HUN 2201 (28509) ~ Fundamentals of Human Nutrition

Fall 2024

Instructor & General Course Information

Instructor: Bin Liu, PhD

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Building 475, Room 349A

Contact Information: Phone: 352-294-3752

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alternative E-mail: binliu1@ufl.edu

Office Hours: Thursday., 9PM-930PM (Via Zoom https://ufl.zoom.us/j/7909090301) or by appointment

*****PLEASE ALLOW 24-48 HOURS FOR A RESPONSE TO E-MAILS ****

Teaching Assistant(s): Melissa Moreno

E-mail: mel.moreno@ufl.edu

Office Hours: TBA

Course Information: HUN 2201- Fundamentals of Nutrition | Class Number 28509 | Section MWF2

Credits: 3

Meeting Times: M,W,F | Period 2 (0830AM – 0920AM)

Location: MCCB 3124

**This course satisfies a UF general education requirement in Biological

Sciences**

Course Web Site: https://ufl.instructure.com/courses/51767

Prerequisites: BSC 2007 or BSC 2009 or BSC 2010 or CHM 1025 or CHM 2045 or APK

2100C or APK 2105C or CHM 1030.

Required Text: None.

Recommended Text: Understanding Nutrition, 16th Ed., Whitney and Rolfes, Cengage, 2022.

Required materials: 1) Non-programmable calculator 2) Reliable access to the Internet and to

e-Learning (Canvas). Note that Canvas will be used for announcements,

grade posting, posting class notes for lectures, recorded lectures, quizzes, exams, and other information. If you are not familiar with

Canvas, please review the website: http://lss.at.ufl.edu and Access to MS

Word, MS PowerPoint, and PDF reader software.

Course Description & Objectives:

This course uses principles of biological sciences (e.g.- anatomy, physiology and biochemistry) to provide an overview of dietary guidance, properties, function, deficiencies, toxicities, requirements, and regulation of nutrients and their role in human health and disease.

The successful completion of this course will enable students to:

- Make informed decisions about foods and dietary supplements by being able to discriminate legitimate from unfounded health recommendations using science-based principles.
- 2. Explain how nutrient requirements and recommendations in humans are determined and how this information is used to provide dietary guidance for the general population.
- 3. Evaluate and improve the nutritional quality of a diet using dietary analysis tools.
- 4. Describe the food sources, chemical forms, digestion, absorption, function, utilization, deficiency, and toxicity of nutrients required by humans.
- 5. Discuss the relationship between diet, human health and chronic diseases such as obesity, diabetes, cardiovascular disease, hypertension, osteoporosis, cancer, etc.
- 6. Explain the concepts of energy balance and metabolism.

PowerPoint Slides, Videos, and Assignments will be posted in Canvas. It will be the student's responsibility to obtain these materials as they become available.

Course Format:

The course will primarily be lecture format using PowerPoint presentations. However, there will be information given that will not be on the PowerPoint slides. Therefore, it is essential that you take detailed notes and attend classes!

Your final course grade will be derived from 2 homework assignment, 4 quizzes and 4 exams. Each exam covers only the information covered in that Unit. There will be no cumulative exam. Grades will be posted on Canvas. <u>It is your responsibility to check for any discrepancies in points and report them to your instructor immediately.</u> All exams will be taken in the classroom where lectures are given while quizzes will be given using Canvas (on-line).

Assignments & Grading:

Exams (100 points each)

There will be 4 exams valued equally at 100 points each. The format of all exams will consist of multiple-choice, true/false, matching, and possibly short answers. Calculators and scratch paper will be allowed.

Assignment (30 points each)

There will be two (2) assignments throughout the semester. Assignments will be posted to Canvas. These assignments will contribute 30 points each to your final course grade. Assignments should be submitted electronically in Canvas. Please be aware that due dates may be adjusted as needed based on lecture schedule.

Quizzes (10 points each)

There will be four (4) quizzes throughout the semester. Quizzes will be given in Canvas. The quizzes will contribute 40 points to your final course grade.

ASSIGNMENTS WILL NOT BE ACCEPTED VIA E-MAIL!!!!!!!!!!

Grading Scale & Record of Grades

GRADING:

Exams:	Possible Pts.
1. Exam #1(Fri., 9/20)	100
2. Exam #2 (Fri., 10/18)	100
3. Exam #3 (Fri., 11/15)	100
4. Final Exam (Thur., 12/12 @ 10AM - 12PM)	100
Quizzes:	
1. Quiz 1 (Sun., 9/8)	10
2. Quiz 2 (Sun., 10/6)	10
3. Quiz 3 (Sun., 11/3)	10
4. Quiz 4 (Sun., 11/17)	10
Assignments:	
1. Assignment #1 (Diet Analysis): Due (Sun., 9/15)	30
2. Assignment #2 (Energy Balance): Due (Sun., 11/17)	30
Possible Bonus Points (Extra Credit):	
TOTAL POINTS	500

^{****}Extra credit may be given at the discretion of the professor or TA throughout the semester.

The extra points that you earned will be added to the total points that you earned******

Grades and Grade Points: For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

GRADING SCALE

Grade	%	Grade	%
Α	93 - 100	С	73 - 76
A-	90 - 92	C-	70 - 72
B+	87 - 89	D+	67 - 69
В	83 - 86	D	63 - 66
B-	80 - 82	D-	60 - 62
C+	77 - 79	F	<60

FINAL COURSE GRADES ARE NOT NEGOTIABLE

Course Policies

Assignment Grading: Please keep a copy of all of your assignments in the event there is a technological error. Please contact a teaching assistant first if you have a question about an assignment grade. If there are still questions, the project will be given to the instructor for a re-grade. However, the entire project will be re-graded and may result in a lower grade. If you choose to compare your project grade to another student's project grade then both projects need to be submitted for re-grading.

Late Policy

Students are expected to submit all assignments on time. All assignments will be submitted electronically in Canvas. Assignments not turned in at this time will be subject to a 5% late penalty. In addition, a penalty of 10% will be imposed for each day that the assignment is late. Late assignments will be accepted at the discretion of the instructor.

"The Rules" during Exams and Quizzes: All exams will be in-class. Exams are closed-book so STUDY YOUR NOTES frequently. You will have 50 minutes to complete the exam. Once you begin, you must finish it within the allotted time frame. Quizzes will be given in Canvas (on-line).

For those of you who have special accommodations, you must notify me ASAP so I can clarify them and make the proper accommodations.

Exam Make-Up Policy

Make-up exams may not be provided unless there are extenuating circumstances (e.g. illness, medical, death in family, etc). In which case, contact your **instructor immediately by** e-mail (stacey.mobley@ufl.edu) to discuss the situation and to make suitable arrangements for a make-up exam — appropriate documentation of the absence must be provided in order to receive a make-up exam. The make-up exam may be essay.

If you must miss an exam due to a University-approved reason (e.g. university sanctioned athletics, competition,), you may complete the exam <u>after</u> your absence if documentation of the anticipated absence is provided to your instructor. The scheduled make-up exam (date and time) is at the discretion of Dr. Liu. Contact your instructor well in advance to coordinate a mutually convenient alternative exam time.

Academic Integrity

All work must be done individually. There are no group projects, quizzes or exams in this course. NO project or open-ended question should mimic another.

All students are expected to follow the UF student code of conduct with regard to academic honesty. Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited, to misrepresenting mastery in an academic area (e.g., cheating), intentionally or knowingly failing to properly credit information, research or ideas to their rightful originators or representing such information, research or ideas as your own (e.g., plagiarism). Any violations or breaches of academic integrity will be reported and dealt with by the Dean of Students Office for consideration of disciplinary action.

Online Course Evaluation Process: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://gatorevals.aa.ufl.edu/public-results/.

OTHER INFORMATION:

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in this course unless I give explicit permission for you to collaborate on course tasks (e.g. in-class assignments). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode.

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.

Services for Students with Disabilities: 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/ 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. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides 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.

• University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/ where the following are available: Counseling Services, Groups

- and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching. Please contact the University Police Department: 352-392-1111 or 9-1-1 for emergencies.
- U Matter We Care: Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
- Sexual Assault Recovery Services (SARS): Student Health Care Center, 352-392-1161.
- University Police Department: 352-392-1111 (or 9-1-1 for emergencies). http://www.police.edu/
- E-learning technical support: 352-392-4357 (select option 2) or email to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
- Library Support: http://cms.uflib.ufl.edu/ask. Receive assistance with respect to using the libraries or finding resources.
- University of Florida Complaints Policy: <u>Student Complaints On-Campus</u>: Visit the Student Honor Code and Student Conduct Code webpage for more information. <u>On-Line Students Complaints</u>: View the Distance Learning Student Complaint Process.
- In-class recordings: Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services.

TENTATIVE COURSE OUTLINE

(The instructor reserves the right to make changes to the course schedule if necessary. Other required reading may be assigned for each lecture.)

DATE	TOPIC
Week 0 (8/22-8/25)	Syllabus and Intro to Nutritional Science
Week 1 (8/26-9/1)	Intro to Nutritional Science; Misinformation and Nutrition Research Principles Standards, Guidelines, and Dietary Guidance
Week 2 (9/2-9/8)	No class Mon., 9/2 (Labor DAY); Standards, Guidelines, and Dietary Guidance (continued); Digestion and Absorption On-Line Quiz 1 (Opens Fri., 9/6 @ 6AM EST; Closes 9/8 @ 1159PM);
Week 3 (9/9-9/15)	Digestion and Absorption (continued); Carbohydrates in the Diet Assignment 1 Due 9/15 before 1159PM
Week 4 (9/16-9/22)	Carbohydrates Form and Function; Carbohydrates and Health (Diabetes, Dental Caries, Ketosis, etc.) EXAM 1 ; Fri., 9/20 @ 0830AM)
Week 5 (9/23-9/29)	Protein in the Diet; Protein Form and Function; Proteins and Health (Vegetarianism, Inborn Errors of Metabolism, Genetically Modified Organisms, etc.); Lipids in the Diet; Lipids Form and Function
Week 6 (9/30-10/6)	Lipids Form and Function (cont.); Lipids and Health (Cardiovascular Disease; Inflammation, etc.); On-Line Quiz 2 (Opens Fri., 10/04@ 6AM EST; Closes 10/6 @ 1159PM)
Week7 (10/7-10/13)	Lipids and Health (Cardiovascular Disease; Inflammation, etc.); Intro to Energy and Metabolism
Week8 (10/14-10/20)	Energy and Metabolism; Energy and Health (Obesity and Eating Disorders) EXAM 2; Fri., 10/18@ 0830AM)
Week 9 (10/21- 10/27)	Energy and Health (cont.); Weight Management
Week 10 (10/28-11/3)	Introduction to Vitamins and Minerals; Water-Soluble Vitamins- Form, Functions, Deficiencies, and Health; On-Line Quiz 3 (Opens Fri., 11/1 @ 6AM EST; Closes 11/3@ 1159PM
Week 11 (11/4-11/10)	Water-Soluble Vitamins- Form, Function, Deficiencies, and Health (cont.); Intro to Fat-Soluble Vitamins
Week 12 (11/11-11/17)	Fat Soluble Vitamins - Form, Functions, Deficiencies. Intro to Macrominerals-Form, Functions, Deficiencies, and Health <u>On-Line Quiz 4</u> (Opens Fri., 11/15 @ 6AM EST; Closes 11/17 @ 1159PM); <u>Assignment 2</u> Due 11/17 before 1159PM <u>EXAM 3</u> ; Fri., 11/15 @ 830AM)
Week 13 (11/18-11/24)	No classes; Thanksgiving BREAK
Week 14 (11/25-12/1)	Microminerals- Form, Functions, Deficiencies, and Health

DATE TOPIC

Week 15 (12/2-12/8)

Trace minerals- Form, Functions, Deficiencies, and Health; Phytochemicals **No** class Fri., 12/6 (Reading Day)

FINAL EXAM; Thurs., 12/12 @ 10AM- 12PM