copying or borrowing liberally from someone else's work without his/her knowledge or permission; or with his/her knowledge or permission and turning it in as your own work.
- Copying of someone else's exam or paper.
- Allowing someone to turn in your work as his or her own. DO NOT provide your work to someone else for reference.
- Not providing adequate references for cited work.
- Copying and pasting large quotes or passages without properly citing them.

On-Campus Tutoring

- Retention, Advising, and Career Preparation offers free, one-on-one tutoring for all undergraduate students at Chaminade. Subjects tutored include, but are not limited to: biology, chemistry, math, nursing, English, etc. The tutoring corps consists of trained Peer and Professional Tutors.
- Tutoring is available by appointment only. Tutoring takes place in either the Student Support Services building during the hours of 8:30 a.m. to 4:30 p.m., Monday to Friday.
- In order to receive tutoring, a student can visit the Student Support Services building and complete an information form. After submitting this form, a staff member will assist the student in creating an online account that allows him/her to book a tutoring appointment through the online system.
- All appointments must be made two days prior to the desired appointment. Cancellations must be made 24 hours in advance.

Online Tutoring through Smarthinking

- All CUH students are eligible to use Smarthinking, an online tutoring system. Students are able to access Smarthinking via their eCollege account.
- Through Smarthinking, students are able to connect in real-time with an expert educator in a variety of subjects using a virtual whiteboard technology. Students also have an option to schedule a 30-minute appointment with a tutor of their choice. The Online Writing Lab provides students with the ability to receive a detailed, personalized critique of any written assignment through a formal critique process.
- All sessions are archived and available for students to review at any time for studying or test preparation.

For any questions related to tutoring services, please contact Nicolle Bekers, Tutor Coordinator, at nicolle.bekers@chaminade.edu.

Appropriate Technology

- 1. Please have a mobile device (e.g. cell phone, tablet, laptop) with you in class. Alternatively you may bring your laptop. Lecture slides will be available to you prior to class through google slides. These are provided to you as an additional learning tool.
- 2. Participation in in class polling is encouraged through PollEverywhere. Instructions will be provided during class. (pollev.com/weichhaus)

Nutritional Research Article Summaries

- 1. Each student is to submit a three written assignments. The assignments will be based on recent research articles pertaining to current issues of nutritional health or understanding.
- 2. The assignments will be provided by the instructor **FOUR** weeks before the summary due date as indicated below. Students are expected to submit individually written summaries. Group work, interaction with the instructor and seeking help online is desired.
- 3. There will be three summaries due during the semester. The summaries will count as a total of 15% of your grade (5% each).
- 4. Summaries must be typed or word processed (use 12 point font). University writing standards are expected. Summaries should be around **500 words**.
- 5. Submissions must be uploaded into canvas. Submission dates are outlined below, the time of submission is 11:59pm.
- 6. Late submission policy: Late submission of up to 24h will result in one letter grade reduction in your grade, submissions less than 48h late will result in two letter grades deduction. Submission more than 48h late will result in a zero for the assignment.

Lecture Presentation

After the add/drop period, each student will be randomly assigned a micronutrient to be presented during class.

You are expected to familiarize yourself with the nutrient as much as possible. For your presentation you are expected to present the following:

- 1. Definition: What is your nutrient?
- 2. Functional role: What does it do in the body? How does the body use it?
- 3. Daily needs: How much are we supposed to consume each day?
- 4. Source: Which types of food provide a good amount of the nutrient?
- 5. Toxicity and Deficiency: What happens when we don't get enough or too much of the nutrient?

You are expected to utilize meaningful visual aids, such as powerpoint or other presentation software. Your presentation is supposed to be 10 min in length followed by questions from your peers.

Upload the presentations as ppt or pdf file to canvas.

Biology 131 / Spring 2018

Week	Date	Lecture	Reading assignment	Comments		
	1/15	Martin Luther King Jr. Day Holiday – No class				
1	1/16	Syllabus of course, Course overview				
	1/19	What is nutrition?	Chapter 1			
2	1/22	Diet Design	Chapter 2			
	1/24	Marianist Founders' Day Mass - No class				
	1/26	The gastrointestinal tract	-			
3	1/29	Digestion 1	Chapter 3			
	1/31	Digestion 2				
	2/3	Carbohydrate 1	Chapter 4	1 st homework assigned		
	2/5	Carbohydrate 2				
4	2/7	Exam Review				
	2/9	EXAM #1				
	2/12	Lipids 1				
5	2/14	Lipids 2	Chapter 5			
	2/16	Lipids 3	v	1st homework due		
	2/19	Presidents' Day Holiday – No class				
6	2/21	Protein 1				
	2/23	Protein 2	Chapter 6			
7	2/26	Vitamins 1 (A, E, K)	Chapter 7			
	2/28	Vitamins 2 (D, B1, B2)		Student presentations		
	3/2	Vitamins 3 (B3, B5, Folate)				
	3/5	Vitamins 4 (B12, C, Biotin)				
8	3/7	EXAM #2				
8	3/9	Minerals 1 (Sodium/Potassium, Phosphorus, Sulfur)		2 nd homework assigned		
	3/11	Minerals 2 (Calcium, Magnesium, Iron)	Chapter 8	Student presentations		
9	3/14	Minerals 3 (Copper, Zinc, Selenium)				
	3/16	Minerals 4 (Iodine, Chromium, Manganese)				
	3/19	Water	Chapter 8			
	3/21	Alcohol	Chapter 9			
	3/23	Weight management and energy balance 1	Chapter 10	2 nd homework due		
10	3/26					
	3/28	Spring Recess – No class				
	3/30					
11	4/2	Weight management and energy balance 2	Chapter 10			
	4/4	Nutrition and Exercise 1	Chapter 11			
	4/6	Nutrition and Exercise 2				

12	4/9	Food Production	Chapter 12	
	4/11	Food Safety	Chapter 13	
	4/13	Exam Review		3 rd homework assigned
13	4/16	EXAM #3		
	4/18	Pregnancy and Breast Feeding 1	Chapter 14	
	4/20	Pregnancy and Breast Feeding 2		
14	4/23	Infancy through Old Age 1	Chapter 15	
	4/25	Infancy through Old Age 2		
	4/27	World Hunger 1		3 rd homework due
15	4/30	World Hunger 2	Chapter 16	
	5/2	TBD	_	
	5/4	TBD	_	
16	5/9	Final Exam		

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