# NTR F306: Fundamentals of Nutrition

# Summer 2024 | Unique Course Number: 85145

**Department of Nutritional Sciences | University of Texas at Austin**

**Lecturer:** Michele Hockett Cooper, MS

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[About Michele](https://he.utexas.edu/component/cobalt/item/85-nutritional-sciences/2861-hocket-cooper-michelle?Itemid=1481)

**Course Dates:** June 6 – July 30, 2024 (“9-week” session)

**Location:**  Web-based, asynchronous lectures

**Instructor’s Office Hours:** By appointment, *-or-* online, open Zoom meetings

Tuesdays at 1:00-2:00pm; Join URL on Canvas (passcode: 85145)

**Teaching Assistants (Who’s My TA?):**

|  |  |  |  |
| --- | --- | --- | --- |
| TA Name | TA Email | Student Section  (by student last name\*) | Office Hours\*\* |
| Madilyn Bradley | madbrad26@utexas.edu | A – C, Z | Wed,  3:30-4:30 |
| Maripat Halimutati | maripat0421@utexas.edu | D – J | Mon,  2:00-3:00 |
| Anahí Ramos-Gonzalez | anahi.ramosg@utexas.edu | K – M | Tues,  11:00-noon |
| Julia Tucker | julia.tucker@utexas.edu | N – R, X, Y | Wed,  11:00-noon |
| Elham Almahmoud | elham@austin.utexas.edu | S – W | Mon,  11:00-noon |
| Michele  Hockett Cooper (Instructor) | mhcooper@utexas.edu | Contact me if you cannot reach your TA, or if you have a question that is private / sensitive | Tues,  1:00-2:00  (or by appt.)  (Zoom link can be found on Canvas in Zoom menu, passcode: 85145) |

**\***If you have two last names (e.g., Hockett Cooper), your TA is assigned by the first initial of your *first* last name (e.g., **H** for Hockett Cooper).

**\*\***Please contact your TA for their Zoom office hours meeting link. If your TA's open office hour time does not align with your schedule, contact them directly to set up a private appointment.

**Course Description**

Fundamentals of Nutrition provides an overview of the science of nutrition. It is an introductory course about food and its relationship to health, development, and disease. Topics covered include components of food (carbohydrates, fats, proteins, vitamins and minerals), their digestion, absorption, transport, and metabolism, their sources in foods, effects of deficiency or excess, and the biological roles they play in the body. Students learn the vital role of scientific inquiry in addressing currently pressing problems such as the growing epidemic of obesity and chronic illnesses, including diabetes, coronary heart disease, and cancer. Other nutrition-related conditions, such as eating disorders and osteoporosis, are also covered. This course conveys knowledge and skills that are relevant and applicable to students’ lives both now and in the future. One example is the application of current nutritional research findings to making informed choices about dietary supplements.

This course may be used to satisfy the Natural Science and Technology (Part I) or (Part II) requirement of the Common Core Curriculum and addresses the following four core objectives established by the Texas Higher Education Coordinating Board: communication skills; critical thinking skills; teamwork; and empirical and quantitative skills.

The content of this course will be communicated via asynchronous lectures, assigned readings, projects, and online discussion groups. In addition, the instructor will engage the class in online discussions of current theories and empirical research in nutrition, and will answer questions raised by students. Quantitative methods are widely used in a variety of contexts. Students will learn formulas for determining major constructs in nutrition such as body mass index, basal metabolic rate, and total energy needs. Students will become familiar with making calculations related to nutrient proportions in their diet and in the foods they eat. A major class assignment is to perform an analysis of students’ own diet, evaluate the degree to which it meets established dietary guidelines, and determine how it could be improved.

**Course Objectives**

Upon completion of this course, students will be able to:

1. Demonstrate fundamental nutrition knowledge related to macronutrients, micronutrients, digestion and absorption, nutrient function, dietary recommendations, food composition, and nutritional health.
2. Apply basic dietary principles of adequacy, balance, variety, and moderation in planning healthy dietary choices.
3. Critically evaluate food and nutrition information in the popular media and scientific literature.
4. Assess nutritional status and make recommendations to improve dietary habits and promote health of self and other individuals.

**Course Materials**

**Textbook**: Whitney, EN, Rolfes, SR. Understanding Nutrition, 16th edition

The e-book and MindTap package are available through the Longhorn Textbook Access (LTA) program, a new initiative between UT Austin, The University Co-op and textbook publishers to significantly reduce the cost of digital course materials. **You are automatically opted into the program** but can easily opt-out (and back in) via Canvas through the 4th class day. If you remain opted-in at the end of the 4th class day you will receive a bill through your “[What I Owe](https://utdirect.utexas.edu/acct/rec/wio/wio_home.WBX)” page and have until the end of the 15th class day to pay and retain access. If you do not pay by the 15th class day, you will lose access to the materials and your charge will be removed. More information about the LTA program is available at:

<https://www.universitycoop.com/longhorn-textbook-access>

**Dietary Analysis Program**: Students are required to use a dietary analysis tool (such as software, online website or mobile app) to complete the Dietary Analysis Project (See “Assignments” below). You may use one of the following to complete the assignment:

* **Suggested Option:** [www.cronometer.com](https://cronometer.com/) (free) + Cronometer app (free)
* **Alternative Option 1:** Diet & Wellness Plus (Cengage) online tool. This accompanies the e-textbook through the MindTap package (see above), and comes with a mobile app. You can find user information upon purchasing the MindTap package.
* **Alternative Option 2:**  [www.MyFoodRecord.com](http://www.myfoodrecord.com) (free)

**Technical Requirements**

All students are required to have access to a **laptop** or **desktop computer**, running either Windows or macOS operating systems. Tablets, smartphones, and Microsoft Surface devices are not supported.  Your computer should meet the following requirements:

* Modern and up-to-date operating system (macOS or Windows)
* Browser: Chrome (highly recommended), Safari or Firefox. If using Safari or Firefox, be prepared to [download Chrome](https://www.google.com/chrome/) and use it.
* Internet connection speed: 5 Mbps download speed. [Check your speed here.](http://www.speedtest.net/)

Confirm that your computer is able to stream video by visiting:

<https://www.laits.utexas.edu/tower/tech.php>

For the best experience:

* Close all unnecessary browser windows and tabs and programs
  + Streaming music (Pandora, Spotify, etc.)
  + Social media sites
  + YouTube or other video sites
  + Online/Offline Gaming
* Check your computer is free of viruses, malware, and spyware ([UT recommendations](https://security.utexas.edu/education-outreach/anti-virus))
* Clear the browser's cache before class ([here's how.](http://www.refreshyourcache.com/en/home/))

**Technical Support:** If you experience a technical problem, click on the "***Online Course Tech Support***" item in the **left-side navigation bar of Canvas**. The Online Course Tech Support chatbot, called "LAITS Bot", will assist with technical problems and can escalate your question to a human if it cannot readily answer your question.

**Grades**

**Evaluative Criteria Points Each Total Points**

Popular Diet Infographic 25 25

Dietary Analysis Project 50 50

Checks for Understanding (CFUs) x8 25 200

Midterm Exam and Final Exam 100 200

**TOTAL 475**

Extra credit: Varies ~35 possible

**Grading Scale**

**Numerical Grade (%) Letter Grade**

92.5 - 100 A

89.5 - 92.4 A-

86.5 - 89.4 B+

82.5 - 86.4 B

79.5 - 82.4 B-

76.5 - 79.4 C+

72.5 - 76.4 C

69.5 - 72.4 C-

66.5 - 69.4 D+

62.5 - 66.4 D

59.5 - 62.4 D-

0 - 59.4 F

**Student Emergency, Disability, and Religious Holy Day Accommodations:** Students experiencing emergencies (e.g., physical illness, accident, or mental health crisis) or unexpected life situations (e.g., death in the family, etc.) may request academic accommodations and/or extensions through the Student Emergency Services (SES) Office: <https://deanofstudents.utexas.edu/emergency/>

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Disability and Access Office: <http://ddce.utexas.edu/disability/>.

By UT Austin policy, students must notify the professor of a pending absence at least fourteen days prior to the date of observance of a religious holy day. Should an assignment be due on one of these days, it must be submitted prior to your absence.

**University Health Services Nutrition Services:** This course may present sensitive material that prompts you to speak with a professional about your personal nutrition or dietary choices. Please take advantage of the University’s on-campus nutrition services available to you, including individual appointments with a registered dietitian, the Mindful Eating Program, and peer education workshops on a variety of wellness topics. Visit <https://healthyhorns.utexas.edu/dietitian.html>or call (512) 475-8010.

**“Classroom” Courtesy:** Given the online format of this course, it is tempting to multitask and allow yourself to be otherwise distracted during lectures. For your own benefit, please limit distractions in your environment and on your devices while you watch asynchronous lectures. Disrespectful behavior will not be tolerated via electronic communications with the course instructor or your fellow students. Persistent non-compliance with course policies will lead to dismissal from the course and referral to the Office of the Dean of Students for counseling.

**Academic Integrity**: All students are expected to conduct themselves in an ethical manner and to have read and understood the sections of the *General Information Catalogue* on scholastic dishonesty. Penalties for instances of scholastic dishonesty in this course will be as outlined in the *General Information Catalogue*. The least severe penalty in this course shall be an official report filed with the Dean of Students, which will appear on students’ permanent academic record. Questions or concerns about this policy can be addressed with the instructor.

All coursework (e.g., exams, assignments, projects, etc.) is to be completed independently. Answer sharing and/or collaboration between students on official coursework will not be tolerated, and will be treated as a violation of academic integrity. Studying for exams or co-learning to understand concepts are the only exception to this policy.

No CFU/exam questions or assignment answers should be preserved through any means whatsoever. Sharing CFU/exam questions, assignments, or any other course material via personal interactions, email, Facebook (or other social media platforms), Google Docs, photographs, course sharing websites (e.g. Course Hero) or any other means is strictly prohibited. No photographs or copies of anything presented on the screen may be made; nor can any material be recorded without consent of the instructor. Violations of these policies will be considered a breach of scholastic honesty and will be penalized as outlined in the *General Information Catalogue*, with the least severe penalty being an official report filed with the Dean of Students, which will appear on students’ permanent academic record.

Absolute honesty must be practiced in all assignments and activities. Cheating in its various forms (such as copying or sharing information on individually assigned projects or examinations, plagiarism or falsification of information or data) will not be tolerated and may be grounds for dismissal from the class. Students are encouraged to become familiar with the University policy on academic honesty. Any suspected violation of the policy will be reported to the Dean of Students and will appear on students’ official academic record.

**Electronic Course Management:** Canvas is the online learning portal through which this course will be administered. Students will find lecture recordings, CFUs, exams, supplementary readings, assignments, and this syllabus posted on Canvas. Grades will also be updated regularly on Canvas.

E-mail is recognized as an official mode of university correspondence. Therefore, you are responsible for reading your e-mail and Canvas Announcements for university and course-related information. You are responsible to keep the University informed about changes to your e-mail address. You can find UT Austin’s policies and instructions for updating your e-mail address at: <http://www.utexas.edu/its/help/email/1564>.

Please utilize email, Canvas messaging, online office hours, or separate, scheduled appointments as the main means of communicating with the course instructor and TAs.

**Course Policy and Procedures**

1. Students are expected to keep pace with asynchronous lectures and CFUs according to the course schedule outlined below.
2. All students are expected to read the UT Student Handbook regarding plagiarism and its possible consequences.
3. Assignments, CFUs, and exams are due by 11:59pm on the date listed on the course schedule below. Technical issues, such as Wi-Fi connection problems or Canvas “glitches”, are *not* an excusable reason for late submission of coursework.
4. For each day that an assignment/CFU is late past the due date, 10% will be deducted from the final assignment grade.
5. Exams will not reopen after the close date unless a documented personal or family emergency or health problem is sent to the course instructor from Student Emergency Services for review and approval *within 24 hours of the exam close date*.
6. Personal emergencies or serious health problems are the only reasons for granting an incomplete in the course. In general, a grade of incomplete will not be given in the course.
7. Grades will be posted on Canvas within approximately 2 weeks of the due dates listed below.
8. Questions regarding grades and general assignment questions should initially be directed to your specific TA over email or online during the TA’s office hours. If any questions need additional follow-up, they should be addressed with the instructor during online office hours. Grades will only be open for discussion for 1 week after they are posted. All grades will be considered final after this 1-week period.

**Coursework**

**Course Structure:** This course utilizes Canvas Modules to organize content (e.g., lecture videos, slide PDFs, assignments, etc.). Each week, there will be a new Module to complete. Weekly Modules will open at 8:00am on Mondays (with the exception of Module 1, which opens the first day of the session). After they open, Modules will remain open for the duration of the session.

**Checks for Understanding (CFUs):** There will be one CFU (worth 25 points) in each Module throughout the session (1 per week for a total of 8, for 200 possible points). CFUs will be administered via Canvas.

* With the exception of the first week of class (which is a condensed week), CFUs for each Module will be available from 8:00am on Monday until 11:59pm the following Sunday (~7 days).
* CFUs will look and feel like a Canvas ‘quiz’, but they are low-stakes assessments (i.e., worth only 25 points each, open-note, not timed).
* You will be allowed **one continuous attempt** at each CFU, but your attempt will have unlimited time.
* CFUs will be open-book, open-note.
* No make-up or early CFUs will be offered.
* You are expected to work alone on the CFUs.
* CFU responses may be reviewed with your TA during online office hours for *one week only* following the close of the assignment.
* Display academic integrity when completing CFUs. CFU questions may not be preserved in any way. “Googling answers” is not allowed. See academic integrity section for penalties should this policy be broken.

**Projects:** This course includes two project-based assignments that are designed to enhance the educational experience, provide more in-depth information for students about their individual dietary habits, utilize peer collaboration as a resource to broaden the scope of their experience, and gain appreciation for the larger role of nutrition in society. All assignments are due on Canvas by 11:59pm on the due date listed in the course schedule below. **All assignments must be submitted as PDFs.** Please find information about late submissions in the Course Policies and Procedures section above. More information about the projects, including the rubrics used for grading, can be found on Canvas.

* **Dietary Analysis Project:**
  + **Objectives:** The purpose of this exercise is to provide students with experience in collecting and analyzing data, as well as provide useful information about their own (or someone else’s) dietary intake.
  + **Expectations:** Each student will keep a food diary for 3 days and then run a quantitative analysis of their diet for a variety of nutrients using dietary analysis software (see “Course Materials” for allowable options). The results of the 3-day dietary analysis will be compared to established national guidelines to assess the adequacy of the student’s diet in providing the necessary macro- and micro-nutrients to support good health. Based on this assessment, students will discuss changes that could be made to achieve a healthier diet, including which food options (and in what amount) would remedy deficiencies, and which foods should be consumed in moderation/less frequently to promote better health.
    - **PLEASE NOTE:** If a student does not wish to analyze their own dietary intake, they may analyze the dietary intake of a friend or family member as a “client”. In this scenario, the client should record their food intake for 3 days and grant the student access to their data. The student would then run quantitative analysis of this data, and calculate changes that could be made to achieve a healthier diet (as outlined above) for their client. The student should then submit these findings in a professional, anonymized report (i.e., client name should be changed or removed) via Canvas, and the student should also share the report results back with the client.
  + **Submission:** Students will submit a report that summarizes their discoveries from this analysis. Further assignment details and rubric can be found on Canvas.
* **Popular Diet Infographic and Student Review:** 
  + **Objectives:** Students will apply course concepts and critical analysis to identify and discredit or support the claims of a popular diet.
  + **Expectations:** Students will choose a popular diet from a list provided by the instructor on Canvas. Popular diets are those which are currently (e.g. Keto) or formerly (e.g. Atkins) practiced among the general public. Students will identify 3 nutritional components and 3 alleged health claims made by the diet they chose. Students will then apply scientifically proven nutritional concepts, as learned throughout the course, to critically analyze (i.e., discredit or support) the health claims of the diet and examine whether the diet meets the current recommendations set by the Dietary Reference Intakes and Dietary Guidelines for Americans. Students will present this information in the form of a one-page infographic, using bullet points, short phrases, and eye-catching graphics. Lastly, students will review and comment on the infographics of two of their peers.
  + **Submission:** Students will create a one-page infographic for their chosen diet, and submit this infographic as a PDF via Canvas. The following online programs can be used to make a FREE infographic:
    - *Option 1:* [*www.canva.com*](http://www.canva.com)
    - *Option 2:* [*www.easel.ly/home*](http://www.easel.ly/home)

Students will view each other’s infographics on a Canvas Discussion Board and will complete a Peer Review worksheet to comment on the infographics of two peers. Further assignment details and the rubric can be found on Canvas.

**Midterm and Final Exams:** Cumulative midterm and final exams (100 points each) will be held during the session, as indicated on the schedule below. Material will be presented in a combination of formats including multiple choice, matching, and application-based questions (apply course knowledge to real life scenarios). Exams will be administered via Canvas.

* Exams will be open for multiple days and can be completed at any time during the exam period. Exams are due at 11:59pm on the specified day on the course schedule below.
* No late exams will be accepted, and no make-up or early exams will be offered.
* You will be allowed one continuous, 75-minute attempt at each exam.
* You are expected to work alone on exams.
* Exams will be available for review for *one week only* following the close of the exam, via online office hours or by appointment.
* Exam grades will not be discussed with the course instructor or TAs via email – please schedule office hours to challenge an exam outcome.
* Display academic integrity when completing exams. “Googling” answers is not allowed. Exams must be completed alone.
* To maintain the security of exam content, students may not make any notes during exams. Exams may not be preserved in any way.

**Extra Credit Opportunities:** There will be several extra credit opportunities throughout the course. However, **no “gift points” or “grade bumps” will be awarded** at the end of the course for borderline grades. Do not ask the instructor for grade bumps or rounding – your request will be denied. The following are opportunities to earn extra credit:

* End-of course evaluation (CIS) for Instructor and respective TA (5 points)
* Debate videos and associated CFUs (10 points each) – three possible (30 points total)

**Course Communication:** This is a very large, asynchronous, web-based class and communication between students and the Instructor/TAs can be challenging. To help you stay on top of upcoming deadlines and to ensure timely communication, please see the following:

* **Weekly Canvas Announcements**: At the beginning of each week/Module, your instructor will send an Announcement through Canvas highlighting the week’s lectures, assignments, and logistical information. **You *must* read these Announcements to stay up-to-date.**
* **Course Schedule:**The Course Schedule included in the next section of this Syllabus is a helpful guideline for course content and due dates.
* **Who’s My TA?:**In this large web-based class, it is impossible for the instructor to answer every student inquiry in a timely manner. Therefore, each student will be assigned to a specific TA (organized by student last name), and this TA will be your first point of contact for anything related to the course. Please see the ‘Who’s My TA?’ table at the beginning of the syllabus (and on Canvas). Reach out to your TA when you have questions or comments about course content, assignments, CFUs, extensions, etc.

**Course Schedule:**

|  |  |  |  |
| --- | --- | --- | --- |
| Module: Week | Lecture Topics | Chapters | Assessments |
| Module 1:  June 6-9 | Course Introduction; Overview of Nutrition | Chapters 1-2 | Due June 9: Module 1 CFU |
| Module 2:  June 10-16 | Digestion, Absorption, and Transport;  Carbohydrates | Chapters 3-4 | Due June 16: Module 2 CFU |
| Module 3:  June 17-23 | Lipids; Proteins | Chapters 5-6 | Due June 23: Module 3 CFU |
| Module 4:  June 24-30 | Energy Metabolism | Chapter 7 | Due June 26: Popular Diet Infographic  Due June 30: Module 4 CFU and  Infographic Peer Review Form |
| Mid-term Exam:  Available June 30 – July 3 | **Chapters 1-7** | | **Due July 3** |
| Module 5:  July 1-7 | Vitamins;  Minerals and Water | Chapters 10-13 | Due July 7: Module 5 CFU |
| Module 6:  July 8-14 | Weight Management & Energy Balance;  Fitness | Chapters 8-9 & 14 | Due July 14: Module 6 CFU |
| Module 7:  July 15-21 | Nutrition Through the Life Cycle | Chapters 15-17 | Due July 17: Dietary Analysis Project  Due July 21: Module 7 CFU |
| Module 8:  July 22-28 | Consumer Concerns;  Hunger and the Global Environment | Chapters 19-20 | Due July 28: Module 8 CFU |
| Final Exam:  Available July 26-30 | **Chapters 1-20**  *(not including chapter 18)* | | **Due July 30** |