HUN 4446 NUTRITION AND DISEASE - PART 2 SPRING 2023 - Section 1118

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Office Hours: Tuesdays 2:00 PM-3:00 PM via Zoom (or appt)

Class meeting time: TUE: 11:45 AM - 1:40 PM; THURS: 12:50 - 1:40 PM

Attendance: Required Location: MAEB 0211

Credits: 3

Course Description and Prerequisites: Part 2 of a two-semester sequence that focuses on the biochemical and pathophysiological bases of diseases/conditions that require nutrition support/medical nutrition therapy. Prerequisites: HUN 4445; BCH 3025 or BCH 4024; APK 2105C or PCB 4723C.

Course Goals/Competencies: Upon completion of this course, students should be able to:

- 1. Describe the risk factors, etiology, symptoms, clinical findings, and pathophysiology associated with diseases/conditions covered in this course.
- 2. Describe the diagnostic tests/procedures and the intervention strategies used in the treatment of diseases/conditions covered in this course.
- 3. Evaluate the impact of selected food/nutrient-drug interactions on nutritional status/drug efficacy and recommend appropriate intervention strategies.
- 4. Relate the theoretical bases for nutrition/medical intervention strategies with the anatomical, physiological, and/or biochemical changes that occur in diseases/conditions covered in this course.
- 5. Identify examples of nutrient-gene interactions, apply concepts related to nutrigenetics/ nutrigenomics and epigenetics, and describe the potential impact of genomic and epigenomic research on nutrition and medical practice.
- 6. Identify appropriate recommendations for the management of patients with diseases/conditions covered in this course.

Required Materials:

- i>clicker2© Remote Response Device ("clicker"): Available for purchase at the UF Bookstore (purchase from cashier) OR a Smartphone/iPhone/laptop/iPad/tablet that is compatible with the i>clicker© REEF response system. (See below for more information.)
- HUN 4446 Course Notes: PowerPoint slides for each unit of study are available on our course site on Canvas; see below for access information)
- Additional Course information and materials posted on Canvas.

Recommended Materials:

Nutrition Therapy and Pathophysiology (4th edition) by Nelms, Sucher, Lacey and Ross, 2020.

How to Access Canvas:

 Access requires a Gatorlink account. If you need to establish a Gatorlink account, go to http://identity.it.ufl.edu/process/gatorlink/create-account/. Once you have created a Gatorlink account, access e-Learning support services home page at http://lss.at.ufl.edu. Select "e-Learning in Canvas". Log in using your Gatorlink ID. HUN 4446 should be listed under "courses". If you are unfamiliar with Canvas, information can be found under the "help" tab.

Class Attendance and Demeanor: Students are expected to attend all classes, to bring their i>clicker2© "clicker" or Smartphone/iPhone/laptop/iPad/tablet computer to every class, to arrive on time, and to leave when dismissed by the instructor. Students are expected to show courtesy to their classmates and instructor by muting electronic devices and refraining from using a computer or any other type of personal electronic device for any purpose other than taking notes, viewing PowerPoint slides being discussed in class, or using them in place of the clicker device to answer questions. Students also are expected to refrain from engaging in personal conversations during class. These same expectations apply to the in person and online sections. Zoom chat should be used for relevant class discussion and questions only.

Absences and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx. (See below for more details.)

Student Evaluation: Three tests, a final exam, two assignments, in class participation, and 6 online quizzes will be used to evaluate student performance. Tests/exams and quizzes must be taken as scheduled. University approved activities that conflict with exams should be brought to the instructor's attention in advance so that alternative arrangements can be made. An unexcused absence from a test will result in a score of "0" unless there are unavoidable extenuating circumstances (subject to my discretion) that can be documented to my 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. Failure to complete a quiz within the time frame allowed will result in a grade of "0". Extra credit projects will **NOT** be available.

Assignments: Detailed information for completing the assignments for this course will be posted on Canvas/distributed separately. Please note assignment #2 has 4 parts with 4 due dates.

Quizzes: Quiz dates will be announced approximately one week prior to the date the quiz will become available. Quizzes will be administered through e-Learning/Canvas. You will have **25 minutes to complete each quiz** beginning from the time you open the quiz. Quizzes will be available for you to take for approximately 34-hour period (from 2:00 PM on day the quiz is announced until 11:59 PM the following day). The lowest guiz score (or missed guiz) will be dropped.

In Class Participation: In class participation will be evaluated using the i>clicker2© ("clicker") or via your Smartphone/iPhone/laptop computer/iPad/tablet using the i>clicker© REEF response system. I have selected to use the i>clicker© system for several reasons, all of which I hope will make for a better learning experience for you, as well as provide you with the opportunity to improve your performance in the class. (See separate handout for details.)

- We will practice using the clickers during the first few class periods. I will officially begin recording response card ("clicker") responses that count toward your final grade beginning January 19th, 2023.
- Questions asked during class may include material just covered in class, material covered from previous lectures, and opinion questions or other types of "informational" questions.
- Content questions will be graded, with partial credit given for incorrect answers.
- Questions may be asked at any point during the class, and on some days, more than one question may be asked. You will be given a set amount of time to respond, but once the "polling time" has ended, it will not be possible to register your response so you should be sure to get to class on time and to have your "clicker" (or the device you are using with the i>clicker© app) with you and ready to use.
- A total of 45 points for the semester will be considered a perfect "in class participation" score. To allow for technical problems, failure to bring your clicker/smartphone/iPhone/laptop computer/iPad/tablet to class, clicker/smartphone/iPhone/laptop computer/iPad/tablet (i.e., dead

battery; malfunction; etc.), unexcused absences, etc., I will offer a minimum of 55 points during the semester (**starting on January 19** forward). Points earned in excess of the number needed for a perfect "in class participation" score (i.e., 45 points) will count as bonus points toward your final grade. This means that you have the opportunity to earn at least 10 bonus points, in addition to the 2 bonus points I offer in exchange for completing and submitting an electronic version of your student information card (follow directions provided on e-Learning in Canvas). Depending on where you stand in the course, these extra points could improve your final grade.

Please note: You are on your honor (see UF Academic Honesty Policy below) to register responses only for yourself WHILE YOU ARE PRESENT IN CLASS. This means you personally must be in class and use your personal response card to register your answers. Registering responses for someone else or having someone else register responses for you or answering questions when you are not present in class is a form of cheating. If you are caught cheating the system, you and the other party(ies) involved will, at a minimum, forfeit all of your points for the semester, and you could be prosecuted through the Student Honor Court. If you are not caught, you will have to deal with your conscience and personal ethics, which may not seem like a big deal now, but may catch up with you some day.

Evaluation of Performance/Grades and Grade Points

Grades and Grade Points For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

| Performance Indicators | Points |
|--|--------|
| Tests (3) @ ~70 points each (this is the average points, some tests will have | 210 |
| slightly more or slightly less points) | |
| Final Exam (~½ comprehensive, ~½ new material) | 120 |
| Assignments (2) 1@20 and 1@55 points | 75 |
| Class Participation (out of a minimum of 55 points; points above 45 = bonus pts) | 45 |
| Quizzes (online, 6) @ ~10 points each (lowest grade dropped) | 50 |
| Total | 500 |

<u>Grading Scale</u>: Grades will be posted on e-Learning in Canvas. Grades are not curved and are not negotiable.

| A = 467-500 | A ⁻ = 450-466 | B+ = 433-449 | B = 417-432 | B ⁻ = 400-416 | C+ = 383-399 |
|--------------|--------------------------|--------------|--------------|--------------------------|--------------|
| 93.34-100% | 90-93.33% | 86.68-89.9% | 83.34-86.67% | 80-83.33% | 76.68-79.9% |
| C =367-382 | C ⁻ = 350-366 | D+ =334-349 | D = 317-333 | D ⁻ =300-316 | E = <300 |
| 73.34-76.67% | 70-73.33% | 66.68-69.9% | 63.34-66.67% | 60-63.33% | <60% |

Supplementary Information: Supplementary information, announcements, reminders, and critical thinking exercises will be posted on e-Learning in Canvas or the class listserv.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. 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://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

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 each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). 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

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.

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. 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. Contact information: 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. 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/

Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

- U Matter We Care, www.umatter.ufl.edu/
- **UF Hitchcock Field and Fork Pantry** provides nutritious food and often other necessities for anyone with a UFID experiencing food insecurity: https://pantry.fieldandfork.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, <u>www.crc.ufl.edu/</u>

Student Complaints:

• Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/

Other Information: Lecture material and 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 quizzes/tests.

Email: Students are required to check their email account(s) daily (at least Monday through Friday) and respond to course/program related requests, inquiries, etc. in a timely manner.

Spring 2023 Tentative Class Schedule*

| Date | | | Topic |
|----------|----|----|---|
| January | Т | 10 | Course Introduction Nutritional Genomics: The Future of Nutrition and Medical Practice |
| | | | Nutritional Genomics. The Future of Nutrition and Medical Fractice |
| | Th | 12 | Nutritional Genomics: The Future of Nutrition and Medical Practice (cont'd) |
| | Т | 17 | Diseases/Disorders of the Upper GI Tract (Chap 14†) |
| | Th | 19 | Diseases/Disorders of the Upper GI Tract (cont') |
| | | | Due Date for All About You Info Card (submit via Canvas) |
| | | | Clicker Participation Points Start Today! |
| | Т | 24 | Diseases/Disorders of the Upper GI Tract (cont'd) |
| | Th | 26 | Diseases/Disorders of the Upper GI Tract (cont'd) |
| | Т | 31 | Diseases/Disorders of the Lower GI Tract (Chap 15†) |
| | | | ASSIGNMENT #1 DUE |
| February | Th | 2 | Diseases/Disorders of the Lower GI Tract (Chap 15†) |
| | T | 7 | Diseases/Disorders of the Lower GI Tract (cont'd) |
| | Th | 9 | EXAM 1 |
| | Т | 14 | Diseases/Disorders of the Lower GI Tract (cont'd) |
| | Th | 16 | Liver Disease and Alcoholism (Chap 16†) |
| | Т | 21 | Liver Disease and Alcoholism (cont'd) |
| | Th | 23 | Liver Disease and Alcoholism (cont'd) |
| | | | ASSIGNMENT #2 Step 1 due |
| | Т | 28 | Liver Disease and Alcoholism (cont'd) |
| March | Th | 2 | Diseases of the Gallbladder and Pancreas Chap 16 [†] |
| | Т | 7 | Diseases of the Gallbladder and Pancreas (cont'd) |
| | Th | 9 | EXAM 2 |
| | Т | 14 | SPRING BREAK |
| | Th | 16 | SPRING BREAK |

| | Т | 21 | Diseases of the Gallbladder and Pancreas (cont'd) |
|-------|----|----|---|
| | Th | 23 | Diabetes Mellitus (Chap 17†) |
| | | | ASSIGNMENT #2 Step 2 due |
| | Т | 28 | Diabetes Mellitus (cont'd) |
| | Th | 30 | Diabetes Mellitus (cont'd) |
| April | Т | 4 | Diabetes Mellitus (cont'd) |
| | Th | 6 | Cardiovascular Disease, Heart Failure & Hypertension (Chap 13†) ASSIGNMENT #2 Step 3 due |
| | Т | 11 | Cardiovascular Disease, Heart Failure & Hypertension (cont'd) |
| | Th | 13 | EXAM 3 |
| | Т | 18 | Cardiovascular Disease, Heart Failure & Hypertension (cont'd) |
| | | | ASSIGNMENT #2 Step 4 due |
| | Th | 20 | Cardiovascular Disease, Heart Failure & Hypertension (cont'd) |
| | Т | 25 | Cardiovascular Disease, Heart Failure & Hypertension (cont'd) |
| | Th | 27 | READING DAY - No CLASS |
| Мау | Th | 4 | FINAL EXAM - 10:00 AM - 12:00 PM |

^{*}Subject to change.

[†]Chapter numbers correspond with related material published in *Nutrition Therapy and Pathophysiology* by Nelms, Sucher, and Lacey, 2020. This textbook is recommended as an adjunct to class.