

FN 253 – Introduction to Nutrition and Nutrient Metabolism

Spring 2021 – 100% online

INSTRUCTOR

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

Text: For brief inquiries (<100 characters) that do not require a detailed response.

715.572.6580 I will respond within 24hrs. **FN253 must appear in the subject line.**

Email: For inquiries that are more detailed, send a Canvas message or awetter@uwsp.edu and I will respond within 24hrs.

Talk: To schedule a phone or Zoom call, send a Canvas message or email with 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 fits my schedule.

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, DG2015) 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 quizzes and 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. Reach out to the instructor whenever you have questions or problems with an assignment, the material, or anything else about the course. 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

FN253 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.

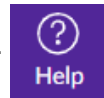
CLASS PARTICIPATION VIA CANVAS

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, assignment, quizzes, 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

By the end of the first week of class (by 5pm Friday), 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.

PRACTICE QUIZZES & EXAMS cover material in lectures, outlines, and readings

Practice quizzes are available for you to gauge how well you are learning the material. Each quiz can only be taken once. They **do NOT count** towards your course grade. Quizzes for a topic are available until 11:59pm the Tuesday before the Wednesday exam due date. Taking quizzes gives you feedback on how well you have mastered some (but not all) of the material and what areas you need to revisit before the exam. While some **exam** questions are based on the quizzes, the exams will contain questions that challenge you to apply the material in a new way.

There are 8 **exams**. ONLY ONE (1) attempt per exam will be provided. Each exam is timed at 30-60 seconds per question. 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.** You cannot start, stop, and go back later. Once you start the exam, you must finish. Each exam will have approximately 30 questions and be from 20-45 minutes long.

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 and we will go over the exam together.

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.
- Because quizzes are available for several weeks and they are intended to help student prepare for the exams, they cannot be taken after they close.

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 (75%)

2 Assignments (25%)

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

The Commission on Accreditation for Dietetics Education (CADE) is the American Dietetic Association's accrediting agency for education programs that are preparing students for careers as registered dietitians. CADE serves and protects the public by assuring the quality and continued improvement of nutrition and dietetics education programs. The UWSP dietetics curriculum is planned to provide learning activities to attain all the CADE Foundation Knowledge and Learning Outcomes required for graduates to be qualified to enter a Dietetic Internship for eligibility for the RD examination.

FN253 addresses the following aspects of CADE Knowledge Requirements and Learning Outcomes. These build on previous coursework and provide the basis for higher level courses in the curriculum.

Curricular Area	Knowledge Requirement	Outcome Assessment
1. Scientific and Evidence Base of Practice: integration of scientific information and research into practice	KRDN 1.2: Use current information technologies to locate and apply evidence-based guidelines and protocols.	Assignments
	KRDN 1.3: Apply critical thinking skills.	Exams and assignments
Portfolio material: One assignment that pertains to KR 1.1 is a required artifact for your dietetics portfolio. It is the student's responsibility to keep an electronic copy of all assignments, including group work.		
2. Professional Practice Expectations: beliefs, values, attitudes and behaviors for the professional dietitian level of practice	KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.	Assignments
3. Clinical and Customer Services: development and delivery of information, products and services to individuals, groups and populations	KR 3.2 Understand the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention.	Exams and assignments

COURSE SCHEDULE

100% Online

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. 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. take practice quizzes and revisit material you missed on the quizzes
 - c. review all the content that was not covered in the study guide and quizzes
7. Plan to start taking the exam no more than 45 minutes before the due date and time.
8. If you are unclear about a quiz or exam question, contact the instructor to discuss further.

You can only take each practice quiz and exam ONCE

Practice quizzes for a topic

Are available until the Tuesday before the topic exam

Help you see how well you are mastering the material and what you need to study more for the exam

Quiz feedback is available ONLY right after you take the quiz, so view it right away

TOPIC	LEARNING ACTIVITIES FOR EACH TOPIC	ASSIGNMENT AND EXAM DUE DATES BY 12 MIDNIGHT
Introduction to nutrition & dietary recommendations	1. Read assigned pages, complete study guide, take practice quiz 2. View video lectures, take notes in outline, complete study guide, take practice quizzes	Wednesday, Feb 3 rd
Digestion, absorption & transport	In Defense of Food worksheet	Wednesday, Feb 10 th Friday, Feb 12 th
Carbohydrates		Wednesday, Feb 24 th
Lipids	Dietary supplement research worksheet	Wednesday, March 10 th Friday, March 19 th
Protein		Wednesday, March 31 st
Energy balance & body weight management		Wednesday, April 14 th
Micronutrients: vitamins & minerals		Wednesday, April 28 th
Water & electrolytes		Wednesday, May 12 th
<i>Extra credit must be uploaded into Canvas by 11:59pm Wednesday May 19th</i>		