Fundamentals of Human Nutrition
Summer 2022

Credits: 3 hours
Class Meetings: asynchronous
Location: online
Lecturer: Ms. Sarah Brunnig, MS, MPH, RDN
Contact: The AFPP Building 120 Room 104B (next to main FSHN by pond)
         Email: skbrunnig@ufl.edu (use mail function in Canvas as best)

Prerequisites: BSC 2007 or BSC 2005 or BSC 2010 or CHM 1025 or CHM 2045 or APK 2100C or APK 2105C or CHM 1030 | Meets General Education – Biological Science

This is an AllAccess book which means you can purchase access to the digital text at a reduced price right from the bookstore, and it will be charged to your account, and you will have access from day one. Please note this course will be participating in the UF AllAccess program. Login at the following website and Opt In to gain access http://www.bsd.ufl.edu/AllAccess. This option will be available starting 1 week prior to the start of the semester and ending 3 weeks after the first day of class. ISBN: 9780357447512

Zoom:
• This course will use UF’s Zoom platform to deliver lectures and exams. PLEASE FAMILIARIZE YOURSELF WITH THIS PLATFORM.
• Do not share your Zoom classroom link or password with others.

E-mailing:
• All correspondence should be via E-mail through the Canvas class (use student email only if Canvas not available – do not use personal email).
• When you send an email to your instructor you should start the subject line - (last name): HUN 2201
• Please be brief and very specific - write professionally
• Do not send messages to all your classmates

Course Description and Objectives
Fundamentals of Human Nutrition 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:
1. 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, cancer, etc.
6. Explain the concepts of energy balance and metabolism.

Course Activities

Lectures:
This course used asynchronous lectures delivered via Zoom recordings. The Zoom links will be
in each Chapter in Modules. It will be the student's responsibility to obtain these materials as
they become available. To familiarize yourself with Zoom go to https://elearning.ufl.edu/zoom/

Assignments:
In most chapters (for a total of 12), there will be an Assignment due by Sunday of the week.
These assignments have a variety of activities, usually involving a Case Study to answer
questions about and a crossword puzzle to help you familiarize yourself with the needed
vocabulary. Once you have the questions answered, you will put the answers into a ‘quiz’ for
grading purposes. Each of these assignments is worth ten points and they are due on Sunday
evenings. There are also four small assignments each worth 2.5 points which are: a quiz over
the syllabus information, Meet the Instructor assignment, When is Good to Meet assignment
and Intro Discussion.

Discussions:
There will be ten Discussion Posts. These are found in most Chapters in Modules and consist of
a simple prompt about noting an interesting point you found in the Chapter and then looking up
another reference about that point. Then you will reply to at least two other fellow student’s
posts. The Main Post is 10 points, and the Replies are each 2.5 points for a total of 5 points.
These are due by Sunday evenings.

Diet Analysis Project:
This will be a major project in which you will keep track of your diet for three days, enter the
three days into a diet analysis program and then analyze the information. It is divided into three
parts. Each part is submitted in Canvas. One part is due in each of Unit’s 2, 3, and 4.

Exams:
There will be four exams, 50 questions each and counting 100 points and each covering only
the information covered in that Unit. Exams will cover lecture material, the text, any readings,
and class activities and will be predominately multiple-choice. For some questions you will need
a calculator. Exams are OPEN-NOTES, but you will still need to read each chapter several
times and study your notes as there will not be time to find all the answers quickly.
Exams will be proctored by Honorlock in Canvas, and you will be audio and/or video recorded (see below for more information). HonorLock only works on the Chrome browser. Exams One, Two and Three will be open from 7:00 AM Friday to 11:59 PM Sunday. Exam Four has to be finished by Friday, Aug. 5, so it will be open from 7:00 AM Thursday to 11:59 PM Friday of that week. Once you begin the exam, you must finish it in the time allotted. Keep in mind the clock being used is Eastern Standard Time and if you are in another Time Zone, you need to moderate yourself to finishing in EST. The clock is on the UF Server and once you begin it continues to run even if your system crashes so try logging back in and call UF HELP DESK at (352) 392-4537 for help. UF Help Desk is available 24/7 for your questions and issues related to Canvas, connectivity and GatorLink accounts, etc. The exam will be open 100 minutes which is twice as long as class time would be and this should accommodate most any special accommodations. Discuss any other needs with your Instructor.

Course Evaluation

Grading:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Discussions - 10</td>
<td>15</td>
<td>150</td>
</tr>
<tr>
<td>Assignments – 12 @ 10 each</td>
<td>10</td>
<td>120</td>
</tr>
<tr>
<td>Small Assignments – 4 @ 2.5 each</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Diet Analysis</td>
<td></td>
<td></td>
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<tr>
<td>Part One</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Part Two</td>
<td>25</td>
<td>25</td>
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<tr>
<td>Part Three</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Exams – 4</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>750</td>
</tr>
</tbody>
</table>

There will be no ‘curve’ or rounding up and your course grade will be calculated as follows:

| Grading Scale | 93 - 100% A | 90 - 92.9% A-<br>87 - 89.9% B+ | 83 - 86.9% B | 80 - 82.9% B-<br>77 - 79.9% C+ | 73 - 76.9% C | 70 - 72.9% C-<br>67 - 69.9% D+ | 63 - 66.9% D | 60 - 62.9% D-<br><60% E |
|----------------|------------|-----------------------------|-------------|-----------------------------------|-------------|-----------------------------------|-------------|-----------------------------|-------------------|
| Attendance:    | Attendance will be obtained from your participation turning in assignments, doing discussion posts and taking exams. Attendance Policies < University of Florida (ufl.edu) |
Assignments:
Assignments and the Diet Analysis Project are turned in through Canvas. Discussions belong in the Discussion Board. It is up to you to check that your assignment is in/uploaded, and that it is the correct version, meaning do not upload just the instructions thinking you have uploaded your answers. Acceptable file types include .docx and .pdf. The MAC file type of .pages is not acceptable. You have to ‘save as’ to an acceptable file type. Keep a copy of all that you do, including your Discussion Posts. This is useful in case an error happens and also for future needs. Do not email assignments.

Assignment Grading:
Please keep a digital copy of all of your assignments. After grading, read all notes the teacher has left you. If you still have questions/concerns then the teacher will answer any of the questions regarding graded assignments.

Technology Issues:
A good method for resolving technical issues is to visit the helpdesk website https://helpdesk.ufl.edu/ or call 352-392-4357. UF Help Desk is available 24/7 for your questions and issues related to Canvas, connectivity and GatorLink accounts, etc.

Online Proctoring:
Honorlock will proctor your exams this semester. You DO NOT need to create an account or schedule an appointment in advance. Honorlock is available 24/7, and all that is needed is a computer, a working webcam, and a stable internet connection. To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at www.honorlock.com/extension/install When taking an exam, you will need to be in Google Chrome. A practice quiz will be available later for all students to prepare their computers for the exams. When you are ready to take the practice quiz, log into Canvas on Google, go to your course, and click on the exam. Clicking ‘Launch Proctoring’ will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it is on a secondary device. Honorlock support is available 24/7/365. If you encounter any issues you may contact them by live chat, phone (855-828-4004), and/or email (support@honorlock.com).

Exam Make-up Policy:
Make-up exams may not be provided unless there are major extenuating circumstances (e.g., illness, medical, death in family, etc), as the test is open for three days and you should be able to take it sometime in that time frame. Contact your instructor immediately by Canvas mail or email (skbrunnig@ufl.edu) to provide appropriate documentation of the absence and discuss the situation and to make suitable arrangements for a make-up exam. The make-up exam may be in a different format than the one provided to your classmates.

Late Policy:
Students are expected to submit all assignments on time. Work ahead so that you are not racing to finish at the last minute. Assignments not turned in on time will be subject to a 5% late penalty. In addition, a penalty of 5% will be imposed for each day further that the assignment is
late up to a maximum of 40% off (so a base of 60%). Late assignments may or may not be accepted at the discretion of the instructor.

If you must miss an exam due to a University-approved reason (e.g., university sanctioned athletics, competition), you may complete the exam after 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 your instructor. Contact your instructor well in advance to coordinate a mutually convenient alternative exam time.

Special Accommodations:
The Disability Resource Center, 0001 Reid Hall, 352-392-8565 Disability Resource Center - Disability (ufl.edu), is the place to go to discuss and have approved any special accommodations. 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. They will send your Instructor a letter. You may want to check with the Instructor that the letter has been received. Tests are going to be open double time (100 minutes) anyways, so that will cover most needs for longer testing periods. If there is anything about the course that you are having trouble accessing, please let your Instructor/TA know.

Lecture and HonorLock Recordings:
Office hours are subject to be audio visually recorded and students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during office hours and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during office hours, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

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-honor-code.

In-Class Recording:
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. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. 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. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Other Information
Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course using a standard set of university and college criteria. Guidance on how to give feedback in a professional and respectful manner is available at Students - Faculty Evaluations - University of Florida (ufl.edu) These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

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.
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.

Health and Wellness:
U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

Field and Fork Food Pantry: Available for any student, staff, faculty experiencing food insecurity. Bring your Gator1 Card.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Academic Resources
E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.
Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.
On-Line Students Complaints: View the Distance Learning Student Complaint Process.
This course outline helps you pace the material per week. The readings and assignments run week to week and there are items due each Sunday evening. The exams are set for certain dates – Friday through Sunday.

<table>
<thead>
<tr>
<th>UNIT ONE – May 9 – May 27 – three weeks – three chapters</th>
<th>UNIT ONE – EXAM – May 27 – May 29</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week</strong></td>
<td><strong>Class Topic/Lecture Recordings</strong></td>
</tr>
<tr>
<td>1</td>
<td>Introduction / Overview of Nutrition</td>
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<tr>
<td></td>
<td>1. Introduction / Overview of Nutrition: Food Choices through Nutrients</td>
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<tr>
<td></td>
<td>2. Science of Nutrition through Dietary Reference Intakes</td>
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<td></td>
<td>3. Nutrition Assessment through Highlight on Misinformation</td>
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<tr>
<td>2</td>
<td>Planning a Healthy Diet:</td>
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<td></td>
<td>1. Principles Through USDA Food Patterns</td>
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<td></td>
<td>2. Putting Plans into Action Through Food Labels</td>
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<td></td>
<td>3. Highlight on Vegetarianism</td>
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<tr>
<td>3</td>
<td>Human Digestion, Absorption and Transport</td>
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<tr>
<td></td>
<td>1. Digestion</td>
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<td></td>
<td>2. Absorption through Glucose in Body</td>
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<td>3. Regulation through Highlight</td>
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</table>

May 30 – Monday – Holiday
<table>
<thead>
<tr>
<th>Week</th>
<th>Class Topic/Lecture Recordings</th>
<th>Book Chapter</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Carbohydrates</td>
<td>Chapter 4</td>
<td>Discussion Post Chapter Four due by June 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 18.5</td>
<td>Assignment Chapter Four due by June 5</td>
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<td></td>
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<td></td>
<td>Enter diet into Cronometer and the Report for this will be due by June 19</td>
</tr>
<tr>
<td>5</td>
<td>Lipids</td>
<td>Chapter 5</td>
<td>Discussion Post Chapter Five due by June 12</td>
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<tr>
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<td></td>
<td>Chapter 18.3</td>
<td>Assignment Chapter Five due by June 12</td>
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<td></td>
<td>Remember to work on Diet Analysis due by June 19</td>
</tr>
<tr>
<td>6</td>
<td>Proteins</td>
<td>Chapter 6</td>
<td>Discussion Post Chapter Six due by June 19</td>
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<td></td>
<td></td>
<td>Assignment Chapter Six due by June 19</td>
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<td></td>
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<td>Remember to turn in Diet Analysis Report Part 1 by June 19</td>
</tr>
</tbody>
</table>

**Take Exam June 17 – June 19**

**Summer Break – June 20 – 24**

<table>
<thead>
<tr>
<th>Week</th>
<th>Class Topic/Lecture Recordings</th>
<th>Book Chapter</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Energy Metabolism</td>
<td>Chapter 7</td>
<td>Assignment Chapter Seven – this one is labeled Assignment 8 - due by July 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Work on Diet Analysis Part 2 Due July 17</td>
</tr>
<tr>
<td>8</td>
<td>Alcohol and Energy Balance and Body Composition</td>
<td>Highlight Chapter 7 Chapter 8</td>
<td>Discussion Post Chapter Eight due by July 10</td>
</tr>
</tbody>
</table>
Assignment Chapter Seven on Alcohol – this one is labeled Assignment 7 -due by July 10

(No Chapter Assignment for Chapter 8)

Work on Diet Analysis Part 2 due July 17

9 Weight Management

1. Overweight/Obesity through Causes
2. Problems of Overweight and Obesity
3. Lifestyle Strategies

Chapter 9

Discussion Post Chapter Nine due by July 17

(No Chapter Assignment for Chapter 9)

Remember to turn in Diet Analysis Part 2 by July 17

Take Exam July 15 –July 17

UNIT FOUR – July 18 – Aug 5 – three weeks of class - four chapters (vitamins, water, select minerals) and 18.6

UNIT FOUR – EXAM – Thursday August 4 – Friday August 5

<table>
<thead>
<tr>
<th>Week</th>
<th>Class Topic/Lecture Recordings</th>
<th>Book Chapter</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Phytochemicals and Water-Soluble Vitamins</td>
<td>1. Highlight on Phytochemicals 2. Overview through B6 3. Folate and B12 4. Vitamin C through Supplements</td>
<td>Highlight Chapter 13 Chapter 10</td>
</tr>
</tbody>
</table>

End of Class – Take Last Exam on the last Unit by Friday Aug 5