



**College of Natural and Health Science  
Department of Nutrition and Dietetics**

**Welcome to FND 250, Principles of Nutrition!** I am excited to be your instructor this semester and talk about nutrition, why we need carbs, what protein really does, why fiber is exciting and more!

**Semester:** Spring 2026

**Course prefix & number:** FND 250-001

**Course title:** Principles of Nutrition (3 credits)

**Prerequisite:** None (You don't have to have taken other classes to enroll in this course!)

**Where and When:** Gunter 1720, 10:10-11 am on Monday, Wednesday, and Friday

**Instructor:** Lisa Caldwell, MS, RD, CLC (Pronouns: she/her/hers) Please call me Lisa!

**Office:** Gunter 2340

**Office Phone:** (970) 351-2332

**Email:** [lisa.caldwell@unco.edu](mailto:lisa.caldwell@unco.edu)

**Student Visiting Hours: Come say hello!**

**When:** Monday and Wednesday 11am-12pm and before and after class.

These are drop-in times for students to say hello, ask questions about class material or class assignments, ask about nutrition and dietetics, or talk about helping you to meet your class goals. You don't have to be prepared with questions just stop by! If these times don't work for you we can schedule a different time to meet either in person, talk by phone, or do a virtual meeting. If for some reason I won't be available during a regularly scheduled time I will send a Canvas Announcement.

**Is a book required? No!**

You can do well in this course by coming to lecture, taking notes using the posted PowerPoints, watching posted videos, completing the quizzes, using the exam review sheets to prepare for exams, and starting the dietary analysis project early.

If you like also having a textbook for reference, (optional, not required!) a couple recommendations are: Byrd-Bredbenner, Moe, Berning, and Kelley. Wardlaw's Perspectives in Nutrition: 10<sup>th</sup> ed. McGraw-Hill Education. ISBN: 9780078021411 (This is available in hard copy and online.)

Or

Revilla, Tichenal, and Drapter. Human Nutrition (2020). University of Hawai'i Manoa. ISBN 13: 9781948027014

This is available in pdf and online formats. The book is downloadable for free at this link <https://open.umn.edu/opentextbooks/textbooks/622>

**Course Catalog Description & Course Description: What is this course about?**

**Course Catalog Description:** For students of any major. Investigation of the principles of nutrition as applied to humans.

**Course Description:** Primarily a large lecture-format course; however, a variety of activities are incorporated to enhance learning. These include presentations, discussions, quizzes/activities, and an

individual dietary analysis project.

### **Student Learning Outcomes: What will you learn in this course?**

1. Explain the fundamental concepts of human nutrition as they relate to overall health and disease. For example, how proper carbohydrate intake can influence diabetes.
2. Explain how concepts in nutrition apply to real world topics affecting humanity, such as malnutrition, access to food, heart disease, and other nutrition-related diseases. For instance, how protein energy malnutrition can result in the development of Kwashiorkor.
3. Evaluate the quality of evidence in a scientific argument as it relates to comparing nutrition research with recommendations. For instance, evaluating claims that energy drinks provide energy without providing calories.
4. Select methods to solve a wide variety of nutrition-related problems, particularly with how nutrition relates to wellness and prevention. For example, how to avoid development of obesity through nutrition, physical activity, and behavioral interventions.
5. Analyze and interpret evidence related to various nutrition concepts, particularly as they relate to health and disease. For example, illustrating trends within the college population as it relates to nutrition, such as, higher intake of fast food, and its impact on the development of atherosclerosis, obesity, or diabetes.
6. Analyze and interpret evidence through the use of graphs, figures, words, and discussion (in-class discussion, quiz/participation questions). For instance, examining growth charts to determine proper growth and development of youth.
7. Draw conclusions based on findings in a diet analysis project that involves analyzing data to come to conclusions regarding health and overall nutritional status. For example, examining average fiber intake over a 3-day period and its impact on personal health.
8. Interpret information provided in various forms and make connections to fundamental nutrition concepts. For instance, examining BMI tables and determining which category individuals fit into and their associated health risks.
9. Represent information using various forms, including demonstrating how the same nutrition information can be described through graphs, diagrams, tables, and words and how the proper conversion between these forms is essential to successful problem solving. For example, evaluating nutrient intake tables provided by the diet analysis project and translating this information into paragraph form to be able to properly analyze the data provided.

### **Course Organization and General Information**

This course will organize topics into what I will call modules. Each of the 14 modules in Canvas will have a video to watch before we start in on the topic, a quiz about the video content, PowerPoints, a post-module quiz, and review topics. (I will tell you more about what these are in a little bit!) Most modules cover about 3 lectures periods.

Course materials will be provided on your Canvas FND 250 page. Check Canvas daily for all updates, due dates, and announcements throughout the semester. If you have never used Canvas, never fear! There are some great videos, how tos, and tutorials available: <https://unco.instructure.com/courses/46>. I will also show you some things about Canvas on the first day of class.

<b>What are things that will help you do well in this class?</b> These are some things that I recommend and things that students have told me helped them to do well on exams.		
<b>Before Class</b>	<b>During Class</b>	<b>After Class</b>
<ul style="list-style-type: none"><li>• Watch the pre-module videos</li></ul>	<ul style="list-style-type: none"><li>• Come to class!</li><li>• Use the PowerPoints to take</li></ul>	<ul style="list-style-type: none"><li>• Take the post-module quizzes</li><li>• Use your notes and</li></ul>

posted in Canvas <ul style="list-style-type: none"> <li>• Take the pre-module quizzes</li> <li>• Think of questions that you want to ask me or look up later</li> </ul>	notes and follow along <ul style="list-style-type: none"> <li>• Ask all your questions (the more random the better!) – if I don't know an answer, I will get back to you</li> <li>• Class will be recorded and posted to Canvas so you can review later</li> </ul>	the exam review topics list to make your own exam review <ul style="list-style-type: none"> <li>• Re-write your class notes or talk through the class topics with a classmate</li> <li>• Re-watch the lecture video</li> <li>• Ask me questions!</li> </ul>
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## Course Organization and Course Schedule

Tentative Weeks	Topic
1	Introduction & Overview
2 -3	Digestion & Absorption
4	Carbohydrates
<b>Food Label Assignment: 8/30</b> <b>Portion Estimation: 9/11</b> <b>Exam 1 &amp; Pre- and Post-Module Quizzes – 9/23</b>	
5	Lipids
6	Proteins
7	Alcohol
<b>Dietary Analysis Part 1 – 10/11</b> <b>Exam 2 &amp; Pre- and Post-Module Quizzes – 10/18</b>	
8	Vitamins
9	Minerals & Water
10	Energy Metabolism
12	Weight, Energy Balance, & Disordered Eating
<b>Exam 3 &amp; Pre- and Post-Module Quizzes – 11/18</b> <b>Dietary Analysis Part 2 Due- 11/20</b>	
12	Nutrition through Pregnancy
13	Nutrition through Youth
14	Nutrition through Adulthood
15	Sports Nutrition
<b>Final Exam &amp; Pre- and Post-Module Quizzes: Thursday, December 12</b> <b>8am-10:30am</b>	

## Course Assessments

You will be assessed on pre and post module quizzes, three exams plus a final, assignments and a dietary analysis project.

<b>Pre-Module Quizzes</b>	<ul style="list-style-type: none"> <li>- Watch the pre-module video before we talk about the module topics in class</li> <li>- Take the pre-module quiz after you watch the pre-module video</li> <li>- This quiz can be taken a maximum of two times to get all the points.</li> </ul>
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	<ul style="list-style-type: none"> <li>- Ideally, take the quiz before we start a new module</li> <li>- The amount of points varies but is usually 3-4 points.</li> <li>- The lowest 3 quizzes will be dropped.</li> <li>- A quiz that isn't done will be a 0.</li> </ul>
<b>Post-Module Quizzes</b>	<ul style="list-style-type: none"> <li>- Take the post-module quiz when we finish a module (topic).</li> <li>- You will have two changes to take the post module quiz.</li> <li>- These are not timed, but I recommend you time yourself to take no more than 5 minutes on these (because we have limited class time for exams).</li> <li>- These are worth 5 points each.</li> <li>- The lowest 3 quizzes will be dropped.</li> <li>- A quiz that isn't done will be a 0.</li> </ul>
<b>Exams</b>	<ul style="list-style-type: none"> <li>- Three exams are worth 50 points each.</li> <li>- The final is worth 100 points.</li> <li>- Exams are multiple choice and true/false.</li> <li>- Exam review topics will be in each module.</li> <li>- There will be review of the topics that will be on the exam throughout class.</li> <li>- If you have an emergency, please let me know so we can reschedule the exam.</li> <li>- Exams are done in-person.</li> </ul>
<b>Projects &amp; Assignments</b>	<ul style="list-style-type: none"> <li>- Portion Estimation Assignment: Most American have portion distortion: how accurately can you guesstimate portion sizes?</li> <li>- Food Label Reading assignment: What can we learn from food labels?</li> <li>- Dietary Analysis Project: Part 1 is recording your nutrition and exercise data. Part 2 consists of analyzing the results during the second part of the semester.</li> <li>- If you have concerns about how any of these activities might impact your wellness let me know.</li> <li>- Extra credit is available by turning in the dietary analysis project earlier than the due date.</li> </ul>

Both the pre and post module quizzes for modules will be due the day of the exam that covers the material from those modules. For example, pre and post module 1, 2 and 3 quizzes will be due on exam 1 day. If I get behind (because I tell random nutrition stories sometimes!) I will extend the quiz due date and only ask questions on the exam that we talked about in class.

**Extra Credit:** You all can earn a maximum of 20 extra credit *points* throughout the semester. The extra credit opportunities will help you learn more about activities that other campus groups, organizations or departments are doing, and learn about campus services.

You can earn 5 points for every event (up to 4) that you attend that is approved by me, relates to a Sustainable Development Goal (SDG; <http://www.teachsdgs.org/>) and be open to all students at UNC. Please feel free to ask me about any events that you are aware of to get approval for extra credit before you go to the event. If you attend an event for extra credit, you will receive these extra credit points if you arrive before the event start and leave after the event ends and pay attention to the material

You will also be able to earn extra credit by checking out campus resources. I will give you more

information in class and on campus.

Other extra credit opportunities towards the 20 points will be announced during the semester in class and on Canvas.

**Course Requirements:** Evaluation and grades will be based on the following:

Exam 1	50
Exam 2	50
Exam 3	50
Final	100
Assignments	50
Dietary Analysis Project (1 and 2)	100
Pre-Module Quizzes	30
Post-Module Quizzes	50
<b>Total</b>	<b>480</b>

**Grading:** A system of total points earned will be used to determine your final course grade as follows:

- A 100% to 90%
- B < 90% to 80%
- C < 80% to 70%
- D < 70% to 60%
- F < 60% to 0%

To calculate the course grade during the semester, take the total earned points divided by the total points attempted.

D and above is a passing grade for the university. You will receive the grade that you earn based on your final point tally. For Dietetics, a C or above (not including a C-) is required to check FND 250 off the major requirements.

### **Resources, References, and Policies**

**Land Acknowledgment:** The University of Northern Colorado occupies the lands in the territories of the Ute, Cheyenne, Lakota and Arapaho peoples. The University acknowledges the 48 tribes that are historically tied to the state of Colorado. Thus, the land on which UNC is situated is tied to the history and culture of our native and indigenous peoples. UNC appreciates this connection and has great respect for this land. Additionally, the University community pays its respect to Elders past, present, and future, and to those who have stewarded this land throughout the generations.

As part of the learning and reflection process please visit <https://native-land.ca/> or call the Office of Equity & Inclusion at 970-351-1944.

### **What should I do if I need help?**

Please contact me if something comes up and you're having a hard time keeping up, if you have a question about the material, a concern about the class, a problem with Canvas, or you just want to talk nutrition and dietetics!

Students often experience stressors that make it difficult for them to meet the challenges of their courses—stressors like sleep problems, financial concerns, relationship concerns, employment difficulties, feelings of anxiety, hopelessness, or depression.

- If you are struggling with this class, please visit me during office hours or contact me via e-mail.
- If you're not sure where to turn, the **website** for UNC's Student Outreach and Support (SOS) office lists a wide variety of resources for students. Case Managers in the SOS office can assist students during difficult circumstances which may include medical, mental health, personal or family crisis, and illness or injury.
- Mental health professionals are available on-campus and in the community. See a wide variety of on- and off-campus resources on the **Dean of Student's webpage**.
  - If you or someone else is experiencing a crisis:
    - On-Campus and During Business Hours: Call the **UNC Counseling Center** at 970-351-2496.
    - After Hours (including evenings, weekends, and holidays):
      - Contact North Range Behavioral Health by calling 844-493-TALK (8255) or text TALK to 38255
      - Contact the 988 Suicide and Crisis Lifeline at 9-8-8.
  - For free, confidential consultations, check out the **Counseling Center**. To access staff in the Counseling Center, call 970-351-2496 or stop by the Center, located on the second floor of Cassidy Hall.

**Contacting me outside of class:** Sometimes it can be intimidating to talk with a professor one-on-one, particularly because the professor will ultimately be assigning you a grade. So, I want to let you know that you are welcome to bring someone else with you to meet with me. For example, you could bring another student in the class, a friend, or another person from the university such as another professor, a director of a cultural center or student success center. I am also ok with you talking with someone else in the university, such as a fellow student, another faculty member, a director of a cultural center or student success center, or your coach and having them call me to talk with me about the issues you are facing.

**Disability Resources:** It is the policy and practice of the University of Northern Colorado to create inclusive learning environments. If there are aspects of the instruction or design of this course that present barriers to students' inclusion or to accurate assessments of students' achievement (e.g. inaccessible web content, use of videos without captions), students should communicate about these aspects with their instructor(s).

Additionally, if you have a temporary health condition or a permanent disability that requires accommodations, contact the Disability Resource Center (DRC) as soon as possible. DRC facilitates the interactive process that establishes reasonable accommodations.

Office: (970) 351-2289, Michener Library L-80.

Students can learn more here: **[www.unco.edu/disability-resource-center](http://www.unco.edu/disability-resource-center)**

**Equity and Inclusion:** The University of Northern Colorado (UNC) embraces the diversity of students, faculty, and staff. UNC honors the inherent dignity of each individual, and welcomes their unique perspectives, behaviors, and world views. People of all races, religions, national origins, sexual orientations, ethnicities, genders and gender identities, cognitive, physical, and behavioral abilities, socioeconomic backgrounds, regions, immigrant statuses, military or veteran statuses, sizes and/or shapes are strongly encouraged to share their rich array of perspectives and experiences. Course content and campus discussions will heighten your awareness of others' individual and intersecting identities. For information or resources, contact the Division of Diversity, Equity and Inclusion, at 970-351-1944. If students want to report an incident related to identity-based discrimination/harassment, please visit **[www.unco.edu/institutional-equity-compliance](http://www.unco.edu/institutional-equity-compliance)**.

**Title IX:** The University of Northern Colorado is committed to providing a safe and inclusive learning environment for all students that is free from discrimination and harassment, including sexual harassment, sexual assault, domestic violence, dating violence, and stalking. Students who have experienced (or who know someone who has experienced) any of these concerns should know that they are not alone. UNC has staff members in the University's **Office of Institutional Equity and Compliance** (OIEC) who are trained to support students in navigating these concerns and are able to provide on- and off-campus resources and supports, referrals to health and counseling services, academic and housing modifications, and mutual no-contact orders between individuals.

Please be aware all UNC instructors and most staff members are required to report their awareness of sexual misconduct to the OIEC. This means that if students tell an instructor about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, the instructor must share that information with the Title IX Coordinator and Equity Officer, Jimmy Kohles. Mr. Kohles or a trained staff member in OIEC will contact the reporting students to let them know about resources and support services at UNC as well as their options to pursue an investigation through OIEC, law enforcement, or both. Students who have experienced these types of incidents are not required to speak with OIEC staff regarding the incident. Students' participation in OIEC processes are entirely voluntary.

If students do not want the Title IX Coordinator notified, instead of disclosing this information to the instructor, students can speak confidentially with the following people on campus and in the community. They can connect you with support services and help explore options now, or in the future. UNC has confidential victim advocates available 24/7 by phone – students can contact the **Assault Survivors Advocacy Program** (ASAP) at 970-351-1490 to seek confidential guidance and support.

UNC's Assault Survivors Advocacy Program (ASAP): 24 Hr. Hotline 970-351-4040 or <http://www.unco.edu/asap>

UNC Counseling Center: 970-351-2496 or <http://www.unco.edu/counseling>

UNC Psychological Services: 970-351-1645 or [http://www.unco.edu/cebs/psych\\_clinic](http://www.unco.edu/cebs/psych_clinic)

Students who are survivors, who are concerned about someone who is a survivor, or who would like to learn more about sexual misconduct or report an incident, can visit [www.unco.edu/sexual-misconduct](http://www.unco.edu/sexual-misconduct). Students may also contact OIEC at 970-351-4899 or email [titleix@unco.edu](mailto:titleix@unco.edu).

### **Academic Integrity:**

Students are expected to practice academic honesty in every aspect of this course. Students who engage in academic misconduct are subject to grading consequences with regard to this course and/or university disciplinary procedures through the Dean of Students Office. Academic misconduct includes actions such as cheating, plagiarizing, fabricating false sources, unauthorized recording, and/or unauthorized use of artificial intelligence (AI). AI Writing tools are not permitted for any student work submissions. More information about the academic misconduct process can be found in **University Regulations 3-2-203** and additional procedures outlined UNC's **Student Code of Conduct** (Student Code).

**Writing Center:** The Writing Center offers three kinds of sessions to meet your writing needs: In-Person, Email, and Zoom Sessions. Trained Writing Center Consultants can assist you with writing assignments from any course or subject. Even if you think your writing is pretty good, it's always nice to have another reader look over your work.

To guarantee a session time, make an appointment using our online scheduling system by visiting our website (below). We also have walk-in session times available during our scheduled open hours, Monday – Friday

9:00 am – 4:00 pm in the Writing Center, Ross Hall 1230 as well as walk-in sessions in the library (first floor)  
Monday – Thursday evenings, 5:00 pm – 8:00 pm.

If your instructor requires you to visit the Writing Center, make sure to alert your Consultant, and/or check the box on the appointment form, and we will send an email confirmation of your session to your instructor.

For more information, email the Writing Center at [writingcenter@unco.edu](mailto:writingcenter@unco.edu) or visit the website: [www.unco.edu/writing-center](http://www.unco.edu/writing-center).

**Veterans/Service Members:** I recognize the complexities of being a member of the military community and also a student. If you are a member of the military community, please inform me if you are in need of special accommodations. Drill schedules, calls to active duty, complications with GI Bill disbursement, and other unforeseen military and veteran-related developments can complicate your academic life. If you make me aware of a complication, I will do everything I can to assist you or put you in contact with university staff who are trained to assist you.

**Notice of Copyright:** Materials in this course—unless otherwise indicated—are protected by United States copyright law [Title 17, U.S. Code]. Materials are presented in an educational context for personal use and study and should not be shared, distributed, or sold in print—or digitally—outside the course without permission. As a student your ability to post or link to copyrighted material is also governed by United States copyright law.

**Accreditation Council for Education in Nutrition and Dietetics (ACEND) Knowledge Requirements for Registered Dietitians (KRDN): How does this class fulfill Accreditation requirements for students aiming to be a Registered Dietitian Nutritionist?**

Our Didactic Program in Dietetics is accredited which means that this course needs to meet certain standards for students studying to be Registered Dietitian Nutritionists. The knowledge requirements are listed below.

- KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.
- KRDN 1.2 Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols.
- KRDN 1.3 Apply critical thinking skills.
- KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation.

**Liberal Arts Curriculum & GT Pathways**

This course is a part of the Liberal Arts Curriculum at UNC and fulfills 3 credit hours of the Natural & Physical Sciences category. The Colorado Commission on Higher Education has approved FND 250 for inclusion in the Guaranteed Transfer (GT) Pathways program in the GT-SC2 category. For transferring students, successful completion with a minimum C– grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to <http://highereducation.colorado.gov/academics/transfers/gtpathways/curriculum.html>

UNC's LAC outcomes in Natural & Physical Sciences are aligned with the State of Colorado's GT Pathways student learning outcomes, competencies, and content criteria for SC2. This includes CDHE competencies and student learning outcomes in Inquiry & Analysis and Quantitative Literacy.

LAC Natural & Physical Sciences Learning Outcomes + GTP Competencies & SLOs	Course Mapping
<b>Inquiry &amp; Analysis:</b> Inquiry is a systematic process of exploring issues/objects/works through the collection and analysis	Demonstrated via the Dietary Analysis Project: Macronutrient and Micronutrient analysis and making recommendations for change

<p>of evidence that results in informed conclusions/judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.</p> <p><b>Student Learning Outcomes (SLOs)</b>  <b><i>Students should be able to:</i></b></p> <p><b>4. Select or Develop a Design Process</b></p> <ul style="list-style-type: none"> <li>a. Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline.</li> </ul> <p><b>5. Analyze and Interpret Evidence</b></p> <ul style="list-style-type: none"> <li>a. Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus.</li> <li>b. Utilize multiple representations to interpret the data.</li> </ul> <p><b>6. Draw Conclusions</b></p> <ul style="list-style-type: none"> <li>a. State a conclusion based on findings.</li> </ul>	
<p><b>Quantitative Literacy:</b>  Competency in quantitative literacy represents a student's ability to use quantifiable information and mathematical analysis to make connections and draw conclusions. Students with strong quantitative literacy skills understand and can create sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc.).</p> <p><b>Student Learning Outcomes (SLOs)</b>  <b><i>Students should be able to:</i></b></p> <p><b>1. Interpret Information</b></p> <ul style="list-style-type: none"> <li>a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).</li> </ul> <p><b>2. Represent Information</b></p> <ul style="list-style-type: none"> <li>a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).</li> </ul>	<p>Demonstrated via the Dietary Analysis Project: Food group analysis, food group description/reflection, and meal pattern reflection</p>

<b>Content Criteria for Natural &amp; Physical Sciences (GT-SC2)</b>	<b>Course Mapping</b>
<p><b>1. The <u>lecture content</u> of a GT Pathways science course (GT-SC1 or GT-SC2): Students should be able to:</b></p> <ul style="list-style-type: none"> <li>a. Develop foundational knowledge in specific field(s) of science.</li> <li>b. Develop an understanding of the nature and process of science.</li> <li>c. Demonstrate the ability to use scientific methodologies.</li> </ul>	<p>Content will be provided, developed, demonstrated and examined in class, with homework (such as the Dietary Analysis Project), with quizzes, and with exams.</p>

<b>d.</b> Examine quantitative approaches to study natural phenomena.	
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