

HUN 4221
Nutrition and Metabolism
Fall 2014 – Section 1343

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Office hours:	Wednesday 2:00 PM to 3:30 PM *If you cannot make my regularly scheduled office hours, you may e-mail me to schedule an appointment.
Teaching assistant:	Caroline Dunn
Email:	cgdunn@ufl.edu
Office hours:	Tuesday 1:00 to 3:00 PM Thursday 10:00 to 11:00 AM
Location	McCarty Hall D room 3028
Class location and meeting times:	McCarty Hall B room G086 Monday, Wednesday, Friday 5 th Period 11:45 AM to 12:35 PM
Attendance:	Required
Credits:	3

Course Description and Prerequisites: The course content focuses on the metabolism, requirements, deficiencies and excesses of nutrients. Essential micronutrients will be covered with the greatest emphasis on vitamins and minerals. Nutrient utilization will be traced from the food source to digestion and absorption, transport, storage, and excretion. Each metabolic pathway dependent on specific nutrients will be evaluated with an emphasis on how the vitamin or mineral facilitates specific biochemical functions.

The basis of how nutrient deficiencies and excesses result in metabolic abnormalities with functional and potentially toxic consequences will be detailed. Amounts required in the diet to maintain normal metabolic pathways will be a focus of the course. Concepts related to reducing the risk for chronic diseases and birth defects will be highlighted. The validity of health claims for key nutrient supplements will be critiqued by evaluating the metabolic basis and current research. Prerequisites: BCH 3025 or BCH 4024; PET 2350C or PCB 4723C

Course Objectives:

At the completion of this course, students will be able to:

1. recall sources of each nutrient covered.
2. trace the physiological path of each nutrient from digestion to excretion.
3. describe major metabolic pathways of each nutrient.
4. provide a biochemical explanation for a deficiency or toxicity symptom.
5. use the scientific literature to verify or dispute health claims of various nutrients.

Required Course Materials

1. Sakai course material: Lecture notes; quizzes from last year; grades for quizzes and exams.
<http://lss.at.ufl.edu>
 - How to access Sakai:
 - a. Access requires a Gatorlink account. If you need to establish a Gatorlink account, go to <http://www.gatorlink.ufl.edu/>.
 - b. Once you have created a Gatorlink account, access the Sakai homepage at <http://lss.at.ufl.edu>. Continue with the Sakai System entry and log in using your Gatorlink ID. HUN 4221 should be listed as one of your courses. If you are

unfamiliar with Sakai, you can review the “Tutorials” located under services on the Sakai homepage.

Lecture Notes and Exams

Class lecture notes will be posted on Sakai by 7:00 PM the day before the lecture is to be presented so students can download the lectures and have them available for class. A class packet will also be available at Target Copy. Exams will be given in class.

Required Text: Advanced Nutrition and Human Metabolism, 5th Ed, Wadsworth Cengage Learning, 2009; Available at most area textbook stores and online bookstores.

Class Attendance and Demeanor: Students are expected to attend all classes, to arrive on time and to leave when dismissed by the instructor. Students are expected to show courtesy to their classmates and instructor by turning cell phones/pagers off before the class period begins and refraining from engaging in conversations during class unless directed to do so by the instructor.

Student Evaluation: Three exams, ten quizzes, and a team project will be used to evaluate student performance. Each exam will be worth 100 points and will cover one-third of the semester’s course content. Exams must be taken when scheduled. Absence from an exam will result in a grade of “0” unless there are unavoidable extenuating circumstances (subject to our discretion) that can be documented to our satisfaction. Extenuating circumstances include unavoidable, unplanned situations such as illness (chart note from physician or clinic; vague notes such as “was seen” are not acceptable); family death (dated obituary); accident (police report); etc. Make up exams will **NOT** be given. An excused, documented absence from an exam will result in the grade for the missed exam being calculated as the average of the other two exams.

Ten 10 point quizzes will be given. Make up quizzes will **NOT** be given. The lowest quiz grade will be dropped and nine quiz grades will be counted towards the final grade. A missed quiz will count as the dropped quiz. Any other missed quizzes will result in a grade of “0” unless there are unavoidable extenuating circumstances as mentioned above or you have an interview at a professional school, which also will require documentation. An excused, documented absence from a quiz will result in the grade for the missed quiz being calculated as the average of the other quizzes.

The Nutrition Education for the Public Project will be worth 50 points. See description below for more information.

Periodic bonus points may be given on unscheduled dates to check attendance. Bonus points will be added to total points at the end of the semester. **There will be NO make-up bonus points even if the absence is excused.**

Performance Indicators	Points
EXAM 1	100
EXAM 2	100
EXAM 3	100
9 QUIZZES	90
PROJECT	<u>50</u>
Total	440

Grading scale: (Grades will **NOT** be curved.)

A = 407-440 A- = 394-406 B+ = 381-393 B = 363-380 B- = 350-362 C+ = 337-349
C = 319-336 C- = 306-318 D+ = 293-305 D = 275-292 D- = 262-274 E = <262

Current UF Grading Policies

Please see the following link for information on grade point equivalencies:
<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Academic Honesty

In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

(Source: 2007-2008 Undergraduate Catalog)

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

Service	Location	Phone	Services provided
University Counseling Center	301 Peabody Hall	392-1575	Personal and career counseling www.counsel.ufl.edu
Student Mental Health Services: Alcohol and Substance Abuse Program (ASAP) Center for Sexual Assault / Abuse Recovery & Education (CARE)	Rm 245 Student Health Care Center	392-1171	Personal counseling www.shcc.ufl.edu/smhs

Eating Disorders Program
Employee Assistance
Program
Suicide Prevention Program
Career Resource Center

CR-100 JWRU

392-1602

Career development assistance
and counseling

www.crc.ufl.edu

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Other Information: Lecture materials, case studies/skill builders and other information are the property of the University of Florida and the course instructor and may not be used for any commercial purpose. Students found in violation may be subject to disciplinary action under the University's Student Conduct Code. Only students formally registered for the course are permitted to attend lectures and take exams.

We the members of the University of Florida community pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

Tentative Class Schedule*

Date			Topic	
August	25	(M)	Course Introduction/Project Assignment	
	27	(W)	Folate	
	29	(F)	Folate	
September	1	(M)	HOLIDAY – Labor day!!!	
	3	(W)	Folate	
	5	(F)	Vitamin B12	QUIZ 1
	8	(M)	Vitamin B12	
	10	(W)	Thiamin	
	12	(F)	Vitamin B6	QUIZ 2
	15	(M)	Vitamin B6	
	17	(W)	Ascorbate	
	19	(F)	Ascorbate	QUIZ 3
	22	(M)	Exam Review	
	24	(W)	EXAM 1 - Student Info Sheet Due!	
	26	(F)	Riboflavin	
	29	(M)	Niacin	
October	1	(W)	Biotin	
	3	(F)	Vitamin K	QUIZ 4
	6	(M)	Vitamin A	
	8	(W)	Vitamin A	
	10	(F)	Vitamin E	QUIZ 5
	13	(M)	Vitamin D	
	15	(W)	Vitamin D	
	17	(F)	HOLIDAY – Homecoming	
	20	(M)	Calcium	
	22	(W)	Phosphorus and Magnesium	
	24	(F)	Presentations 1, 2, 3, 4	QUIZ 6

Date		Topic	
	27	(M) Exam Review	
	29	(W) Exam 2	
	31	(F) Presentations 5, 6, 7, 8	
November	3	(M) Iron	
	5	(W) Iron	
	7	(F) Presentations 9, 10, 11, 12	QUIZ 7
	10	(M) Zinc	
	12	(W) Copper	
	14	(F) Presentations 13, 14, 15, 16	QUIZ 8
	17	(M) Selenium	
	19	(W) Chromium	
	21	(F) Presentations 17, 18, 19, 20	QUIZ 9
	24	(M) Iodine	
	26	(W) No class	
	28	(F) HOLIDAY – Thanksgiving	
December	1	(M) Electrolytes	
	3	(W) Obesity	
	5	(F) Nutrition and Dentistry	QUIZ 10
	8	(M) Exam Review	
	10	(W) Exam 3	

***Subject to change**

Nutrition Education for the Public Project (50 points)

As a health care professional you will be responsible for sharing evidence-based, health information with your patients that is both interesting and easy to understand. Most health-related literature is written at a 6th to 8th grade level to ensure that patients are able to understand the information and benefit from its content. This project will give you the opportunity to practice delivering complex information in a creative way that is easy to understand.

You will work in groups of three. If you are unable to find a group please notify me ASAP, and I will help find one for you. **You must sign up for a group by Friday, September 12.** You must also post a link on Sakai to a website, picture, or some kind of creative nutrition-related content by September 12 to help you start thinking of ideas for your project. You will sign up for a nutrient that we will cover in class. You must identify some aspect of this nutrient that you would like to focus on for your project. For example, you can focus on sources, requirements, metabolism, deficiency, excess, or all of the above. Remember, the point is to make these complex concepts entertaining and easy to understand. The more complex the concept the more effort is involved.

Some examples of creative projects you can develop include a webpage, YouTube video, EDIS publication, Family Album blog, song, poem, play etc. The more creative the project the more points you will receive. Project presentations will take place on Fridays throughout the semester.

If your team is having any problems throughout the semester, please notify me immediately so we can find a solution.

Point Breakdown:

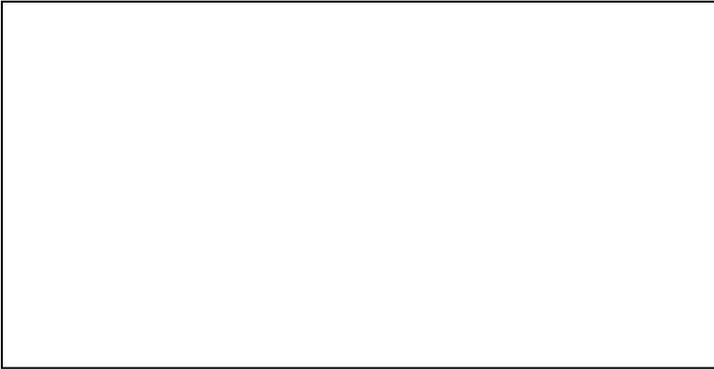
Evidence of effort – 20 pts

Clarity of message – 10 pts

Accuracy of information – 10 pts

Link Posting – 10 points

Student Information Sheet*



Please attach a picture of yourself to this box. You will not get your picture back so make sure it's a copy.

Name: _____

Major: _____

Career Goals: _____

Hometown: _____

Hobbies: _____

Favorite Song: _____

***This information sheet is worth 1 bonus point if you hand it in during class and 3 bonus points if you hand it in during office hours by September 24, 2014.**