KINE 350: SCIENCE OF NUTRITION
Course Syllabus, Fall 2021
Tuesday and Thursday, 12:30-1:50pm
Small Hall, rm. 110

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Office hours: Tuesday and Thursday, 2-3pm

Course description: This course presents the fundamental concepts of human nutrition from the broadest possible perspective. It is organized into five sections: basis of a healthy diet; food in the body (including digestion, metabolism, and weight control); macronutrients and alcohol; micronutrients and phytochemicals; and consumer concerns (including food safety, waste, and labeling).

By the end of this course, students will be able to:

- Describe how food is digested, absorbed, metabolized, and excreted;
- Categorize each of the macronutrients and micronutrients into their respective groups;
- Identify important food sources of each micronutrient;
- Explain the health effects associated with nutrient deficiencies and toxicities;
- Summarize key food labeling concepts and appropriate food safety protocols; and
- Discriminate between evidence-based nutrition information and misinformation.

Required text: Whitney, E.N. and Rolfes, S.R. Understanding Nutrition. 15th Edition. You may also use the 14th edition, but it is your responsibility to make sure that the page range for required readings line up between the 14th and 15th edition. Available at the William & Mary bookstore.

Additional readings will be posted on Blackboard.

COLL 200 Natural World and Quantitative Reasoning (NQR): Courses in this domain examine the natural world and physical universe and the means by which humans observe, measure, model, and interpret it. Courses explore the process of scientific discovery, including the methods required to gather and assess empirical data, investigate the predictions of existing theories, and develop experimentally testable hypotheses. Courses may also focus on mathematical or computational methods as applied to these investigations. Students develop their understanding not only of the foundations, implications, and uses of scientific knowledge but also how scientific approaches can be used to create tangible products.

Add/drop deadline: September 10th, 2021
Withdraw deadline: November 1st, 2021

Grading:

Assignment/assessment*	Points	Completion date
Assignments (×5)	25	9/16, 10/5, 10/26, 11/16, 12/7
Section tests (×4)	60	9/23, 10/12, 11/2, 11/23
Final exam (not cumulative)	15	12/13, 9am-noon
Total	100	

*All assignments will be submitted via Blackboard, and all tests will be submitted in class.

Grading system: This course grades on a 100 point scale, and each 10 point increment represents a threshold for a distinct letter grade. Within each letter grade, minus (-) is awarded for up to 2.5 points above the lower threshold, and plus (+) is awarded for up to 2.5 points below the upper threshold. All grades are rounded to the first decimal place. For example, B- is 80 to 82.4, B is 82.5 to 87.4, and B+ is 87.5-89.9 points. 92.5-100 is an A.

Description of assignments and tests:

Assignments: Near the end of each section you are asked to submit a single question about anything related to nutrition that you want an answer to. Questions can include (but are not at all limited to) clarifications of material that we've covered, questions about material that we won't cover, media coverage of certain topics, my opinions about certain topics, etc. I will answer as many questions as possible during the subsequent class in an **AMA session**. Importantly, any questions that I answer can be included on the next test. You will receive full points if you submit a genuine, thought-provoking question; and you will receive zero points if your question is clearly not intended to elicit a thoughtful response (e.g., "what do you think about nutrition?"). 20 percentage points will be deducted if submitted within 24 hours after the due date, and an additional 20 percentage points will be deducted for each additional late day. You will submit your questions via Blackboard by 11:59pm on the due date. Five submissions are worth five points each, totaling 25 points overall.

Section tests are designed to assess depth of knowledge of each section. All tests will be completed during normal class times. These typically include 20-30 multiple-choice and true/false questions, and each question is worth the same number of points. 10 percentage points will be deducted if submitted within 24 hours after the due date, and an additional 10 percentage points will be deducted for each additional late day. Four tests are worth 15 points each, totaling 60 points overall.

The **Final exam** is designed to assess depth of knowledge of the final section in the course (it is not cumulative). Late submissions will not be accepted without prior approval. The exam is scheduled for a three-hour period at the end of the course, and is worth 15 points.

Course schedule:

Date	Topic	Readings (ranges are inclusive)	Due/completion dates
Introduction to course			
9/2	Introduction to course		

Section 1: Basis of a Healthy Diet			
9/7	Nutrition Overview	Posted readings	
9/9	Nutrients, Foods, and Meals	Section 1.2	
9/14	Dietary Assessment Methods	Section 1.5 and posted readings	
9/16	Nutrition (mis)Communication	Highlight 1 and posted readings	Assignment #1 (5%)
9/21	AMA #1		
9/23	Section 1 test		Test: Section 1 (15%)
Section 2: Food in the Body			
9/28	Digestion and Absorption	Sections 3.1 and 3.2	
9/30	Common Digestive Problems	Highlight 3	
10/5	Energy Metabolism and Weight Control	Chapter 7; and sections 9.1, 9.3, and 9.6	Assignment #2 (5%)
10/7	AMA #2		
10/12	Section 2 test		Test: Section 2 (15%)
Section 3: Macronutrients and Alcohol			
10/14	Carbohydrates	Chapter 4	
10/21	Lipids	Chapter 5	
10/26	Proteins and Alcohol	Chapter 6 and Highlight 7	Assignment #3 (5%)
10/28	AMA #3		
11/2	Section 3 test		Test: Section 3 (15%)
Section 4: Micronutrients and Phytochemicals			
11/4	Vitamins: Water Soluble	Chapter 10	
11/9	Vitamins: Fat Soluble	Chapter 11	
11/11	Minerals	Sections 12.2, 12.3, 13.1, and 13.2	
11/16	Phytochemicals	Highlight 13	Assignment #4 (5%)
11/18	AMA #4		
11/23	Section 4 test		Test: Section 4 (15%)
Section 5: Consumer Concerns			
11/30	Food Safety	Sections 19.1, 19.3, 19.5, and 19.6	
12/2	Food Loss and Waste	Posted readings	
12/7	Food Labeling	None	Assignment #5 (5%)
12/9	AMA #5		
12/13	Final exam		Final exam: Section 5 (15%)

Laptop and phone policy: If you bring your laptop/tablet to class I expect that you are using it to take notes. The problem with using your laptop for non-class activities is that it is distracting

to other students who can see your screen (and to yourself) – and it can also be distracting to me! The same goes for your phone – please don't use it at all during class. If there is an emergency during class and you need to use your phone, please step outside of the classroom so others aren't distracted.

Attendance: You are expected to attend every class. Although attendance will not be recorded, crucial concepts will be presented and discussed in class that will not be included in the lecture slides and readings.

Accommodations: It is the policy of William & Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any student who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact the Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu. SAS staff will work with you to determine if accommodations are warranted and, if so, to help you obtain an official letter of accommodation.

Late submissions: If you will not be able to turn in an assignment or complete a test for any reason, you must notify me by email at least two days before your planned absence. Accommodations will be granted on a case-by-case basis. See the description of assignments/tests above for additional information, such as grade penalties.

Communications: All emails should include "KINE 350" somewhere in the subject line, that way I can prioritize your email. If you are requesting an accommodation, you must do so by email.

Diversity Mission Statement: To make the Department of Health Sciences a place where all are welcome and thrive, irrespective of their age, cultural identity, ethnicity, gender, faith, neurological make-up, geographic background, military (veterans) and economic status. We also seek to expand the definition of diversity to include differences in physical ability and physiologic capacity and to provide leadership across campus in understanding those differences. This includes students, faculty and staff.

The College Honor System: The College of William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the College, and we all are responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and I will report all suspected instances of academic dishonesty to the honor system. The Student Handbook (**www.wm.edu/studenthandbook**) includes your responsibilities as a student and the full Code. Your full participation and observance of the Honor Code is expected. To read the Honor Code, see **www.wm.edu/honor**.

This syllabus is subject to change.