

KINE 354: Nutrition in Health & Disease
Course Syllabus, Spring 2022
Tuesday and Thursday, 12:30-1:50pm



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Office hours: by appointment

Course description: This course presents the fundamental concepts that link nutrition with health and disease. These concepts are explored at the individual level *and* the population level – from clinical practice to epidemiologic research to national policy. This course is organized into five sections: From Clinical to Population Health; Reproductive System and Early Life; Gastrointestinal System; Metabolic, Pulmonary, and Renal Systems; and Cardiovascular and Immune Systems.

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

- Describe the etiology (biological and cultural) of major nutrition-related diseases and disorders;
- Identify the symptoms of micronutrient deficiencies;
- Identify evidence-based strategies for preventing and treating nutrition-related diseases and disorders;
- Describe the epidemiologic evidence that links food and nutrient intake with health outcomes; and
- Identify disparities in nutrition-related health outcomes.

Required text: Debruyne, L.K.; Pinna, K. Nutrition and Diet Therapy. 10th Edition. Available at the William & Mary bookstore.

Additional readings will be posted on Blackboard.

COLL 200 Cultures, Societies, and the Individual (CSI): Courses in this domain examine the realm of human cultures, societies, and individuals through their development, organization, and interaction. Some courses employ mathematical modeling, statistical analysis, and scientific experimentation; some, the analysis of artifacts and texts; and others, observation, inference, and extrapolation. Students learn to describe, theorize, and explain human cultures, societies, and individuals in their variety over time and space.

Add/drop deadline: February 4, 2022

Withdraw deadline: March 28, 2022

Grading:

Assignment/test	Points	Due/completion date
Assignments (×5)	25	2/8, 2/24, 3/22, 4/7, 5/3
Section tests (×4)	60	2/15, 3/3, 3/29, 4/14
Final exam (not cumulative)	15	5/12, 9am-noon
Total	100	

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 activities/assignments/assessments:

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 (20 percentage points is equivalent to 1 out of 5 points on the assignment). You will submit your questions via Blackboard by 11:59pm on the due date. Five submissions are worth 5% each, totaling 25% of your final grade.

Section tests are designed to assess depth of knowledge of each section. These typically include 20-30 multiple-choice and true/false questions, and each question is worth the same number of points. All tests are open note and open slides, but do not use the textbook or any other material (including online sources). 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 (including weekends). Tests submitted after five late days will not be accepted and will be graded as 0%. All tests will be completed on Blackboard. Tests will open at 12:01am and will be due by 11:59pm on the due date, you will have two hours to complete the test once you begin, and it will auto-submit at the two-hour mark. Four tests are worth 15% each, totaling 60% of your final grade.

The **Final exam** is designed to assess depth of knowledge of the final section in the course (it is not cumulative). It will include 20-30 multiple-choice and true/false questions, and each question is worth the same number of points. The final exam is open note and open slides, but do not use the textbook or any other material (including online sources). It will be completed on Blackboard and will be due by the date and time specified in this syllabus, and is worth 15% of your final grade.

Course schedule:

Date	Topic	Readings (ranges are inclusive)	Due dates
Introduction to course			
1/27	Introduction to course		
Section 1: From Clinical to Population Health			
2/1	Diet quality and disparities	Chapter 1 and posted readings	
2/3	Nutritional assessment and intervention	Chapter 14 and posted readings	
2/8	Obesity	Sections 6.5-6.7, and Chapter 7	Assignment #1 (5%)
2/10	AMA #1		
2/15	Section 1 test		Test: Section 1 (15%)
Section 2: Reproductive System and Early Life			
2/17	Pregnancy	Section 11.1	
2/22	Breastfeeding and Infancy	Sections 11.2 and 12.1	
2/24	Childhood and adolescence	Sections 12.2 and 12.3	Assignment #2 (5%)
3/1	AMA #2		
3/3	Section 2 test		Test: Section 2 (15%)
Section 3: Gastrointestinal System			
3/8	Digestion, absorption, and elimination	Chapter 2	
3/10	Upper and lower GI tract disorders	Chapters 17 and 18	
3/22	Malabsorption disorders	Chapter 19	Assignment #3 (5%)
3/24	AMA #3		
3/29	Section 3 test		Test: Section 3 (15%)
Section 4: Metabolic, Pulmonary, and Renal Systems			
3/31	Energy metabolism	Sections 6.1-6.4	
4/5	Endocrine and exocrine disorders	Chapter 21	
4/7	Pulmonary and kidney disorders	Section 24.3 and Chapter 23	Assignment #4 (5%)
4/12	AMA #4		
4/14	Section 4 test		Test: Section 4 (15%)
Section 5: Cardiovascular and Immune Systems			
4/19	Hypertension and atherosclerosis	Sections 22.4 and 22.1	

4/21	Stroke and coronary heart disease	Sections 22.2, 22.3, and 22.5	
4/26	Cancer	Chapter 25	
4/28	Foodborne illness and allergies	Posted readings	
5/3	Nutritional (mis)information	Posted readings	Assignment #5 (5%)
5/5	AMA #5		
5/12	Final exam		Final exam: Section 5 (15%) 9am-noon

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: This semester, the world will enter its third year with COVID. As we experience a fifth surge of pandemic with the highly transmissible omicron variant, it is reasonable to expect significant levels of infection at W&M. As an academic community based on faculty and students *convening*, spring 2022 courses will largely consist of in-person instruction. All of us will follow W&M requirements - vaccinations and boosters, indoor masking, as well as quarantine and isolation when ill. That last part is really important: for those who have tested positive, W&M’s requirements must be fulfilled before class can be attended in person; and, out of an abundance of caution, anyone with symptoms consistent with COVID – even if they don’t have a positive test – should not come to class.

Please note that testing positive for COVID or any other temporary illness is not considered a disability as defined by ADA guidelines and is not under the purview of W&M’s Student Accessibility Services (SAS). Thus, any questions should be addressed via email to the instructor.

To address student absences, students will be encouraged to post their class notes on Blackboard under the “Class notes” section. To address instructor absences, the instructor will post recorded lectures under the “Recorded lectures” section on Blackboard. These protocols will be implemented on an as-needed basis and will not necessarily be implemented throughout the entire semester. All assignments and tests will be submitted on Blackboard and will be completed remotely throughout the semester, regardless of COVID protocols. But if you are not able to complete a test due to illness please contact the instructor before the test opens to request an accommodation.

Mental health can pose significant challenges to student success at W&M, both in and outside of the classroom environment. The Kinesiology Department wants students to flourish during their time at W&M. If you are struggling with concerns, including, but not limited to, relationships, anxiety, alcohol or drug use, feeling down, trouble concentrating and/or lack of motivation, we hope you will reach out to campus resources, such as the Counseling Center, which is available for walk-ins during business hours and by phone after hours (757-221-3620).

You can learn more about their services via this link <https://www.wm.edu/offices/wellness/counselingcenter/>.

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 on late penalties.

Communications: All emails should include “KINE 354” 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.