### **HUN6331**

### Vitamins in Human Nutrition

Fall 2022, 3 Credits

**Class:** Monday, Periods 4-5 (10:40 – 12:35 pm) MCCB3124

**Thursday**, Periods 4-5 (10:40 – 12:35 pm) APL0101

Instructor: Mitchell Knutson, PhD, 459 FSHN, (352) 294-3753, mknutson@ufl.edu

Office hours: By appointment

**Course description:** The objective of this course is to focus on molecular, cellular, and metabolic aspects of vitamins and their roles in human nutrition, health, and disease. Emphasis will be placed on the current research literature.

**Prerequisite**: BCH4025 (Introduction to Biochemistry and Molecular Biology) or 3025 (Fundamentals of Biochemistry) or equivalent

# Course Syllabus (Subject to change)

Date	Day	Topic
08/25	Thurs	Introduction to course
08/29	Mon	History of vitamins/Vitamin B1
09/01	Thurs	Vitamin B1
09/05	Mon	No class; Labor Day holiday
09/08	Thurs	No class
09/12	Mon	No class
09/15	Thurs	Biotin
09/19	Mon	B2
09/22	Thurs	B3
09/26	Mon	B3 (Nicotinamide Riboside)
09/29	Thurs	Vitamin C
10/03	Mon	Vitamin C
10/06	Thurs	Vitamin B12
10/10 10/13	Mon Thurs	No class; Academy of Nutrition and Dietetics Conference, Orlando Vitamin B12
10/17	Mon	Folate
10/20	Thurs	Folate
10/24	Mon	Vitamin B6
10/27	Thurs	Vitamin D
10/31	Mon	Vitamin D
11/03	Thurs	Vitamin A
11/07	Mon	Vitamin E
11/10	Thurs	Vitamin K
11/14	Mon	TBD
11/17	Thurs	FINAL EXAM

# Course philosophy and specific objectives

This discussion-based course will focus on critical analysis of some of the most recent research relating to vitamins and human nutrition. Primary scientific research articles will be discussed in detail, focusing on the background, methods, results, as well as broader implications for human nutrition, health, and disease. One of the most important skills of a graduate student is the ability to read original research critically. This involves not only analyzing and critiquing research articles, but also entails a substantial amount of self-directed, self-initiated learning. For relevant and required background on individual vitamins, textbook and online readings will be assigned along with learning objectives for each topic

#### **Textbook and Online Resources**

<u>Textbook:</u> *The Vitamins*, 4<sup>th</sup> edition, by Gerald F. Combs, 2012. No need to purchase book; PDF download is available for UF students. Note that there is a newer edition (2017), but it costs \$150. The earlier 2012 edition is more than adequate for background information.

Online: <a href="https://lpi.oregonstate.edu/mic/vitamins">https://lpi.oregonstate.edu/mic/vitamins</a> The Micronutrient Information Center at Linus Pauling Institute at Oregon State University provides easily accessible summaries of each vitamin.

### **Grades and Grade Points**

## % of Final Grade

Class participation 35

Quizzes 40 (7, 25-point quizzes; can drop lowest)

Final Exam 25

<u>Final %</u>	Final Grade
00 100	<b>A</b>
90 - 100 88 - 89	A B+
80 - 87	В
78 - 79	C+
70 - 77	C
68 - 69	D+
60 - 67	D
< 60	E

For information on current UF policies for assigning grade points, see <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/#gradingpoliciestext">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/#gradingpoliciestext</a>

# **Expectations for Performance in the Class**

- 1) To be punctual to class
- 2) To arrive prepared for class
- 3) To participate in discussions
- 4) To consult the instructor when having difficulties
- 5) To inform the instructor in advance of any scheduling issues
- 6) To be inquisitive, enthusiastic, motivated, and dedicated

### **Absences and Make-Up Work**

Since this 3-credit course meets 4 hours per week, the course will end early (i.e., in early November). **As a result, attendance at each class meeting is mandatory.** Missed classes will need to be made up by written summaries of the relevant readings (due within one week after the missed class).

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/UGRD/academic-regulations/attendance-policies/

# **Current UF Grading Policies**

Please see the following link for information on grade point equivalencies:

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/#gradestext-otp1

## **University Honesty Policy**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

#### **Services for Students with Disabilities**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### **Campus Helping Resources**

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

Counseling and Wellness Center: <u>Visit the Counseling and Wellness Center website</u> 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.

*University Police Department*: <u>Visit UF Police Department website</u> 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; <u>Visit the UF Health Emergency Room and Trauma Center website</u>.

### **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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

# Audio-visually recording of online classes

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. 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 class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, 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.

### **Course evaluations**

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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.