

FN 354 – Introduction to Nutrition and Nutrient Metabolism

Fall 2023 – 100% online

INSTRUCTOR

Annie Wetter, PhD

Office: CPS 236

If you have questions or want to discuss something further, connect with me in these ways:

In-person office hours: Stop by my office or email me to set up a time that fits your schedule.

Virtual office hours:

To schedule a time to talk via phone or Zoom, email me **several days and times** that work for you, whether you want to call or Zoom, and I will respond within 24hrs with the time that works best for me.

Text: For brief inquiries (<200 characters) that do not require a detailed response.

I will reply ONLY if the text has "FN354" in the subject line.

715.572.6580 I will respond within 24hrs.

Email: For inquiries that are more detailed.

awetter@uwsp.edu I will respond within 24hrs.

COURSE DESCRIPTION

The course provides students with a fundamental understanding of the functions of nutrients and nutrient metabolism. This information will serve as a background for discussing contemporary health and nutrition issues, such as the basis for current nutrient and dietary recommendations, the relationship between diet and health, and the interaction between diet and physical activity in determining chronic disease risk. Sophomore standing is expected. As a 200-level science course, material is covered with the assumption that students have successfully completed a 100-level college biology course

STUDENT OBJECTIVES

1. Describe the anatomy, physiology, and biochemistry of nutrient digestion, absorption, and utilization.
2. Explain the role that foods, nutrients, and nutritional status play in chronic disease risk reduction, human performance, and overall well-being.
3. Describe some nutritional needs that differ based on gender, age, genetics and life stage.
4. Explain how personal factors such as ethnicity, culture, socioeconomic status, and environment can affect a person's food choices as they relate to achieving dietary recommendations.
5. Explain how food-based recommendations (MyPlate, DG2020) meet nutrient recommendations (RDA, AI, UL) and reduce chronic disease risk.
6. List common food sources for nutrients that have recommended levels of intake.
Learning objectives 1-6 will be
 - achieved by mastering reading and lecture material and engaging in discussions
 - assessed via exams
7. Investigate the evidence on nutrition claims and apply data from reputable sources to provide a defensible answer to questions about those claims.
Learning objective 7 will be achieved and assessed via written assignments

WHAT STUDENTS CAN DO TO BE SUCCESSFUL

1. Take ownership of your education and learning experience.
2. Take notes from the lectures in the outlines provided.
3. Complete the study guide and achieve the learning outcomes for each reading assignment.
4. Whenever you have questions or problems with an assignment, the material, or anything else about the course, reach out to the instructor using your UWSP email or Canvas message. Feel free to connect whenever you want to explore a topic further or to discuss how to apply the material in different ways.

ENDURING UNDERSTANDINGS

FN354 is designed to build essential knowledge and skills for health promotion professionals who discuss food and nutrition with individuals and/or groups. This course begins to transform your perspective from one of a consumer to that of a professional. Students will develop the professional understandings below through class discussions, lecture take-home messages, and assigned written work.

1. There is no one perfect diet.
2. No single food makes or breaks a diet. In other words, integrating a less healthful food (e.g., Big Mac) does not make a person's entire diet unhealthy. Similarly, consuming 1 more healthful food (e.g., salmon) or eliminating 1 less healthful food (e.g., bologna) does not make a diet healthful overall. The healthfulness of the diet is based on the balance of numerous foods consumed regularly.
3. Food and nutrient recommendations are not prescriptions or strict rules. Recommendations (e.g., My Plate) are general guidelines that can be achieved through numerous combinations of foods. Professionals help clients use these evidence-based recommendations as a point of reference for making healthy food choices that are consistent with personal preferences (i.e., taste, texture), cultural traditions, religious beliefs, economic circumstances, and logistical realities (i.e., access).
4. Reliable nutrition recommendations are based on decades of research from multiple lines of evidence. Recommendations therefore do not change quickly or often.
5. While foods can be grouped into categories (fruits, vegetables, grains), these distinctions are often less important than the foods' other characteristics (degree of processing, energy density, nutrient density). For example, it is less important to discuss whether a tomato is a fruit or a vegetable or beans are a vegetable or "protein" than to be clear that ketchup and corn flakes are more processed than whole tomatoes and corn.
6. While there are diagnostic criteria for health conditions (diabetes, obesity, hypertension), indicators of health (blood sugar, fatness, blood pressure) occur along a continuum of lower to higher. For most people, lifestyle choices (diet, physical activity, smoking, stress management, etc.) can shift their place along that continuum and as a result change their disease risk.
7. Preventable chronic disease risk (CVD, type II diabetes) is multifactorial, thus one is not "unhealthy" based only on the presence of one risk factor (e.g., body weight).

REQUIRED TEXTBOOK

NUTRITION: CONCEPTS & CONTROVERSIES,Sizer, 14th edition *Available at text rental and in Canvas*

There is some required reading. The assigned pages are posted in CANVAS for each topic and will be part of the content covered on exams. In addition, the text is a valuable resource for students to easily look up unfamiliar terms and provide visuals and explanations of the material that can enhance your mastery of the concepts covered in class. Thus, it is a reliable independent learning tool for students to use. With that said, students must know that the lecture material is NOT based on the textbook.

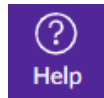
CLASS PARTICIPATION VIA CANVAS

All course material is accessible in Canvas. Students are expected to access course material in a timely manner and complete assignments by the posted due date. **You can work ahead, but you can't fall behind.** Technology can be a challenge, especially in rural areas. Be sure you have the [minimum computer and internet configurations for Canvas](#) and access to a stable internet connection (don't rely on cellular). If you have any questions about the capabilities of your technology resources, see [Student Technology Tutor](#) or contact [IT Service Desk](#) (715-346-4357; techhelp@uwsp.edu).

- You will use your UWSP account to login to the course from the [Canvas Login Page](#). If you have not activated your UWSP account, please visit the [Manage Your Account](#) page to do so.
- To access this course on Canvas you will need a stable internet connection (don't rely on cellular) and a supported Web browser (Internet Explorer, Chrome, Firefox, Safari). **Canvas works best in Chrome.**
- In Canvas, you will access resources and course materials as well as discussions, assignments, and exams. At designated times throughout the semester, you will participate in a blend of self-paced and group-paced activities using Canvas.
- Stay connected with the course by turning on email/text notifications. Go to the Account tab at the far left, hit settings to enter your email and cell phone in "ways to contact" and then hit notifications to tell Canvas to alert you of due dates, announcements, grades posted, etc. Hit Notifications (back in the Account menu on the left) and choose which course details you want to get reminders about and when you get the alerts.

TECHNICAL ASSISTANCE

Canvas Support is always available via the help button.



Also, you can contact:

a [Student Technology Tutor](#)

- **phone** 715-346-3568
- **e-mail** tlctutor@uwsp.edu
- **visit** 018 Albertson Hall (ALB)

the [IT Service Desk](#)

- **phone** 715-346-HELP (4357); 1-877-832-8977
- **e-mail** techhelp@uwsp.edu
- **visit** ALB 027

SPECIAL ACCOMMODATIONS

Within the first 3 days of class, students requiring special accommodations and/or program access should arrange an appointment with UWSP Disability and Assistive Technology Center located at the Learning Resource Center (LRC 609), telephone (715)346-3365. After the assessment, please email eligibility documentation to the instructor to request appropriate accommodations.

ASSIGNMENTS

All assignments will be submitted in Canvas by 11:59pm of the due date using a word processing software that is compatible with the default UWSP software Microsoft Word. If you have questions about how to ensure your submitted work can be graded, contact IT Service Desk (715-346-4357; techhelp@uwsp.edu).

Students will complete 2 assignments that involve current events in food and nutrition. The assignments build critical thinking skills. One also builds confidence accessing reliable sources of information and applying that information with care to address a client's question. Grades and feedback on assignments will be posted within 1 week of the due date.

EXAMS

There are 8 exams. ONLY ONE (1) attempt per exam will be provided. Each exam is timed at 1-2 minutes per question. Canvas shows you how many questions there are, so you know approximately how much time it will take to complete an exam. You cannot start, stop, and go back later. Once you start the exam, you must finish. Each exam will have approximately 20-40 questions and be from 20-60 minutes long. **This means students must be well prepared BEFORE starting the exam. No retakes will be allowed for students who do not plan appropriately and fail to take an exam by the deadline or are timed out before completing it.**

Students must notify the instructor 1 day BEFORE an exam due date about a conflict that interferes with a due date. The instructor will consider the circumstances and make a decision about whether to grant an extension. Without prior notification, an exam CANNOT be made up.

Exams are available through 11:59pm of the due date. **You can take the exam any time before the due date.** This means you have plenty of time to plan so that nothing interferes with your taking exams.

Exam feedback will NOT be available in Canvas. If you want to understand which questions you got wrong and why, contact the instructor to go over your exam.

If you have any questions or concerns about meeting the requirements of this course as stated above, please contact the instructor to discuss your questions and concerns.

If modifications are required due to a documented and verified disability, please inform the instructor and contact the Disability and Assistive Technology Center: 609 Learning Resource Center; phone (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or email at datctr@uwsp.edu

LATE WORK POLICY

Be sure to pay close attention to deadlines:

- Assignments will be docked 1 full letter grade for each day late.
- Exams **cannot be made up** without a serious and compelling reason and instructor approval.
 - Students must notify the instructor no later than **12 hours PRIOR** to the exam due date about the rare, unexpected, and extenuating circumstances that interfere with taking the exam.
 - The instructor will consider the circumstances and decide whether to grant an extension.

RELIGIOUS BELIEFS

Relief from any academic requirement due to religious beliefs will be accommodated according to UWS 22.03, with notification within the first three weeks of class.

GRADING

COMMIT TO INTEGRITY: UWSP 14.01 STATEMENT OF PRINCIPLES

The board of regents, administrators, faculty, academic staff and students of the University of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for

Grades (% of total grade)

8 Exams (70%)

2 Assignments (30%)

Extra credit

a **maximum** of **15pts** extra credit can be earned
see detailed instructions in CANVAS

Grading Scale

| | | | |
|----|---------|----|-----------|
| A | 93-100% | C+ | 77-79.9% |
| A- | 90-92.9 | C | 73-76.9 |
| B+ | 87-89.9 | C- | 70-72.9 |
| B | 83-86.9 | D+ | 67-69.9 |
| B- | 80-82.9 | D | 60-66.9 |
| | | F | below 60% |

FOR DIETETICS STUDENTS

FN354 addresses the following CADE Core Knowledge requirements:

| Curricular Area | Knowledge Requirement | Outcome Assessment |
|--|---|-----------------------|
| Domain 1. Scientific and Evidence Base of Practice | KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. | Assignments |
| | KRDN 1.3: Apply critical thinking skills. | Exams and assignments |
| Portfolio material: Assignment 2 that pertains to KRDN 2.1 is a required artifact for your dietetics portfolio. It is the student's responsibility to keep an electronic copy of all assignments. | | |
| Domain 2. Professional Practice Expectation | KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation. | Assignments |

Course schedule: 100% Online Fall 2023

Once a topic module opens, you may move through the module as quickly as you choose up until the topic exam due date. **You can work ahead, but you cannot fall behind.**

I recommend planning to devote at least 6 hours on each module.

Tips for success:

1. Take out a calendar and plan when you will proceed through each topic
2. Plan to devote at least 2 hours per topic to listen to lectures and take notes.
3. Add more time to do the reading
4. Combine the notes you take on the lectures/slides with what you are given in the outlines.
5. Complete the study guide and achieve the learning outcomes for each topic (at end and beginning of each outline) and each reading assignment.
6. Whenever you have questions about the material, ask the instructor for clarification.
7. Plan additional time to master the material on your own by doing these things
 - a. be able to EXPLAIN the material, don't just memorize the words
 - b. review all the content that was not covered in the study guide
8. Plan to start taking the exam no LESS than 45 minutes before the due date and time.
9. If you were unclear about an exam question, contact the instructor to discuss further after the exam.

You can only take each exam **ONCE**

| TOPIC | LEARNING ACTIVITIES FOR EACH TOPIC | ASSIGNMENT AND EXAM DUE DATES BY 11:59PM |
|--|--|--|
| Introduction to nutrition & dietary recommendations | <ol style="list-style-type: none"> 1. Read assigned pages, complete study guide 2. View video lectures, take notes in outline, complete study guide 3. Master the material by combining the info from the reading and lecture and be able to explain all of what you have learned to someone else | Monday, Sept 18 th |
| Digestion, absorption & transport | In Defense of Food worksheet | Friday, Sept 15 th Monday, Sept 25 th |
| Carbohydrates | | Monday, Oct 9 th |
| Lipids | Corroborating a claim with research evidence | Monday, Oct 23 rd Friday, Oct 27 th |
| Protein | | Monday, Nov 6 th |
| Energy balance & body weight management | | Monday, Nov 20 st |
| Micronutrients: vitamins & minerals | | Monday, Dec 4 th |
| Water & electrolytes | | Monday, Dec 18 th |
| Extra credit must be uploaded into Canvas by 11:59pm Friday Dec 15th | | |