

Term Information

Effective Term Spring 2021
Previous Value Spring 2017

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

Increase credit hours from 3 to 4

What is the rationale for the proposed change(s)?

This request is made for 2 reasons: 1) There is a need to provide additional content related to diet and disease prevention in this course and 2) an increase from 3 to 4 credit hours will align with the new GEC structure with the new credit hour structure for the natural science GEC

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

There are no programmatic implications for this proposed change

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area Human Nutrition
Fiscal Unit/Academic Org Department of Human Sciences - D1251
College/Academic Group Education & Human Ecology
Level/Career Undergraduate
Course Number/Catalog 2210
Course Title Science of Human Nutrition
Transcript Abbreviation Sci Hum Nutrition
Course Description Basic principles of biological science, emphasizing the interaction between nutrients and physiological (including cellular) processes.
Semester Credit Hours/Units Fixed: 4
Previous Value Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? Yes
Is any section of the course offered 100% at a distance
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus, Lima, Mansfield, Marion, Newark

Prerequisites and Exclusions

Prerequisites/Corequisites

Exclusions

Previous Value

Electronically Enforced

Not open to students with credit for 210.

No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code

30.1901

Subsidy Level

Baccalaureate Course

Intended Rank

Sophomore

Requirement/Elective Designation

General Education course:

Biological Science

Course Details

Course goals or learning objectives/outcomes

- Examine and describe the basic biological aspects of nutrient requirements of humans.
- Describe the complex interactions between various nutrients upon physiological and cellular processes.
- Recognize the linkages between nutrients and disease processes, body size, mental ability, and performance.
- Examine key events in the history of nutritional science from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.
- Determine how nutritional information is derived from the scientific method of investigation.
- Evaluate reputable versus non-reputable sources of nutrition information
- Describe how methods of modern science are used in the assessment of nutritional status.
- Examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.

Previous Value

- *Understand basic biological aspects of nutrient requirements of humans*
- *Appreciate the complex interactions and synergism of nutrients upon physiological and cellular processes*
- *Evaluate reputable versus non-reputable sources of nutrition information*
- *Determine how nutritional information is derived from the scientific method of investigation*
- *Understand the linkages between nutrients and disease processes, body size, mental ability and performance*
- *Understand the diverse cultural patterns that influence both food preferences and nutrient status*
- *Evaluate controversial topics related to food and nutrition*

Content Topic List

- Explore and examine how of modern science and technology can address nutritional problems of the contemporary world.
- Utilize computer technology to assess dietary intake and activity levels compared to national recommendations
- Identify the links between nutrients and disease processes, body size, mental ability and labor effectiveness (sport).
- Explain how nutrition requirements change throughout the lifespan (pregnancy to adulthood)

Previous Value

- *What you eat and why*
- *Nutrition and health/nutrients*
- *Using scientific research to determine nutrient needs*
- *Guidelines for designing a healthy diet*
- *Methods of nutritional assessment*
- *Dietary guidelines*
- *MyPyramid*
- *DRIs*
- *Food labels*
- *Healthy web sites*
- *The human body: A nutrition perspective*
- *Human physiology: Digestive system*
- *Nutrients: Carbohydrates simple, complex carbohydrates/fiber digestion, absorption, energy use lactose intolerance, diabetes*
- *Nutrients: Lipids (fat) digestion, absorption, function, heart disease, fat intake & replacement strategies*
- *Nutrients: Protein amino acids; putting proteins to work; vegetarianism*
- *Energy: Energy balance: Intake vs. use*
- *Weight Control: Healthy Weight/Obesity*
- *Energy Balance: Obesity treatment*
- *Controlling energy intake/physical activity*
- *Nutrients: Fat soluble vitamins, A, D, E, K*
- *Vitamin Supplements: Who needs them?*
- *Nutrients: Water soluble vitamins
thiamin, riboflavin, niacin, B-6, folate, B-12, C*
- *Nutrients: Water*
- *Nutrients: major minerals: sodium, potassium, chloride, fluoride
high blood pressure
calcium, phosphorus/osteoporosis*
- *Nutrients: Trace minerals*
- *Fitness and sports*
- *Energy sources, fluids/ergogenic aids?*
- *Eating Disorders, anorexia nervosa & bulimia nervosa*
- *Alcohol*

Sought Concurrence

No

Attachments

- Propose 4-credit HN 2210 Syllabus In person.docx: Proposed 4 Credit In person syllabus
(Syllabus. Owner: Bomser,Joshua A)
- ELO MAPPING NEW GEC 2210.docx: Learning Objective Map
(Other Supporting Documentation. Owner: Bomser,Joshua A)
- 3 credit AU20 HN 2210D Syllabus 2020-08-21.pdf: Current 3 Credit Syllabus
(Syllabus. Owner: Bomser,Joshua A)
- Proposed 4-credit HN 2210D Syllabus 2020-10-15.docx: Proposed 4 Credit Syllabus
(Syllabus. Owner: Bomser,Joshua A)
- Copy of HUMN NTR 2210 Assessment Plan 2020-11-20 modified.xlsx: Assessment Plan (Including Experiential Learning)
(GEC Course Assessment Plan. Owner: Bomser,Joshua A)

Comments

- Course changed to 4 credits
Uploaded 3 credit syllabus
Assessment Plan added with experiential learning component included) *(by Bomser,Joshua A on 11/20/2020 01:14 PM)*
- - The form has not been changed to 4 credits.
 - Please upload current 3-credit syllabus so that the panel can see the difference between the 3 and 4 credit versions.
 - Since this is a change to a current GE course, please upload GE assessment plan.
(Though the following does not need to be done now, you might like to bear in mind that under the new GE an experiential component (laboratory or other) will need to be part of a 4credit natural science GE.) *(by Vankeerbergen,Bernadette Chantal on 11/16/2020 02:13 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Bomser,Joshua A	10/13/2020 08:00 AM	Submitted for Approval
Approved	Folden Jr.,H Eugene	10/13/2020 09:24 AM	Unit Approval
Approved	Brown,Danielle Marie	11/06/2020 09:11 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	11/16/2020 02:13 PM	ASCCAO Approval
Submitted	Bomser,Joshua A	11/20/2020 01:14 PM	Submitted for Approval
Approved	Folden Jr.,H Eugene	11/21/2020 11:12 AM	Unit Approval
Approved	Brown,Danielle Marie	12/10/2020 11:45 PM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Oldroyd,Shelby Quinn Vankeerbergen,Bernadette Chantal	12/10/2020 11:45 PM	ASCCAO Approval



THE OHIO STATE UNIVERSITY
COLLEGE OF
EDUCATION AND HUMAN ECOLOGY

College of Education & Human Ecology
Department of Human Sciences
Human Nutrition Program

HUMN NTR 2210 ONLINE
Science of Human Nutrition
AUTUMN 2022: 4 credit hours, undergraduate

Course Syllabus

INSTRUCTOR

Angela Collene
385 Campbell Hall
collene.6@osu.edu

OFFICE HOURS

Tu/Th 8:00 AM – 12:00 PM
Fri 8:00 AM – 11:00 AM
or by request

GRADUATE TEACHING ASSISTANTS

Student Last Names A – H
GTA 1
Campbell Hall
name.##@osu.edu

Wed 1:00 PM – 2:30 PM
or by request

Student Last Names I – P
GTA 2
Campbell Hall
name.##@osu.edu

Wed 12:00 – 1:30 PM
or by request

Student Last Names Q – Z
GTA 3
Campbell Hall
name.##@osu.edu

Tu/Th 9:30 AM – 11:00 AM
or by request

COURSE DESCRIPTION

This course will address the basic principles of the biological science involving interactions between nutrients and physiological processes with emphasis on implications for human health.

PREREQUISITES

None

GENERAL EDUCATION (GE) GOALS AND EXPECTED LEARNING OUTCOMES

This course meets the goals of the Natural Science Component of the GE at The Ohio State University. Courses in Natural Sciences foster an understanding of the principles, theories, and methods of modern science; the relationship between science and technology; the implications of scientific discoveries; and the potential of science and technology to address problems of the contemporary world.

The specific Learning Outcomes below stem from the Natural Science Learning Outcomes.

LEARNING OUTCOMES

Upon completion of the course, the student will be able to:

1. Examine and describe the basic biological aspects of nutrient requirements of humans.
2. Describe the complex interactions between various nutrients upon physiological and cellular processes.
3. Recognize the linkages between nutrients and disease processes, body size, mental ability, and performance.
4. Examine key events in the history of nutritional science from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.
5. Determine how nutritional information is derived from the scientific method of investigation.
6. Evaluate reputable versus non-reputable sources of nutrition information.
7. Describe how methods of modern science are used in the assessment of nutritional status.
8. Examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.
9. Explore and examine how modern science and technology can be used to address nutritional problems of the contemporary world.
10. Utilize computer technology to assess dietary intake and activity levels compared to national recommendations.
11. Identify the influences of nutrients on disease processes, mental ability, and labor effectiveness (sport).
12. Explain how nutrition requirements change throughout the lifespan (e.g., pregnancy, older adulthood).

Commented [A1]: Recent discovery? Ongoing research?

Commented [A2]: In my dietary analysis assignment, assessment of physical activity levels is not required. Should I change my assignment? Or can I leave this part out of the LOs?

Commented [A3]: Could this be combined with #3?

Commented [A4]: I only cover this a little bit because we have a whole course on that topic.

COURSE MATERIALS

The eBook and courseware for this course are being provided via CarmenBooks. Through CarmenBooks, students obtain publisher materials electronically through Carmen, saving them up to 80% per title. The fee for this material is included as part of tuition and is listed as *CarmenBooks fee* on your Statement of Account. In addition to cost-savings, materials provided through CarmenBooks are available immediately on or before the first day of class. There is no need to wait for financial aid or scholarship money to purchase your textbook.

Unless you choose to opt out of the program, you do NOT need to purchase any materials for this course at the bookstore. For more information on the program or information on how to opt out, please visit the [CarmenBooks website](#).

Smith, A.M., Collene, A.L., and Spees, C.K. (2021). *Wardlaw's Contemporary Nutrition: A Functional Approach* (6th ed.). New York, NY: McGraw-Hill Education.

Access the courseware for this title through the **McGraw-Hill Connect** link in the course navigation.

There is an option to add a printed (loose-leaf) version of the textbook for an additional \$30.00 after you create your Connect account through our course Carmen page.

Additional resources (e.g., articles, videos, audio files) will be provided via Carmen.

COURSE TECHNOLOGIES

Technical Skills Required for this Online Course

- Basic computer and web-browsing skills
- Navigating Carmen (For questions about Carmen, see the [Canvas Student Guide](#).)
- [CarmenZoom virtual meetings](#)
- Navigating McGraw-Hill Connect (tutorials available in Course Orientation)

Required Equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in or external
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Accessing Carmen

You will need to use [BuckeyePass](#) multifactor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass – Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at (614) 688-4357 (HELP) and IT support staff will work out a solution for you.

Accessing McGraw-Hill Connect

The course materials (eBook, many assignments, and dietary analysis software) were included as your course fee when you registered for the course. When you log into Carmen, you will see a link to McGraw-Hill Connect in the navigation menu. The first time you click on this link or try to access an assignment, you will be prompted to create an account and register your course materials. Please use your OSU email address to create your account. If you are using (or have used) Connect for other courses, you may use the same account. On subsequent visits, you should be logged into Connect automatically and will be able to access your assignments via links in our Carmen course page.

Getting Help

For help with your password, university e-mail, Carmen, or any other OSU technology issues, contact the **OSU IT Service Desk**. Standard support hours are Monday – Thursday 9 AM – 6 PM, Friday 9 AM – 5 PM, and Saturday 11 AM – 5 PM. Support for urgent issues is available 24/7.

- **Self-Service and Chat support:** <https://osuitsm.service-now.com/selfservice/>
- **Phone:** (614) 688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** (614) 688-8743

For technical help with McGraw-Hill Connect, contact **McGraw-Hill Customer Support**. Standard support hours are Sunday 12 PM – 12 AM, Monday – Thursday 24 hours, Friday 12 AM- 9 PM, and Saturday 10 AM – 8 PM.

- **Phone:** (800) 331-5094 (RECOMMENDED)
- **Email or Live Chat:** click the **Help (?)** icon in the navigation menu on the left side of the screen in Connect

For technical help with Proctorio, contact **Proctorio Support**. Agents are available 24/7.

- **Online Support:** <https://proctorio.com/support>
- **Phone:** (866)-948-9087

COMMUNICATION

E-Mail

All students must have an active OSU email account and reliable access to the Internet. Emails sent from hotmail, yahoo, google, etc. may go to the spam boxes of your instructor or teaching assistants. It is best to send communication through your OSU account.

Please feel comfortable emailing your instructor and teaching assistants throughout the semester. This is the main form of communication between students and instructing staff. Students should use email rather than discussion boards in Carmen to ask questions about personal concerns (e.g., grades). Our policy is to respond to emails within 1 business day (i.e., excluding weekends and university holidays). When authoring emails, please type "2210" at the beginning of the subject line of your email. If you do not receive a response to an email within 24 hours, please resend your email.

Your instructor will post weekly updates using the announcements feature in Carmen to answer common questions and remind you of upcoming tasks. Be sure to read these announcements to stay informed, engaged, and on schedule. To ensure that you are alerted when new announcements are posted, you can adjust your settings and notification preferences within Carmen. Go to Account (on the left side of the screen in Carmen) and select Settings to add your preferred email address; select Notifications to change how you are alerted when new announcements are posted. As the semester goes on, weekly updates will be archived in the Getting Started module on Carmen. If you do not receive weekly updates from your instructor (collene.6@osu.edu), please contact OSU IT to resolve the problem (see above).

Carmen (<https://carmen.osu.edu/>)

All students are required to use Carmen, OSU's learning management system, which is based on the Canvas platform. Students should plan to access Carmen frequently throughout the week for announcements, discussions, learning resources, assignments, and grades. If you are new to Carmen, please see the guide to getting started at <https://resourcecenter.odee.osu.edu/carmencanvas/getting-started-canvas-students>.

Carmen's Discussion Board

If you have general questions about the course that do not contain personal information and are likely to be relevant to other students in the course, post your questions on the discussion board in Carmen. Examples of general questions include clarifications of assignment instructions, questions about course content, or technical concerns. In a large, online course, it is very common for students to have similar questions. To avoid redundancy, please review recent questions and answers before posting a new question.

ONE-ON-ONE MEETINGS

Meeting with the Instructor

If course content, assignment, or technology struggles arise, please join your instructor during scheduled Zoom drop-in hours or contact the instructor via email for an individual appointment. Due to recent public health recommendations from the state of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19), we will rely on virtual meetings (see page 1 of the syllabus).

Meeting with the Graduate Teaching Assistants

The graduate teaching assistants (GTAs) are graduate students in nutrition who are available to help you master the course content and excel in the course. Please email your GTAs directly (see page 1) to ask questions or schedule a web conference or phone call.

COURSE EXPECTATIONS

This is a **4-credit** online course. You should expect to spend *at least* the same amount of time reading the text, engaging with online content, completing assignments, and reviewing course notes as you would spend for a face-to-face course (about 12 hours per week).

It can be very easy to fall behind in an online course. Any online course requires self-discipline to stay on track with readings and assignments. This course is designed in weekly increments, such that new material is released each Monday and assignments based on that material are due the following Monday at 11:59 PM. This layout is flexible enough to allow you to work wherever and whenever you choose, yet structured enough to encourage efficient accumulation and retention of knowledge. The instructor and GTAs will support your learning with organized materials, weekly email updates, thoughtful feedback, and clear instructions throughout the semester. Please do your part by reading emails, maintaining a record of all due dates in your own calendar, and regularly visiting our course page in Carmen for news and assignments.

NETIQUETTE

As a member of a community of online learners, it is your responsibility to exhibit professional behavior and decorum in all modes of communication. Following the rules of etiquette on the Internet (netiquette) helps to improve the readability of your messages, keeps conversations focused, increases trust, and creates a more positive experience for all participants. Netiquette includes, but it not limited to, the following guidelines:

- Honor people's rights to their opinions; respect the right for people to disagree.
- Be professional; use language that is not considered foul or abusive.
- Respond to peers honestly, thoughtfully, respectfully, and constructively.
- Avoid writing in all caps; it conveys shouting and anger.
- Avoid colors like red and green for accessibility reasons; avoid font styles, colors, and sizes that are difficult to read.
- Address the ideas, not the person, when responding to messages or discussions.

- Be careful when using humor or sarcasm; without social cues like facial expressions or body language, a remark meant to be humorous could come across as offensive or hurtful.
- Do not distribute copyrighted materials, such as articles and images (most things online are not licensed as “fair use”). Share links to those materials (instead of copying/pasting them) and be sure to properly cite all sources to avoid unintentional plagiarism.

ASSIGNMENTS

Assignment due dates are all set from the beginning of the semester and are listed in multiple locations for your benefit.

1. Syllabus
2. Carmen calendar
3. Weekly emails

With all these resources at your fingertips, you can find an effective way to stay on schedule. Stating that you “were not aware” of an assignment due date is not a valid excuse for an extension.

This course uses a variety of digital tools, including Carmen (OSU’s learning management system) and Connect (a digital learning platform from McGraw-Hill that accompanies our eBook for the course). Whether the assignments are built in Carmen or Connect, you will be able to access them by simply clicking on the name of the assignment from our course page in Carmen.

SmartBook

SmartBook activities will be how you encounter the chapters of our text, *Wardlaw’s Contemporary Nutrition: A Functional Approach*. SmartBook is an adaptive reading tool. As you read the pages of the eBook, you will notice that some text is highlighted. The highlighted text represents core content you will need to pass the course. I recommend that you read the chapters completely (including the non-highlighted material) the first time through. You can focus on the highlighted material when you go back and study for exams.

As you read each chapter, you will be prompted to stop and answer questions based on what you have read. If you answer the questions correctly, you will move on quickly. If you get some questions wrong, SmartBook will give you additional questions and resources to help you master the content. SmartBook will also remember where you struggled with the content and present you with additional questions when you return to a chapter to review. Expect the SmartBook activities (including reading and practice questions) to take about 2 to 3 hours per week. Start SmartBook activities early in the week and plan to spend 20 to 30 minutes per day to optimize retention.

SmartBook activities are graded based on completion; an assignment is considered complete when you have demonstrated mastery of the concepts selected by your instructor. If you read the section first, you will move through the practice questions quickly. However, if you decide to skip the reading and just do the practice questions, it may take a longer time because

SmartBook will present you with more and more questions until you demonstrate mastery of the selected concepts.

SmartBook activities are worth **10 points** per chapter. Full credit is awarded once you have mastered the concepts your instructor has selected. If you start a SmartBook activity and make some progress, you will receive partial credit based on the number of concepts you have mastered by the due date. If you do not start an assigned SmartBook activity by the due date, you will receive a score of 0 for that activity. You may return to any SmartBook activity to read and recharge, but your score for that activity is based on what you have achieved by the due date. There are 17 SmartBook activities; your **15 best scores** will be counted toward your final grade. If you complete all of the assigned SmartBook activities on time, you can be assured of 150 points (of 1000 total points for the course).

Check Point

Complete Check Point activities to review and apply the material in preparation for exams. The first Check Point activity (Course Orientation) is meant to orient you to the online course. For the second Check Point activity (All Daily Reports), you will track and analyze your food and beverage intake for three days using NutritionCalc Plus, a dietary analysis program that is included in your course materials through Connect (detailed instructions are available on our course Carmen page). The remaining Check Point activities will give you an opportunity to practice the most important concepts from the chapters. Besides traditional multiple choice and true/false questions, Check Point activities consist of a variety of interactive question types, such as labeling, classification, matching, and sentence completion activities. Some questions will be based on the analysis of your dietary intake (All Daily Reports, described above).

For most Check Point activities, you will have one attempt (no time limit). Exceptions include Check Point: Course Orientation (unlimited attempts) and Check Point: All Daily Reports (revisions allowed). You are welcome to reference your eBook and other course materials as you complete these activities (most items provide a link to the relevant section in the eBook). You can also save your progress, close the browser, and resume at a later time. Please be aware that each student receives a set of questions that is randomly drawn from a pool of many questions, so your assignment may be different from that of your classmates. Points for late submissions will be reduced by 10% per day late. There are 6 Check Point activities, worth **50 points** each; your **5 best scores** (always including Check Point: All Daily Reports) will be counted toward your final grade.

HELPFUL TIP: To be assured of proper credit, make certain to click SUBMIT before the due date when you have completed your Check Point activities. After you complete any assignment, verify that your score has posted to the Carmen grade book.

Beyond the Basics

Throughout the semester, you will participate in several critical thinking activities that encourage you to explore clinical applications and other timely, relevant nutrition topics. A few of these activities also provide an opportunity to interact with other students in the course. Typically, Beyond the Basics activities require you to read an article, watch a video, or listen to a podcast and then answer some questions or participate in a discussion about the topic. You will find links to Beyond the Basics activities from our Carmen course page.

Here are some tips for productive online discussions:

1. Adhere to the netiquette guidelines described on pages 6 and 7 of the syllabus.
2. Read the instructions and stay on topic.
3. Elaborate! Instead of simply writing "I agree," state why you agree, give an example, or refer to a thought-provoking resource.
4. Be mindful of proper spelling and grammar; proofread your posts before submitting them.
5. Support your opinions with credible, scientific evidence. Choose your sources wisely. The internet is a bottomless pit of health information—some is reliable, some is suspicious, and some is downright dangerous. In Chapter 2, you will learn how to identify reliable nutrition information. As you search online for health information, consider the credibility of the source and how current the information is. For more information on evaluating health information, see <https://medlineplus.gov/evaluatinghealthinformation.html>.
6. It is not acceptable to copy and paste content that has been written by someone else. To avoid plagiarism, even if you are paraphrasing, *always* cite your sources.

Points for late submissions will be reduced by 10% per day late. There are 15 options for Beyond the Basics activities, worth **20 points** each; your **10 best scores** will be counted toward your final grade. If you are enrolled in a **NURSING** program or you plan to apply for a nursing program, you **MUST** complete at least 10 Beyond the Basics that are designated as **CLINICAL**. You may also complete the non-clinical activities, but these 10 clinical activities are required for the nursing program.

Extra Credit

Optional extra credit assignments will be available. All extra credit assignments must be submitted by 11:59 PM on the due dates listed in the course calendar if you would like them to be counted toward your grade. No extensions will be available for extra credit assignments and no additional individual requests for extra credit will be granted. Although extra credit assignments are optional, it is in your best interest to complete all of these assignments; they can only boost your grade (i.e., scores will be counted out of 0).

Please note that the Carmen grade book does not provide a simple way to award extra credit points. Therefore, your overall grade may not improve immediately after you complete an extra credit assignment. However, within a week after the due date for each extra credit assignment, the instructor will convert scores from up to 10/10 to up to 10/0 in the grade book.

EXAMS

There are four online proctored exams. Each exam will be available for five days and will be administered via Carmen. Exam questions are drawn from a bank of many questions, so your exam will not be exactly like any of your classmates' exams, although it will cover the same content. Exams are timed. You may use a basic, non-graphing calculator and scratch paper during exams; these tools are available on-screen during remotely proctored exams. All exams are closed book/closed note.

EXAM	TIME LIMIT	POINTS	CONTENT
Unit 1	60 minutes	100	1, 2, 3, and part of 17
Unit 2	60 minutes	100	4, 5, and 6
Unit 3	60 minutes	100	8, 9, 10, 11, 12, and 13
Unit 4/Final	90 minutes	150	Cumulative; mostly 7, 14, 15, and 16

You have several options for taking exams:

Remotely Proctored Exams with Proctorio

The most flexible exam option is Proctorio, an online proctoring tool available through OSU (at no cost to you). Proctorio offers you flexibility to take your exams at the time and in the location of your choosing. Students are required to have a webcam (USB or internal) with a microphone and a strong and stable internet connection. During each exam, Proctorio will record the testing environment. At this time, Proctorio only works in the Chrome browser. *If you intend to use Proctorio, you must use a desktop or laptop computer with a webcam, microphone, reliable internet connection, and Chrome browser and you should select a private space for each exam session where disruptions are unlikely and where recording devices can be enabled.*

Prior to the first exam, you will receive instructions to use Proctorio. To use Proctorio, you must be **over 18 years of age**. Additionally, the tool has **limitations in its accessibility** for students reliant upon screen readers and keyboard navigation. For more information about remote exam proctoring with Proctorio, see <https://resourcecenter.odee.osu.edu/carmencanvas/getting-started-proctorio-students>.

Proctored Exams at an Approved Testing Center

If you have concerns about using an online proctoring tool for any reason, you may make an appointment to take your exam at an approved testing center at any time during the available dates. Testing centers are available at all OSU campuses. All OSU testing centers except Mansfield are free of charge for students enrolled in this course.

On the Columbus campus, the OSU Testing Center is located on the fifth floor of the Student Academic Services Building at 281 West Lane Avenue, Columbus, OH 43210. The OSU Testing Center schedules exams between 8:00 AM and 5:00 PM on weekdays.

Schedule an appointment online (at least one day before your desired testing date) at <https://www2.registerblast.com/theosu/Exam/List>. From the drop-down menus on the registration page, choose 1.) Online Course Exams (Ohio State Courses Only), 2.) the appropriate

exam (e.g., HUMN NTR 2210 Unit 1 Exam), 3.) a date within the range of available dates, and 4.) a time. Then, indicate 5.) your name and email address, 6.) your acknowledgement of the testing center's guidelines, and 7.) your phone number.

On the date you choose, go to the testing center, check in at the desk, stash your belongings in a locker, and a staff member will set you up to take your exam at a computer and will monitor your testing session. At the testing center, most students use computer-based testing, but you may request a paper version of the exam. For more information about taking exams at the OSU Testing Center, see https://registrar.osu.edu/testing/policies_and_procedures.pdf.

Please note that the testing centers will have limited capacity this semester due to public health recommendations from the State of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19). It is best to schedule at least one week in advance.

If you need to schedule your exam at a branch campus or another approved testing center, please contact your instructor at least one week before the exam date to set this up. Check the Getting Started module on our Carmen course page for updates about testing center availability.

Proctored Exams with SLDS-Approved Accommodations

If you have special exam accommodations approved through the Office of Student Life Disability Services, you may schedule your exams with SLDS in Baker Hall during the range of available dates. At the beginning of the semester, please provide proper documentation of your accommodations through the SLDS portal. Communicate with the instructor via email or virtual meeting to determine how you will take exams.

Please note, if you only need extended time for exams, the instructor can set the extension within Carmen so that you can still use Proctorio for remotely proctored exams.

Due to recent public health recommendations from the state of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19), the Office of Student Life Disability Services has limited hours and space for in-person testing. Please use the AIM portal (<https://sierra.accessiblelearning.com/OSU/>) and/or contact your assigned access specialist if you have questions about your testing environment.

Whatever testing environment you choose, it is your responsibility to make arrangements to take exams within the range of available dates. Make up exams or alternative exam accommodations can be requested for medical or equivalent excuses with appropriate documentation. If needed, please contact your instructor via email *prior* to the scheduled exam date. All exam dates are all set from the beginning of the semester and are listed in multiple locations for your benefit. Failure to responsibly manage your schedule is *not* a valid reason for a make-up attempt. If you do not take an exam or make arrangements for a make-up exam by 11:59 PM on the due date, late exam submissions will be allowed with a 20% penalty for each day that it is late. If you miss an exam, you will receive a 0 for the exam.

There are 4 exams, worth a **total of 450 points**; **all scores** will be counted toward your final grade.

GRADING POLICIES

Progress will be regularly evaluated by student performance on assignments and exams. Dates for all assignments and exams are clearly indicated in the course calendar portion of the syllabus, on the Carmen calendar feature, and in email communications from the instructor. Detailed instructions will be provided for each assignment. For SmartBook activities and Extra Credit activities, no credit will be awarded for late submissions. Points earned for Check Point and Beyond the Basics activities will be reduced by 10% per day late. . Points earned for exams will be reduced by 20% per day late. Students requesting an extension for any assignment should provide appropriate documentation and discuss the matter with the instructor *prior* to the due date.

Grading Point Distribution

The weights of each form of student evaluation are shown below. For a spreadsheet version of the point distribution that will accurately calculate your grade, see “How to Calculate Your Grade” in the Getting Started module.

<i>EXAMS (400 points = 40% of grade)</i>	<i>Points</i>
Unit 1 Exam (Chapters 1, 2, 3, part of 17)	100
Unit 2 Exam (Chapters 4, 5, 6)	100
Unit 3 Exam (Chapters 8, 9, 10, 11, 12, 13)	100
Unit 4/Final Exam (cumulative; focus on Chapters 7, 14, 15, 16)	100
<i>SMARTBOOK ACTIVITIES (best 15 of 17; 150 points = 15% of grade)</i>	
SB Ch01: Nutrition, Food Choices, & Health	10
SB Ch02: Designing a Healthy Dietary Pattern	10
SB Ch17: Safety of Our Food Supply	10
SB Ch03: The Human Body: A Nutrition Perspective	10
SB Ch04: Carbohydrates	10
SB Ch05: Lipids	10
SB Ch06: Proteins	10
SB Ch08: Overview of Micronutrients & Phytochemicals	10
SB Ch09: Fluid & Electrolyte Balance	10
SB Ch10: Nutrients Involved in Body Defenses	10
SB Ch11: Nutrients Involved in Bone Health	10
SB Ch12: Micronutrient Function in Energy Metabolism	10
SB Ch13: Nutrients that Support Blood & Brain Health	10
SB Ch07: Energy Balance & Weight Control	10
SB Ch14: Nutrition: Fitness & Sports	10
SB Ch15: Eating Disorders	10
SB Ch16: Undernutrition Throughout the World	10

CHECK POINT ACTIVITIES (best 5 of 6; 250 points = 25% of grade)

Check Point: Course Orientation	50
Check Point: All Daily Reports (<i>cannot be dropped</i>)	50
Check Point: Nutrition Basics	50
Check Point: Macronutrients	50
Check Point: Micronutrients	50
Check Point: Energy Balance	50

BEYOND THE BASICS (best 10 of 16; 200 points = 20% of grade)

Beyond the Basics: Alcohol & Binge Drinking	20
Beyond the Basics: Nutrition Assessment*	20
Beyond the Basics: Digestive Disorders*	20
Beyond the Basics: Diabetes Management*	20
Beyond the Basics: Cardiovascular Disease*	20
Beyond the Basics: Food Allergies & Intolerances*	20
Beyond the Basics: Hypertension & Kidney Disease*	20
Beyond the Basics: Cancer*	20
Beyond the Basics: Bone and Joint Health*	20
Beyond the Basics: Caffeine	20
Beyond the Basics: Nutrition & Mental Health*	20
Beyond the Basics: Fad Diets	20
Beyond the Basics: Bariatric Surgery*	20
Beyond the Basics: Orthorexia	20
Beyond the Basics: Malnutrition*	20
Beyond the Basics: Food Insecurity on Campus	20

EXTRA CREDIT ACTIVITIES

Gastrointestinal Health	+10
Mediterranean Diet	+10
Cancer Research	+10
Sleep & Weight Management	+10
Course Feedback Request	+5
Detect an Error	+unlimited

1000

*Denotes clinical nutrition topics. Students enrolled in a nursing program or who plan to apply for a nursing program MUST complete 10 of the clinical nutrition options.

HELPFUL TIP: Using the default settings, Carmen calculates your grade based on the assignments and exams you have completed to date. Missed assignments may not be factored into the calculation. Periodically throughout the semester, your instructor or GTA will review the gradebook and manually enter "0" for missing assignments. To see your total grade (including any incomplete assignments) using the Carmen grade book, be sure to uncheck the option for "Calculate based only on graded assignments."

Grading Scale

A	=	930 – 1000 points
A-	=	900 – 929 points
B+	=	870 – 899 points
B	=	830 – 869 points
B-	=	800 – 829 points
C+	=	770 – 799 points
C	=	730 – 769 points
C-	=	700 – 729 points
D+	=	670 – 699 points
D	=	600 – 669 points
E	=	0 – 599 points

HELPFUL TIP: At the end of the semester, many students ask if their grades will be rounded up. Your grade will be rounded to the nearest *whole point* out of 1000 points and assigned a letter grade according to the scale shown above. This is not the same as rounding to the nearest percent. For example, if your total points for the semester are 929.5 out of 1000, this would be rounded up to 930 and you would earn an A for the course. However, if your total points are 925 out of 1000, this falls into the range of scores for A-. To maximize your points, turn in all assignments on time and take advantage of extra credit opportunities.

ACADEMIC INTEGRITY

Policies for this Online Course

- **Exams:** You must complete all exams yourself, using remote proctoring software, without any external help or communication.
- **Assignments:** You are expected to do your own work on all assignments (e.g. SmartBook, Check Point, Beyond the Basics, and Extra Credit activities), without external collaboration.
- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past course to your current course, even if you modify it. If you have specific questions about this, please ask the instructor.
- **Collaboration and informal peer-review:** This course includes several discussion-based Beyond the Basics activities that provide opportunities for collaboration with your classmates. While study groups are encouraged, remember that comparing answers on exams and assignments is not permitted. If you are unsure about a particular situation, please ask your instructor ahead of time.

OSU's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must

recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If the instructor or GTAs suspect that a student has committed academic misconduct in this course, we are obligated by university rules to report our suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the university's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact your instructor.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))
- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

COPYRIGHT DISCLAIMER

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

ACCESSIBILITY ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability, including mental health, chronic, or temporary medical condition, please contact your instructor to discuss your specific needs. To establish accommodations, you may need to register with Student Life Disability Services. After registration, make arrangements with your instructor as soon as possible to discuss the timely implementation of your accommodations for this course. You may contact the Office of Student Life Disability Services (<http://slids.osu.edu/>) at (614) 292-3307 or visit 098 Baker Hall at 113 West 12th Avenue to coordinate reasonable accommodations.

Accessibility of Course Technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [CarmenCanvas accessibility](#)
- [CarmenZoom accessibility](#)
- [McGraw-Hill Connect accessibility](#)

COVID-RELATED ACCOMMODATIONS

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let your instructor know immediately so that you can set up a meeting to discuss options for completing your coursework. To establish reasonable accommodations, the instructor may request that you register with Student Life Disability Services (<https://slids.osu.edu/>). After registration, make arrangements with your instructor as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

MENTAL HEALTH

College students may experience mental health concerns impacted by a variety of factors. As a result, it is important for students to keep in mind that there are supports available. While individual counseling, group counseling, and psychiatric care are good options, it is important for students to consider all the resources available based on the situation/need, timeliness, and availability. More information about university support may be found here <https://ccs.osu.edu/mental-health-support-options/>

At the College of Nursing, a mental health counselor is available for individual counseling appointments. More information may be found on the website (<https://nursing.osu.edu/students/student-resources/counseling-services>) or reach out to schedule an appointment via email woith.3@osu.edu or by calling (614) 292-6952.

Students are also welcome to use Ohio State's primary counseling center, Counseling Consultation Services (CCS), which offers appointments 8:00 a.m. – 8:00 p.m. Monday-Thursday and 8:00 a.m. – 5:00 p.m. on Fridays. Students can schedule an appointment with CCS by calling (614) 292-5766.

DIVERSITY

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

TITLE IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin, and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

GRIEVANCES AND SOLVING PROBLEMS

According to University Policies, available from the Division of Student Affairs, if you have a problem with this class, "You should seek to resolve a grievance concerning a grade or academic practice by **speaking first with the instructor or professor**. Then, if necessary, with the department chairperson, college dean, and provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23, which is available from the Office of Student Life, 208 Ohio Union." "Grievances against graduate, research, and teaching assistants should be submitted first **to the supervising instructor**, then to the chairperson of the assistant's department."

COURSE EVALUATIONS

It is critical to the continued success of this course to have your honest and valued feedback. Near the end of the semester, you will have the opportunity to fill out the standard institutional SEI on the instructor (online submission). The instructor will also send you a separate course feedback survey via Carmen to gather more course-specific information.

August/September 2022

HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
21	22 Course Materials Available	23	24	25	26	27
28	29 Check Point: Course Orientation SmartBook: Ch01 Nutrition, Food Choices, Health Beyond the Basics: Alcohol & Binge Drinking	30	31	1	2	3
4	5 LABOR DAY SmartBook: Ch02 Designing a Healthy Dietary Pattern SmartBook: Ch17 N&YH: Preventing Foodborne Illness Check Point: All Daily Reports Beyond the Basics: Nutrition Assessment*	6	7	8	9	10
11	12 SmartBook: Ch03 The Human Body: A Nutrition Perspective Check Point: Nutrition Basics Beyond the Basics: Digestive Disorders* Extra Credit: Gastrointestinal Health	13	14	15	16	17 Unit 1 Exam (Chapters 1, 2, 3, and 17)
18	19 SmartBook: Ch04 Carbohydrates Beyond the Basics: Diabetes Management*	20	21	22	23	24
25	26 SmartBook: Ch05 Lipids Beyond the Basics: Cardiovascular Disease* Extra Credit: Mediterranean Diet	27	28	29	30	1

*Denotes clinical nutrition topics. Students enrolled in a nursing program or who plan to apply for a nursing program MUST complete 10 of the clinical nutrition options.

October 2022

HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
2	3 SmartBook: Ch06 Proteins Check Point: Macronutrients Beyond the Basics: Food Allergies & Intolerances*	4	5	6	7	8 Unit 2 Exam (Chapters 4, 5, and 6)
9	10 SmartBook: Ch08 Overview of Micronutrients SmartBook: Ch09 Fluid & Electrolyte Balance Beyond the Basics: Hypertension & Kidney Disease*	11	12	13	14	15 AUTUMN BREAK
16	17 SmartBook: Ch10 Body Defenses Beyond the Basics: Cancer* Extra Credit: Cancer Research	18	19	20	21	22
23	24 SmartBook: Ch11 Bone Health Beyond the Basics: Bone & Joint Health*	25	26	27	28	29
30	31 SmartBook: Ch12 Energy Metabolism Beyond the Basics: Caffeine	1 NOV	2	3	4	5

*Denotes clinical nutrition topics. Students enrolled in a nursing program or who plan to apply for a nursing program MUST complete 10 of the clinical nutrition options.

November/December 2022 HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
6	7 SmartBook: Ch13 Blood & Brain Health Check Point: Micronutrients Beyond the Basics: Nutrition & Mental Health*	8	9	10	11	12 Unit 3 Exam (Chapters 8, 9, 10, 11, 12, and 13)
13	14 SmartBook: Ch07 Energy Balance & Weight Control Beyond the Basics: Bariatric Surgery* Extra Credit: Sleep & Weight Management	15	16	17	18	19
20	21 SmartBook: Ch14 Sports Nutrition Beyond the Basics: Fad Diets	22	23	24	25	26 THANKSGIVING BREAK
27	28 SmartBook: Ch15 Eating Disorders Beyond the Basics: Orthorexia	29	30	1	2	3
4	5 SmartBook: Ch16 Undernutrition Check Point: Energy Balance Beyond the Basics: Malnutrition* Beyond the Basics: Food Insecurity on Campus Extra Credit: Detect an Error Extra Credit: Course Feedback	6	7	8	9	10 Unit 4/Final Exam (Cumulative, focus on Chapters 7, 14, 15, and 16)

*Denotes clinical nutrition topics. Students enrolled in a nursing program or who plan to apply for a nursing program MUST complete 10 of the clinical nutrition options.

The Ohio State University
College of Education and Human Ecology
Department of Human Sciences
2210 Science of Human Nutrition
Au 2022; 4 credit hours

Professor: Joshua A Bomser, PhD
Office: 343B Campbell Hall
Office Hours: Generally available (call or email first) 614-247-6622
Email: bomser.1@osu.edu

TA2: TBD

Office hrs:

Email:

A. TEXTBOOK: Not required but some students enjoy having the textbook. Book on reserve at Thompson library.

Smith, A et al., Wardlaw's Contemporary Nutrition 11th ed. McGraw-Hill, ISBN-13: 9781259709968

I don't mind you using older editions of the textbook; however chapters and information presented in these editions might be slightly different.

Available at Barnes and Noble. 1598 N High St Columbus OH

General Education (GE) Curriculum Objectives: This course meets the goals of the Natural Science Component of the GE at The Ohio State University. Courses in Natural Sciences foster an understanding of the principles, theories, and methods of modern science; the relationship between science and technology; the implications of scientific discoveries; and the potential of science and technology to address problems of the contemporary world. The specific Learning Outcomes below stem from the Natural Science Learning Outcomes

B. COURSE DESCRIPTION & LEARNING OBJECTIVES:

The course will address the basic principles of biological science, emphasizing the interaction between chemicals (nutrients) and physiological (including cellular) processes. Upon completion of this course the student will be able to:

1. Examine and describe the basic biological aspects of nutrient requirements of humans.
2. Describe the complex interactions between various nutrients upon physiological and cellular processes.
3. Recognize the linkages between nutrients and disease processes, body size, mental ability, and performance.
4. Examine key events in the history of nutritional science from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.
5. Determine how nutritional information is derived from the scientific method of investigation.
6. Evaluate reputable versus non-reputable sources of nutrition information.
7. Describe how methods of modern science are used in the assessment of nutritional status.
8. Examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.
9. Explore and examine how of modern science and technology can address nutritional problems of the contemporary world.
10. Utilize computer technology to assess dietary intake and activity levels compared to national recommendations.
11. Identify the links between nutrients and disease processes, body size, mental ability and labor effectiveness (sport).
12. Explain how nutrition requirements change throughout the lifespan (pregnancy to adulthood)

C. EVALUATION: The following exams and required assignments will be used to determine your grade in this class. Details for assignments will be provided throughout the semester and on Canvas.

D. EXAMS: Exams will consist of multiple choice / true-false and matching questions. There are **four exams** given in the class but I only count your **three highest** exam scores. **Therefore you may elect to take any 3 of the 4 exams that you choose or take all 4 with only the highest 3 scores counted.**

E. ASSIGNMENTS: There are three related assignments for this class. Directions for completing assignments and all necessary handouts/answer sheets and templates will be available on Canvas.

Assignment 1: Food and Activity Record (24 hr recall) - (20 pts). Please visit Canvas for specific instructions/details necessary for completion of this assignment. **Assignment will be uploaded to Canvas.**

Assignment 2: Food and Activity Analysis (MyFitnessPal) Assignment –(30 pts). Please visit Canvas for specific instructions/details necessary for completion of this assignment. **Upload assignment to Canvas**

Assignment 3: Beyond the Basics: Throughout the semester, you will participate in several critical thinking activities that encourage you to explore clinical applications and other timely, relevant nutrition topics. A few of these activities also provide an opportunity to interact with other students in the course. Typically, Beyond the Basics activities require you to read an article, watch a video, or listen to a podcast and then answer some questions or participate in a discussion about the topic. You will find links to Beyond the Basics activities from our Carmen course page. There are 16 options for Beyond the Basics activities, worth **10 points** each; your **10 best scores** will be counted toward your final grade. If you are enrolled in a **NURSING** program or you plan to apply for a nursing program, you **MUST** complete at least 10 Beyond the Basics that are designated as **CLINICAL (denoted with an asterisk)** . You may also complete the non-clinical activities, but these 10 clinical activities are required for the nursing program.

F. POINTS

Three (3) out of four (4) exams @ 100 points each	=	300 pts.
Assignments:		
Food & Activity (24 hr recall) Record	=	20 pts.
Food & Activity (MyFitnessPal) Analysis	=	30 pts.
Beyond the Basic activity (10 out of 16)	=	100 pts
TOTAL POINTS	=	450 pts.

G. COURSE GRADING SCALE: The following scale will be used in determining letter grades out of the total 350 possible points.

A= 93 – 100%	B = 83 – 86.9	C = 73 – 76.9	D = 60-66.9%
A- = 90 – 92.9	B- = 80-82.9	C- = 70 – 72.9	E = Below 60
B+ = 87 – 89.9	C+ = 77 – 79.9	D+ = 67-69.9	

ALL GRADING DISPUTES MUST BE RESOLVED WITHIN 7 WORKING DAYS AFTER RECEIVING SCORE FOR EXAM AND/OR ASSIGNMENT

H. IMPORTANT DATES: TBD

I. ATTENDANCE: ATTENDANCE IS MANDATORY

J. STUDENTS WITH DISABILITIES: The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue

K. MAKE-UP EXAM POLICY: *There will be no makeup exams.* If you miss a midterm you must take the optional final provided. (At each exam, no further exams will be passed out once the first examinee leaves the room). If you miss two midterms, there is no procedure in place to make up the second missed exam. All assignments are due **on Canvas, unless otherwise noted**. Any assignments received after due date are considered late and are penalized 2 points per day (weekends excluded).

L. ACADEMIC MISCONDUCT: Academic Misconduct is defined as any activity which compromises the academic integrity of the institution or subverts the educational process. Suspected cases of academic misconduct will be reported to the Committee on Academic Misconduct.

M. TENTATIVE SCHEDULE:

<u>DATE</u>	<u>TOPIC</u>	<u>CHAPTER</u>
Week 1	Syllabus and Introduction	
	Nutrition, Food Choices and Health	1
	Beyond the Basics: Fad Diets	
	Nutrition, Food Choices and Health	1
Week 2	Guidelines for Designing a Healthy Diet	2
	Beyond the Basics: Nutrition Assessment*	
	Guidelines for Designing a Healthy Diet	2
	Human Body	3
	Beyond the Basics: Digestive Disorders*	
Week 3	NO Class	NO CLASS
	Carbohydrates	4
	Carbohydrates	4
	Beyond the Basics: Diabetes Management*	
Week 4	Carbohydrates	4
	Lipids	5
	Beyond the Basics: Cardiovascular Disease*	
	Lipids	5

DATE	TOPIC	CHAPTER
Week 5	Lipids	5
	Beyond the Basics: Food Allergies & Intolerances*	
	Protein	6
	EXAM 1	EXAM 1
Week 6	Protein	6
	Energy balance and weight control	7
	Energy balance and weight control	7
	Beyond the Basics: Bariatric Surgery*	
Week 7	Fat soluble vitamins	8
	Fat soluble vitamins	8
	Beyond the Basics: Cancer*	
	Fat soluble vitamins	8
Week 8	Water soluble vitamins	8
	Beyond the Basics: Malnutrition*	
	Water soluble vitamins	8
	Water soluble vitamins	8
Week 9	Water and Major Minerals	9
	Food and Activity Record (24 recall) due	
	Major minerals	9
	Major minerals	9
	Beyond the Basics: Bone & Joint Health*	
Week 10	Break	
	Break	
	Break	
Week 11	Trace minerals	9
	Beyond the Basics: Hypertension & Kidney Disease*	
	Trace minerals	9
	EXAM 2	EXAM 2

DATE	TOPIC	CHAPTER
Week 12	Eating disorders	11,12
	Beyond the Basics: Orthorexia	
	Fitness and sport	10
	Fitness and sport	10
	Beyond the Basics: Caffeine	
Week 13	Pregnancy and breastfeeding	14
	Pregnancy and breastfeeding	14
	Food and Activity Analysis (MyFitnessPal) due	
	Nutrition: Infancy through adolescence	15
Week 14	Nutrition: Infancy through adolescence	
	Beyond the Basics: Food Insecurity on Campus	
	Nutrition during adulthood	16
	Nutrition during adulthood	16
	Beyond the Basics: Alcohol and Binge drinking	
Week 15	Microorganisms and Food Safety	13
	Microorganisms and Food Safety	13
	Microorganisms and Food Safety	13
	Beyond the Basics: Nutrition & Mental Health*	
	EXAM 3	EXAM 3
Final exam (10am-11:45am)	EXAM 4 (Final): The final exam is optional IF you have already taken the first 3 exams AND you are happy with your grades on those exams. Approximately half of the questions on the final will be identical to questions appearing on the first 2 exams. The remaining 50% of the questions will be comprehensive in nature and/or material (final few lectures) not covered on Exam 3	

N. Beyond The Basics Topic List: See Carmen for specific activities and assignments

BEYOND THE BASICS (best 10 of 16; 100 points = 22% of grade)

Beyond the Basics: Alcohol & Binge Drinking	10
Beyond the Basics: Nutrition Assessment*	10
Beyond the Basics: Digestive Disorders*	10
Beyond the Basics: Diabetes Management*	10
Beyond the Basics: Cardiovascular Disease*	10
Beyond the Basics: Food Allergies & Intolerances*	10
Beyond the Basics: Hypertension & Kidney Disease*	10
Beyond the Basics: Cancer*	10
Beyond the Basics: Bone and Joint Health*	10
Beyond the Basics: Caffeine	10
Beyond the Basics: Nutrition & Mental Health*	10
Beyond the Basics: Fad Diets	10
Beyond the Basics: Bariatric Surgery*	10
Beyond the Basics: Orthorexia	10
Beyond the Basics: Malnutrition*	10
Beyond the Basics: Food Insecurity on Campus	10

*** Nursing students must complete these Beyond the Basic Activities**



HUMN NTR 2210 (27846 & 27762) ONLINE

Science of Human Nutrition

Autumn 2020: 3 credit hours, undergraduate

Course Syllabus

INSTRUCTOR

Angela Collene, MS, RDN, LD
385 Campbell Hall
collene.6@osu.edu

OFFICE HOURS

Drop-in via Zoom
Tu/Th 9:30 AM – 11:00 AM
or request individual appointment

GRADUATE TEACHING ASSISTANTS

Student Last Names A – O
Zihan Zhang
zhang.6648@buckeyemail.osu.edu

By request

Student Last Names P – Z
Rosalie Zhong
zhong.198@buckeyemail.osu.edu

By request

COURSE DESCRIPTION

This course will address the basic principles of the biological science involving interactions between nutrients and physiological processes with emphasis on implications for human health.

MODE OF DELIVERY

This course is 100% online. All content will be delivered asynchronously; there are no required sessions when you must be logged in to Carmen at a scheduled time. Logging in to Zoom drop-in hours and exam review sessions is optional.

PREREQUISITES

None

GENERAL EDUCATION (GE) GOALS AND EXPECTED LEARNING OUTCOMES

This course meets the goals of the Natural Science Component of the GE at The Ohio State University. Courses in Natural Sciences foster an understanding of the principles, theories, and methods of modern science; the relationship between science and technology; the implications of scientific discoveries; and the potential of science and technology to address problems of the contemporary world.

The specific Learning Outcomes below stem from the Natural Science Learning Outcomes.

LEARNING OUTCOMES

Upon completion of the course, the student will be able to:

1. Understand the basic biological aspects of nutrient requirements of humans.
2. Appreciate the complex interactions and synergism of nutrients upon physiological and cellular processes.
3. Recognize the linkages between nutrients and disease processes, body size, mental ability, and performance.
4. Understand key events in the history of nutritional science from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.
5. Determine how nutritional information is derived from the scientific method of investigation.
6. Evaluate reputable versus non-reputable sources of nutrition information.
7. Understand how methods of modern science are used in the assessment of nutritional status.
8. Understand the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.
9. Understand the potential of modern science and technology to address nutritional problems of the contemporary world.
10. Utilize computer technology to assess dietary intake and activity levels compared to national recommendations.

COURSE MATERIALS

The eBook and courseware for this course are being provided via CarmenBooks. Through CarmenBooks, students obtain publisher materials electronically through Carmen, saving them up to 80% per title. The fee for this material is included as part of tuition and is listed as *CarmenBooks fee* on your Statement of Account. In addition to cost-savings, materials provided through CarmenBooks are available immediately on or before the first day of class. There is no need to wait for financial aid or scholarship money to purchase your textbook.

Unless you choose to opt out of the program, you do NOT need to purchase any materials for this course at the bookstore. For more information on the program or information on how to opt out, please visit the [CarmenBooks website](#).

Smith, A.M., Collene, A.L., and Spees, C.K. (2021). *Wardlaw's Contemporary Nutrition: A Functional Approach* (6th ed.). New York, NY: McGraw-Hill Education.

Access the courseware for this title through the **McGraw-Hill Connect** link in the course navigation.

There is an option to add a printed (loose-leaf) version of the textbook for an additional \$30.00 after you create your Connect account through our course Carmen page.

Additional resources (e.g., articles, videos, audio files) will be provided via Carmen.

COURSE TECHNOLOGIES

Technical Skills Required for this Online Course

- Basic computer and web-browsing skills
- Navigating Carmen (For questions about Carmen, see the [Canvas Student Guide](#).)
- [CarmenZoom virtual meetings](#)
- Navigating McGraw-Hill Connect (tutorials available in Course Orientation)

Required Equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in or external
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Accessing Carmen

You will need to use [BuckeyePass](#) multifactor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass – Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at (614) 688-4357 (HELP) and IT support staff will work out a solution for you.

Accessing McGraw-Hill Connect

The course materials (eBook, many assignments, and dietary analysis software) were included as your course fee when you registered for the course. When you log into Carmen, you will see a link to McGraw-Hill Connect in the navigation menu. The first time you click on this link or try to access an assignment, you will be prompted to create an account and register your course materials. Please use your OSU email address to create your account. If you are using (or have used) Connect for other courses, you may use the same account. On subsequent visits, you should be logged into Connect automatically and will be able to access your assignments via links in our Carmen course page.

Getting Help

For help with your password, university e-mail, Carmen, or any other OSU technology issues, contact the **OSU IT Service Desk**. Standard support hours are Monday – Thursday 9 AM – 6 PM, Friday 9 AM – 5 PM, and Saturday 11 AM – 5 PM. Support for urgent issues is available 24/7.

- **Self-Service and Chat support:** <https://osuitsm.service-now.com/selfservice/>
- **Phone:** (614) 688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** (614) 688-8743

For technical help with McGraw-Hill Connect, contact **McGraw-Hill Customer Support**. Standard support hours are Sunday 12 PM – 12 AM, Monday – Thursday 24 hours, Friday 12 AM- 9 PM, and Saturday 10 AM – 8 PM.

- **Phone:** (800) 331-5094 (RECOMMENDED)
- **Email or Live Chat:** click the **Help (?)** icon in the navigation menu on the left side of the screen in Connect

For technical help with Proctorio, contact **Proctorio Support**. Agents are available 24/7.

- **Online Support:** <https://proctorio.com/support>
- **Phone:** (866)-948-9087

COMMUNICATION

E-Mail

All students must have an active OSU email account and reliable access to the Internet. Emails sent from hotmail, yahoo, google, etc. may go to the spam boxes of your instructor or teaching assistants. It is best to send communication through your OSU account.

Please feel comfortable emailing your instructor and teaching assistants throughout the semester. This is the main form of communication between students and instructing staff. Students should use email rather than discussion boards in Carmen to ask questions about personal concerns (e.g., grades). Our policy is to respond to emails within 1 business day (i.e., excluding weekends and university holidays). When authoring emails, please type "2210" at the beginning of the subject line of your email. If you do not receive a response to an email within 24 hours, please resend your email.

Your instructor will post weekly updates using the announcements feature in Carmen to answer common questions and remind you of upcoming tasks. Be sure to read these announcements to stay informed, engaged, and on schedule. To ensure that you are alerted when new announcements are posted, you can adjust your settings and notification preferences within Carmen. Go to Account (on the left side of the screen in Carmen) and select Settings to add your preferred email address; select Notifications to change how you are alerted when new announcements are posted. As the semester goes on, weekly updates will be archived in the Getting Started module on Carmen. If you do not receive weekly updates from your instructor (collene.6@osu.edu), please contact OSU IT to resolve the problem (see above).

Carmen (<https://carmen.osu.edu/>)

All students are required to use Carmen, OSU's learning management system, which is based on the Canvas platform. Students should plan to access Carmen frequently throughout the week for announcements, discussions, learning resources, assignments, and grades. If you are new to Carmen, please see the guide to getting started at <https://resourcecenter.odee.osu.edu/carmencanvas/getting-started-canvas-students>.

Carmen's Discussion Board

If you have general questions about the course that do not contain personal information and are likely to be relevant to other students in the course, post your questions on the discussion board in Carmen. Examples of general questions include clarifications of assignment instructions, questions about course content, or technical concerns. In a large, online course, it is very common for students to have similar questions. To avoid redundancy, please review recent questions and answers before posting a new question.

ONE-ON-ONE MEETINGS

Meeting with the Instructor

If course content, assignment, or technology struggles arise, please join your instructor during scheduled Zoom drop-in hours or contact the instructor via email for an individual appointment. Due to recent public health recommendations from the state of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19), we will rely on virtual meetings (see page 1 of the syllabus).

Meeting with the Graduate Teaching Assistants

The graduate teaching assistants (GTAs) are graduate students in nutrition who are available to help you master the course content and excel in the course. Please email your GTAs directly (see page 1) to ask questions or schedule a web conference or phone call.

COURSE EXPECTATIONS

This is a 3-credit online course. You should expect to spend *at least* the same amount of time reading the text, engaging with online content, completing assignments, and reviewing course notes as you would spend for a face-to-face course (about 9 hours per week).

It can be very easy to fall behind in an online course. Any online course requires self-discipline to stay on track with readings and assignments. This course is designed in weekly increments, such that new material is released each Monday and assignments based on that material are due the following Monday at 11:59 PM. This layout is flexible enough to allow you to work wherever and whenever you choose, yet structured enough to encourage efficient accumulation and retention of knowledge. The instructor and GTAs will support your learning with organized materials, weekly email updates, thoughtful feedback, and clear instructions throughout the semester. Please do your part by reading emails, maintaining a record of all due dates in your own calendar, and regularly visiting our course page in Carmen for news and assignments.

NETIQUETTE

As a member of a community of online learners, it is your responsibility to exhibit professional behavior and decorum in all modes of communication. Following the rules of etiquette on the Internet (netiquette) helps to improve the readability of your messages, keeps conversations focused, increases trust, and creates a more positive experience for all participants. Netiquette includes, but it not limited to, the following guidelines:

- Honor people's rights to their opinions; respect the right for people to disagree.
- Be professional; use language that is not considered foul or abusive.
- Respond to peers honestly, thoughtfully, respectfully, and constructively.
- Avoid writing in all caps; it conveys shouting and anger.
- Avoid colors like red and green for accessibility reasons; avoid font styles, colors, and sizes that are difficult to read.
- Address the ideas, not the person, when responding to messages or discussions.

- Be careful when using humor or sarcasm; without social cues like facial expressions or body language, a remark meant to be humorous could come across as offensive or hurtful.
- Do not distribute copyrighted materials, such as articles and images (most things online are not licensed as “fair use”). Share links to those materials (instead of copying/pasting them) and be sure to properly cite all sources to avoid unintentional plagiarism.

ASSIGNMENTS

Assignment due dates are all set from the beginning of the semester and are listed in multiple locations for your benefit.

1. Syllabus (last three pages)
2. Carmen calendar
3. Weekly updates

With all these resources at your fingertips, you can find an effective way to stay on schedule. Stating that you “were not aware” of an assignment due date is not a valid excuse for an extension.

This course uses a variety of digital tools, including Carmen (OSU’s learning management system) and Connect (a digital learning platform from McGraw-Hill that accompanies our eBook for the course). Whether the assignments are built in Carmen or Connect, you will be able to access them by simply clicking on the name of the assignment from our course page in Carmen.

SmartBook

SmartBook activities will be how you encounter the chapters of our text, *Wardlaw’s Contemporary Nutrition: A Functional Approach*. SmartBook is an adaptive reading tool. As you read the pages of the eBook, you will notice that some text is highlighted. The highlighted text represents core content you will need to pass the course. I recommend that you read the chapters completely (including the non-highlighted material) the first time through. You can focus on the highlighted material when you go back and study for exams.

As you read each chapter, you will be prompted to stop and answer questions based on what you have read. If you answer the questions correctly, you will move on quickly. If you get some questions wrong, SmartBook will give you additional questions and resources to help you master the content. SmartBook will also remember where you struggled with the content and present you with additional questions when you return to a chapter to review. Expect the SmartBook activities (including reading and practice questions) to take about 2 to 3 hours per week. Start SmartBook activities early in the week and plan to spend 20 to 30 minutes per day to optimize retention.

SmartBook activities are graded based on completion; an assignment is considered complete when you have demonstrated mastery of the concepts selected by your instructor. If you read the section first, you will move through the practice questions quickly. However, if you decide to skip the reading and just do the practice questions, it may take a longer time because

SmartBook will present you with more and more questions until you demonstrate mastery of the selected concepts.

SmartBook activities are worth **10 points** per chapter. Full credit is awarded once you have mastered the concepts your instructor has selected. If you start a SmartBook activity and make some progress, you will receive partial credit based on the number of concepts you have mastered by the due date. If you do not start an assigned SmartBook activity by the due date, you will receive a score of 0 for that activity. You may return to any SmartBook activity to read and recharge, but your score for that activity is based on what you have achieved by the due date. There are 17 SmartBook activities; your **15 best scores** will be counted toward your final grade. If you complete all of the assigned SmartBook activities on time, you can be assured of 150 points (of 1000 total points for the course).

Check Point

Complete Check Point activities to review and apply the material in preparation for exams. The first Check Point activity (Course Orientation) is meant to orient you to the online course. For the second Check Point activity (All Daily Reports), you will track and analyze your food and beverage intake for three days using NutritionCalc Plus, a dietary analysis program that is included in your course materials through Connect (detailed instructions are available on our course Carmen page). The remaining Check Point activities will give you an opportunity to practice the most important concepts from the chapters. Besides traditional multiple choice and true/false questions, Check Point activities consist of a variety of interactive question types, such as labeling, classification, matching, and sentence completion activities. Some questions will be based on the analysis of your dietary intake (All Daily Reports, described above).

For most Check Point activities, you will have one attempt (no time limit). Exceptions include Check Point: Course Orientation (unlimited attempts) and Check Point: All Daily Reports (revisions allowed). You are welcome to reference your eBook and other course materials as you complete these activities (most items provide a link to the relevant section in the eBook). You can also save your progress, close the browser, and resume at a later time. Please be aware that each student receives a set of questions that is randomly drawn from a pool of many questions, so your assignment may be different from that of your classmates. Points for late submissions will be reduced by 10% per day late. There are 7 Check Point activities, worth **50 points** each; your **6 best scores** (always including Check Point: All Daily Reports) will be counted toward your final grade.

HELPFUL TIP: To be assured of proper credit, make certain to click SUBMIT before the due date when you have completed your Check Point activities. After you complete any assignment, verify that your score has posted to the Carmen grade book.

Beyond the Basics

Throughout the semester, you will participate in several critical thinking activities that encourage you to explore timely, relevant nutrition topics. A few of these activities also provide an opportunity to interact with other students in the course. Typically, Beyond the Basics activities require you to read an article, watch a video, or listen to a podcast and then answer

some questions or participate in a discussion about the topic. You will find links to Beyond the Basics activities from our Carmen course page.

Here are some tips for productive online discussions:

1. Adhere to the netiquette guidelines described on page 6 of the syllabus.
2. Read the instructions and stay on topic.
3. Elaborate! Instead of simply writing “I agree,” state why you agree, give an example, or refer to a thought-provoking resource.
4. Be mindful of proper spelling and grammar; proofread your posts before submitting them.
5. Support your opinions with credible, scientific evidence. Choose your sources wisely. The internet is a bottomless pit of health information—some is reliable, some is suspicious, and some is downright dangerous. In Chapter 2, you will learn how to identify reliable nutrition information. As you search online for health information, consider the credibility of the source and how current the information is. For more information on evaluating health information, see <https://medlineplus.gov/evaluatinghealthinformation.html>.
6. It is not acceptable to copy and paste content that has been written by someone else. To avoid plagiarism, even if you are paraphrasing, *always* cite your sources.

Points for late submissions will be reduced by 10% per day late. There are 6 Beyond the Basics activities, worth **20 points** each; your **5 best scores** will be counted toward your final grade.

Extra Credit

Optional extra credit assignments will be available. All extra credit assignments must be submitted by 11:59 PM on the due dates listed in the course calendar if you would like them to be counted toward your grade. No extensions will be available for extra credit assignments and no additional individual requests for extra credit will be granted. Although extra credit assignments are optional, it is in your best interest to complete all of these assignments; they can only boost your grade (i.e., scores will be counted out of 0).

Please note that the Carmen grade book does not provide a simple way to award extra credit points. Therefore, your overall grade may not improve immediately after you complete an extra credit assignment. However, within a week after the due date for each extra credit assignment, the instructor will convert scores from up to 10/10 to up to 10/0 in the grade book.

EXAMS

There are four online proctored exams.

EXAM	AVAILABLE	TIME LIMIT	POINTS	CONTENT
Unit 1	09/15 – 09/19	60 minutes	100	1, 2, 3, and part of 17
Unit 2	10/06 – 10/10	60 minutes	100	4, 5, and 6
Unit 3	11/03 – 11/07	60 minutes	100	8, 9, 10, 11, 12, and 13
Unit 4/Final	12/08 – 12/12	90 minutes	150	Cumulative; mostly 7, 14, 15, and 16

Each exam will be available for five days and will be administered via Carmen. Exam questions are drawn from a bank of many questions, so your exam will not be exactly like any of your

classmates' exams, although it will cover the same content. Exams are timed. You may use a basic, non-graphing calculator and scratch paper during exams; these tools are available on-screen during remotely proctored exams. All exams are closed book/closed note.

You have several options for taking exams:

Remotely Proctored Exams with Proctorio

The most flexible exam option is Proctorio, an online proctoring tool available through OSU (at no cost to you). Proctorio offers you flexibility to take your exams at the time and in the location of your choosing. Students are required to have a webcam (USB or internal) with a microphone and a strong and stable internet connection. During each exam, Proctorio will record the testing environment. At this time, Proctorio only works in the Chrome browser. *If you intend to use Proctorio, you must use a desktop or laptop computer with a webcam, microphone, reliable internet connection, and Chrome browser and you should select a private space for each exam session where disruptions are unlikely and where recording devices can be enabled.*

Prior to the first exam, you will receive instructions to use Proctorio. To use Proctorio, you must be **over 18 years of age**. Additionally, the tool has **limitations in its accessibility** for students reliant upon screen readers and keyboard navigation. For more information about remote exam proctoring with Proctorio, see <https://resourcecenter.odee.osu.edu/carmencanvas/getting-started-proctorio-students>.

Proctored Exams at an Approved Testing Center

If you have concerns about using an online proctoring tool for any reason, you may make an appointment to take your exam at an approved testing center at any time during the available dates. Testing centers are available at all OSU campuses. All OSU testing centers except Mansfield are free of charge for students enrolled in this course.

On the Columbus campus, the OSU Testing Center is located on the fifth floor of the Student Academic Services Building at 281 West Lane Avenue, Columbus, OH 43210. The OSU Testing Center schedules exams between 8:00 AM and 5:00 PM on weekdays.

Schedule an appointment online (at least one day before your desired testing date) at <https://www2.registerblast.com/theosu/Exam/List>. From the drop-down menus on the registration page, choose 1.) Online Course Exams (Ohio State Courses Only), 2.) the appropriate exam (e.g., HUMN NTR 2210 Unit 1 Exam), 3.) a date within the range of available dates, and 4.) a time. Then, indicate 5.) your name and email address, 6.) your acknowledgement of the testing center's guidelines, and 7.) your phone number.

On the date you choose, go to the testing center, check in at the desk, stash your belongings in a locker, and a staff member will set you up to take your exam at a computer and will monitor your testing session. At the testing center, most students use computer-based testing, but you may request a paper version of the exam. For more information about taking exams at the OSU Testing Center, see https://registrar.osu.edu/testing/policies_and_procedures.pdf.

Please note that the testing centers will have limited capacity this semester due to public health recommendations from the State of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19). It is best to schedule at least one week in advance.

If you need to schedule your exam at a branch campus or another approved testing center, please contact your instructor at least one week before the exam date to set this up. Check the Getting Started module on our Carmen course page for updates about testing center availability.

Proctored Exams with SLDS-Approved Accommodations

If you have special exam accommodations approved through the Office of Student Life Disability Services, you may schedule your exams with SLDS in Baker Hall during the range of available dates. At the beginning of the semester, please provide proper documentation of your accommodations through the SLDS portal. Communicate with the instructor via email or virtual meeting to determine how you will take exams.

Please note, if you only need extended time for exams, the instructor can set the extension within Carmen so that you can still use Proctorio for remotely proctored exams.

Due to recent public health recommendations from the state of Ohio and the university to limit social contact to prevent the spread of coronavirus (COVID-19), the Office of Student Life Disability Services has limited hours and space for in-person testing. Please use the AIM portal (<https://sierra.accessiblelearning.com/OSU/>) and/or contact your assigned access specialist if you have questions about your testing environment.

Whatever testing environment you choose, it is your responsibility to make arrangements to take exams within the range of available dates. Make up exams or alternative exam accommodations can be requested for medical or equivalent excuses with appropriate documentation. If needed, please contact your instructor via email *prior to* the scheduled exam date. All exam dates are all set from the beginning of the semester and are listed in multiple locations for your benefit. Failure to responsibly manage your schedule is *not* a valid reason for a make-up attempt. If you do not take an exam or make arrangements for a make-up exam by 11:59 PM on the due date, late exam submissions will be allowed with a 20% penalty for each day that it is late. If you miss an exam, you will receive a 0 for the exam.

There are 4 exams, worth a **total of 450 points**; **all scores** will be counted toward your final grade.

GRADING POLICIES

Progress will be regularly evaluated by student performance on assignments and exams. Dates for all assignments and exams are clearly indicated in the course calendar portion of the syllabus, on the Carmen calendar feature, and in email communications from the instructor. Detailed instructions will be provided for each assignment. For SmartBook activities and Extra Credit activities, no credit will be awarded for late submissions. Points earned for Check Point and Beyond the Basics activities will be reduced by 10% per day late. . Points earned for exams will be reduced by 20% per day late. Students requesting an extension for any assignment

should provide appropriate documentation and discuss the matter with the instructor *prior to* the due date.

Grading Point Distribution

The weights of each form of student evaluation are shown below. For a spreadsheet version of the point distribution that will accurately calculate your grade, see “How to Calculate Your Grade” in the Getting Started module.

<i>EXAMS (450 points = 45% of grade)</i>	<i>Points</i>
Unit 1 Exam (Chapters 1, 2, 3, part of 17)	100
Unit 2 Exam (Chapters 4, 5, 6)	100
Unit 3 Exam (Chapters 8, 9, 10, 11, 12, 13)	100
Unit 4/Final Exam (cumulative; focus on Chapters 7, 14, 15, 16)	150
<i>SMARTBOOK ACTIVITIES (best 15 of 17; 150 points = 15% of grade)</i>	
SB Ch01: Nutrition, Food Choices, & Health	10
SB Ch02: Designing a Healthy Dietary Pattern	10
SB Ch17: Safety of Our Food Supply	10
SB Ch03: The Human Body: A Nutrition Perspective	10
SB Ch04: Carbohydrates	10
SB Ch05: Lipids	10
SB Ch06: Proteins	10
SB Ch08: Overview of Micronutrients & Phytochemicals	10
SB Ch09: Fluid & Electrolyte Balance	10
SB Ch10: Nutrients Involved in Body Defenses	10
SB Ch11: Nutrients Involved in Bone Health	10
SB Ch12: Micronutrient Function in Energy Metabolism	10
SB Ch13: Nutrients that Support Blood & Brain Health	10
SB Ch07: Energy Balance & Weight Control	10
SB Ch14: Nutrition: Fitness & Sports	10
SB Ch15: Eating Disorders	10
SB Ch16: Undernutrition Throughout the World	10
<i>CHECK POINT ACTIVITIES (best 6 of 7; 300 points = 30% of grade)</i>	
Check Point: Course Orientation	50
Check Point: All Daily Reports (<i>cannot be dropped</i>)	50
Check Point: Nutrition Basics	50
Check Point: Macronutrients	50
Check Point: Micronutrients I	50
Check Point: Micronutrients II	50
Check Point: Energy Balance	50

BEYOND THE BASICS (best 5 of 6; 100 points = 10% of grade)	
Beyond the Basics: Alcohol & Binge Drinking	20
Beyond the Basics: Caffeine	20
Beyond the Basics: Nutrition & Mental Health	20
Beyond the Basics: Keto Diet	20
Beyond the Basics: Orthorexia	20
Beyond the Basics: Food Insecurity	20
EXTRA CREDIT ACTIVITIES	
Extra Credit: Gastrointestinal Health	+10
Extra Credit: Mediterranean Diet	+10
Extra Credit: Cancer Research	+10
Extra Credit: Intermittent Fasting	+10
Extra Credit: Course Feedback Request	+5
Extra Credit: Detect an Error	+unlimited
1000	

HELPFUL TIP: Using the default settings, Carmen calculates your grade based on the assignments and exams you have completed to date. Missed assignments may not be factored into the calculation. Periodically throughout the semester, your instructor or GTA will review the gradebook and manually enter “0” for missing assignments. To see your total grade (including any incomplete assignments) using the Carmen grade book, be sure to uncheck the option for “Calculate based only on graded assignments.”

Grading Scale

A	=	930 – 1000 points
A-	=	900 – 929 points
B+	=	870 – 899 points
B	=	830 – 869 points
B-	=	800 – 829 points
C+	=	770 – 799 points
C	=	730 – 769 points
C-	=	700 – 729 points
D+	=	670 – 699 points
D	=	600 – 669 points
E	=	0 – 599 points

HELPFUL TIP: At the end of the semester, many students ask if their grades will be rounded up. Your grade will be rounded to the nearest *whole point* out of 1000 points and assigned a letter grade according to the scale shown above. This is not the same as rounding to the nearest percent. For example, if your total points for the semester are 929.5 out of 1000, this would be rounded up to 930 and you would earn an A for the course. However, if your total points are 925 out of 1000, this falls into the range of scores for A-. To maximize your points, turn in all assignments on time and take advantage of extra credit opportunities.

ACADEMIC INTEGRITY

Policies for this Online Course

- **Exams:** You must complete all exams yourself, using remote proctoring software, without any external help or communication.
- **Assignments:** You are expected to do your own work on all assignments (e.g. LearnSmart, Check Point, Beyond the Basics, and Extra Credit activities), without external collaboration.
- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past course to your current course, even if you modify it. If you have specific questions about this, please ask the instructor.
- **Collaboration and informal peer-review:** This course includes several discussion-based Beyond the Basics activities that provide opportunities for collaboration with your classmates. While study groups are encouraged, remember that comparing answers on exams and assignments is not permitted. If you are unsure about a particular situation, please ask your instructor ahead of time.

OSU's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If the instructor or GTAs suspect that a student has committed academic misconduct in this course, we are obligated by university rules to report our suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the university's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact your instructor.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))

- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

COPYRIGHT DISCLAIMER

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

ACCESSIBILITY ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability, including mental health, chronic, or temporary medical condition, please contact your instructor to discuss your specific needs. To establish accommodations, you may need to register with Student Life Disability Services. After registration, make arrangements with your instructor as soon as possible to discuss the timely implementation of your accommodations for this course. You may contact the Office of Student Life Disability Services (<http://slds.osu.edu/>) at (614) 292-3307 or visit 098 Baker Hall at 113 West 12th Avenue to coordinate reasonable accommodations.

Accessibility of Course Technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [CarmenCanvas accessibility](#)
- [CarmenZoom accessibility](#)
- [McGraw-Hill Connect accessibility](#)

COVID-RELATED ACCOMMODATIONS

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let your instructor know immediately so that you can set up a meeting to discuss options for completing your coursework. To establish reasonable accommodations, the instructor may request that you register with Student Life Disability Services (<https://slds.osu.edu/>). After registration, make arrangements with your instructor as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

MENTAL HEALTH

College students may experience mental health concerns impacted by a variety of factors. As a result, it is important for students to keep in mind that there are supports available. While individual counseling, group counseling, and psychiatric care are good options, it is important for students to consider all the resources available based on the situation/need, timeliness, and availability. More information about university support may be found here <https://ccs.osu.edu/mental-health-support-options/>

At the College of Nursing, a mental health counselor is available for individual counseling appointments. More information may be found on the website (<https://nursing.osu.edu/students/student-resources/counseling-services>) or reach out to schedule an appointment via email woith.3@osu.edu or by calling (614) 292-6952.

Students are also welcome to use Ohio State's primary counseling center, Counseling Consultation Services (CCS), which offers appointments 8:00 a.m. – 8:00 p.m. Monday-Thursday and 8:00 a.m. – 5:00 p.m. on Fridays. Students can schedule an appointment with CCS by calling (614) 292-5766.

DIVERSITY

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

TITLE IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin, and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

GRIEVANCES AND SOLVING PROBLEMS

According to University Policies, available from the Division of Student Affairs, if you have a problem with this class, “You should seek to resolve a grievance concerning a grade or academic practice by ***speaking first with the instructor or professor***: Then, if necessary, with the department chairperson, college dean, and provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23, which is available from the Office of Student Life, 208 Ohio Union.” “Grievances against graduate, research, and teaching assistants should be submitted first ***to the supervising instructor***, then to the chairperson of the assistant’s department.”

COURSE EVALUATIONS

It is critical to the continued success of this course to have your honest and valued feedback. Near the end of the semester, you will have the opportunity to fill out the standard institutional SEI on the instructor (online submission). The instructor will also send you a separate course feedback survey via Carmen to gather more course-specific information.

August/September 2020

HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
23	24 Course Materials Available	25	26	27	28	29
30	31 Check Point: Course Orientation SmartBook: Ch01 Nutrition, Food Choices, Health Beyond the Basics: Alcohol & Binge Drinking	1	2	3	4	5
6	7 LABOR DAY SmartBook: Ch02 Designing a Healthy Dietary Pattern SmartBook: Ch17 N&YH: Preventing Foodborne Illness Check Point: All Daily Reports	8	9	10	11	12
13	14 SmartBook: Ch03 The Human Body: A Nutrition Perspective Check Point: Nutrition Basics Extra Credit: Gastrointestinal Health	15	16	17	18	19
20	21 SmartBook: Ch04 Carbohydrates	22	23	24	25	26
27	28 SmartBook: Ch05 Lipids Extra Credit: Mediterranean Diet	29	30	1	2	3

Each week, assignments are due at 11:59 PM on Monday on the dates indicated above.
At the end of each unit, exams are available 12:00 AM on Tuesday – 11:59 PM on Saturday.

October 2020

HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
4	5 SmartBook: Ch06 Proteins Check Point: Macronutrients	6	7	8	9	10 Unit 2 Exam (Chapters 4, 5, and 6)
11	12 SmartBook: Ch08 Overview of Micronutrients SmartBook: Ch09 Fluid & Electrolyte Balance	13	14	15	16	17
18	19 SmartBook: Ch10 Body Defenses Check Point: Micronutrients I Extra Credit: Cancer Research	20	21	22	23	24
25	26 SmartBook: Ch11 Bone Health SmartBook: Ch12 Energy Metabolism Beyond the Basics: Caffeine	27	28	29	30	31

Each week, assignments are due at 11:59 PM on Monday on the dates indicated above.

At the end of each unit, exams are available 12:00 AM on Tuesday – 11:59 PM on Saturday.

November/December 2020 HUMN NTR 2210D

SUN	MON	TUE	WED	THU	FRI	SAT
1	2 SmartBook: Ch13 Blood & Brain Health Check Point: Micronutrients II Beyond the Basics: Nutrition & Mental Health	3	4	5	6	7 Unit 3 Exam (Chapters 8, 9, 10, 11, 12, and 13)
8	9 SmartBook: Ch07 Energy Balance & Weight Control Extra Credit: Intermittent Fasting	10	11	12	13	14
15	16 SmartBook: Ch14 Sports Nutrition Beyond the Basics: Keto Diet	17	18	19	20	21
22	23 SmartBook: Ch15 Eating Disorders Beyond the Basics: Orthorexia	24	25	26	27	28 THANKSGIVING BREAK
29	30 SmartBook: Ch16 Undernutrition Check Point: Energy Balance Beyond the Basics: Food Insecurity Extra Credit: Detect an Error Extra Credit: Course Feedback	1	2	3	4	5
6	7	8	9	10	11	12 Unit 4/Final Exam (Cumulative, focus on Chapters 7, 14, 15, and 16)

Each week, assignments are due at 11:59 PM on Monday on the dates indicated above.
 At the end of each unit, exams are available 12:00 AM on Tuesday – 11:59 PM on Saturday.

ELO 1.1 Explain basic facts, principles, theories, and n

1. Examine and describe the basic biological aspects c

Capstone (4)

General language	Demonstrates superior ability to describe the basic biological aspects of nutrient requirements of humans.
Specific language	Demonstrates ability to modify dietary patterns to meet nutrient requirements.
Assessment item	DIETARY ANALYSIS ITEM: Many people fall short of the Recommended Dietary Allowance (RDA) for calcium. Which of the following would be the most effective way to increase calcium intake? [Drink milk instead of soft drinks.]

2. Describe the complex interactions between various

Capstone (4)

General language	Demonstrates superior ability to describe the complex interactions between nutrients and cellular processes.
Specific language	Demonstrates ability to modify dietary patterns to address nutrient deficiencies or toxicities.
Assessment item	DIETARY ANALYSIS ITEM: Which of the following would be an effective way to improve iron status? [Consume plant sources of iron (e.g., legumes) with a source of vitamin C (e.g., tomatoes).; Occasionally choose lean red meats (e.g., sirloin steak) as part of meals.; At breakfast, choose an iron-fortified cereal.]

3. Recognize the linkages between nutrients and dise

General language	Demonstrates superior ability to recognize linkages between nutrients and disease processes, body size, mental ability, and performance.
Specific language	Demonstrates ability to modify dietary patterns to mitigate risk for the leading noncommunicable diseases in the United States.

Assessment item	FINAL EXAM ITEM: To prevent bone loss, a post-menopausal woman at risk for osteoporosis could [increase dietary intake of calcium and vitamin D.; add some strength-training to her exercise routine.; limit alcohol intake to one drink per day.]
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11. Identify the links between nutrients on disease pr

General language	Demonstrates superior ability to identify the links between nutrients on disease processes, mental ability and labor effectiveness.
Specific language	Demonstrates ability to modify dietary patterns to improve/optimize physical performance.
Assessment item	UNIT 4 EXAM ITEM: Think about the nutrients that are important for muscle recovery. Which of the following snacks would be best to promote muscle recovery after a strength-training workout? [1 peanut butter sandwich with 1 cup of low-fat milk.]
General language	12. Explain how nutrition requirements change through Demonstrates superior ability to explain how nutrient requirements change throughout the lifespan.
Specific language	Demonstrates ability to modify dietary patterns to meet the specific nutrient needs of individuals throughout the lifespan.
Assessment item	UNIT 3 HOMEWORK ITEM: Adequate folate intake during pregnancy is imperative for the prevention of neural tube defects like spina bifida. Which of the following dietary sources would provide the greatest amount of bioavailable vitamin for a pregnant woman? [Prenatal vitamin with 400 micrograms of folic acid]
General language	ELO 1.2 Identify how key events in the development of 4. Examine key events in the history of nutritional sci Demonstrates superior ability to examine key events in the history of nutritional science, from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.
Specific language	Modify dietary patterns to prevent or treat nutrition-related diseases with a genetic component.
Assessment item	UNIT 2 HOMEWORK ITEM: Individuals with phenylketonuria (PKU) should avoid [aspartame.]

5. Determine how nutritional information is derived f

General language	Demonstrates superior ability to determine how nutritional information is derived from the scientific method of investigation.
Specific language	Interpret the results and conclusions of a current, peer-reviewed, scientific journal article about nutrition.
Assessment item	UNIT 1 EXAM ITEM: The results of an observational study show that women who regularly take multivitamins tend to have healthier body weight. From this study, we can conclude that taking multivitamins causes weight loss. [False]

ELO 1.3 Employ the processes of science through expl

10. Utilize computer technology to assess dietary inta

Experiential Learning	
General language	Demonstrates superior ability to utilize computer technology to assess dietary intake and activity levels compared to national recommendations.
Specific language	Modify dietary patterns to meet nutrient needs and adhere to public health recommendations.
Assessment item	DIETARY ANALYSIS ITEM: Describe one way you could change your usual dietary pattern to reduce your intake of added sugars. Be specific! For example, "Instead of choosing x for breakfast, I could choose y."

7. Describe how methods of modern science are used

General language	Demonstrates superior ability to describe how methods of modern science are used in the assessment of nutritional status.
Specific language	Use data from nutritional assessments to inform dietary choices to correct nutrition-related health problems.

Assessment item FINAL EXAM ITEM: Jorge's blood pressure measurement of 160/90 mmHg indicates hypertension. Which of the following dietary patterns may be used to lower his blood pressure? [DASH Diet]

ELO 2.1 Analyze the inter-dependence and potential i

9. Explore and examine how modern science and tect

General language Demonstrates superior ability to explore and examine how modern science and technology can be used to address nutritional problems of the contemporary world.

Specific language Discuss the pros and cons of the use of biotechnology in food production.

Assessment item UNIT 4 HOMEWORK ITEM: Benefits of genetic engineering in agriculture include [reduced food costs.; increased crop yield.; enhanced food safety and food security.; reductions in soil erosion and environmental stress.]

ELO 2.2 Evaluate social and ethical implications of na

8. Examine the diverse social and cultural patterns th

General language Demonstrates superior ability to examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.

Specific language Describe the impact of food insecurity on human health and wellbeing.health impact of a public health nutrition program in the United States.

Assessment item BEYOND THE BASICS (discussion-based activity): Food Insecurity on College Campuses

ELO 2.3 Critically evaluate and responsibly use inform

6. Evaluate reputable versus non-reputable sources o

General language Demonstrates superior ability to evaluate reputable versus non-reputable sources of nutrition information.

Specific language Evaluate the risks and benefits of a popular diet.

Assessment item BEYOND THE BASICS (quiz): Keto Diet

methods of modern natural sciences; describe and analyze the process of scientific inquiry.

of nutrient requirements of humans.

Milestone (3)	Milestone (2)
Demonstrates adequate ability to describe the basic biological aspects of nutrient requirements of humans. Demonstrates ability to use nutrient standards to evaluate the adequacy of dietary patterns. DIETARY ANALYSIS ITEM: Was your calcium intake at least as much as your recommendation?	Demonstrates partial ability to describe the basic biological aspects of nutrient requirements of humans. Demonstrates ability to define various nutrient intake standards used in the United States. UNIT 1 EXAM ITEM: The RDAs for nutrients are set [to cover the needs of 97% to 98% of the population.]

s nutrients upon physiological and cellular processes.

Milestone (3)	Milestone (2)
Demonstrates adequate ability to describe the complex interactions between nutrients and cellular processes. Demonstrates ability to describe nutrient/nutrient interactions that support cellular processes. UNIT 3 EXAM ITEM: Consumption of vitamin C [enhances absorption of iron.]	Demonstrates partial ability to describe the complex interactions between nutrients and cellular processes. Identify signs of nutrient deficiencies. UNIT 3 EXAM ITEM: A Disease characterized by poor mineralization of newly synthesized bones due to low calcium content and caused by vitamin D deficiency [Rickets]

ase processes , body size, mental ability, and performance.

Demonstrates adequate ability to recognize linkages between nutrients and disease processes, body size, mental ability, and performance. Demonstrates ability to recall the recommendations of major public health authorities (e.g., American Heart Association, American Institute for Cancer Research) to mitigate the risk for the leading noncommunicable diseases in the United States. UNIT 3 EXAM ITEM: For cancer prevention, most Americans would benefit from reducing their intakes of [red and processed meats.]	Demonstrates partial ability to recognize linkages between nutrients and disease processes, body size, mental ability, and performance. Demonstrates ability to recall the recommendations of the Dietary Guidelines of Americans to reduce risk for the leading noncommunicable diseases in the United States. UNIT 1 EXAM ITEM: Which of the following statements is consistent with the 2010 Dietary Guidelines for Americans? [Balance the calories you eat with physical activity.]
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ocesses, mental ability, and labor effectiveness (sport).

Demonstrates adequate ability to identify the links between nutrients on disease processes, mental ability and labor effectiveness.

Recalls nutrition recommendations to support optimal physical performance.

UNIT 4 EXAM ITEM: Amanda loses 3 pounds of fluid by sweating during a soccer game. How many cups of fluid would be appropriate to replenish her body fluids? [8 cups]

Demonstrates partial ability to identify the links between nutrients on disease processes, mental ability and labor effectiveness.

Demonstrates ability to describe the negative impact of nutrient deficiencies on physical performance.

UNIT 4 EXAM ITEM: To decrease the risk of developing heat-related injuries, [watch for rapid body-weight changes of 2% or more of body weight.]

Throughout the lifespan (e.g., pregnancy to adulthood).

Demonstrates adequate ability to explain how nutrient requirements change throughout the lifespan.

Explains how the physiological changes of human development affect nutrient requirements throughout the lifespan.

UNIT 3 EXAM ITEM: To promote bone health, all infants should receive supplemental _____ until dietary intake from formula and/or other foods meets their needs. [vitamin D]

Demonstrates partial ability to explain how nutrient requirements change throughout the lifespan.

Describes an example of a nutrient requirement that changes throughout the lifespan.

UNIT 3 EXAM ITEM: Older adults may require a supplemental source of vitamin B-12 because [decreased production of intrinsic factor decreases vitamin B-12 absorption.]

How advances in science contribute to the ongoing and changing nature of scientific knowledge and methods.

From the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.

Demonstrates adequate ability to examine key events in the history of nutritional science, from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.

Differentiate between nutrigenetics and nutrigenomics.

UNIT 2 HOMEWORK ITEM: Match each term with its definition. Nutrigenetics = Study of the effect of genes on nutritional health; Nutrigenomics = Study of how food impacts health through its interactions with genes; Epigenetics = Heritable changes in gene function that are independent of DNA sequence

Demonstrates partial ability to examine key events in the history of nutritional science, from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.

Define nutritional genomics.

UNIT 2 EXAM ITEM: The study of how a person's genes interact with nutrients is called [nutritional genomics.]

from the scientific method of investigation.

Demonstrates adequate ability to determine how nutritional information is derived from the scientific method of investigation.

Identify the elements of the scientific method of investigation in a current peer-reviewed, scientific journal article about nutrition.

UNIT 1 EXAM ITEM: In the experimental design, neither the participants nor the researchers are aware of each participant's assignment (test or placebo) or the outcome of the study until it is completed.[double -blinded

Demonstrates partial ability to determine how nutritional information is derived from the scientific method of investigation.

Differentiate among different types of nutrition research methods.

UNIT 1 HOMEWORK ITEM: The scientific method is important for determining relationships between dietary patterns and health. Classify each of the following studies according to its study design. Randomized, placebo-controlled, human study = Men with high blood pressure are randomized . . . ; Case-control study = Scientists studying middle-aged women . . . ; Laboratory animal experiments = Rats receive a high-fat diet . . . ; Observational study = Nurses report that patients . . .

loration, discovery, and collaboration to interact directly with the natural world when feasible, using appropriate and activity levels compared to national recommendations. (EXPERIENTIAL LEARNING COMPONENT)

Demonstrates adequate ability to utilize computer technology to assess dietary intake and activity levels compared to national recommendations.

Use reports from dietary analysis software to identify food sources of nutrients.

DIETARY ANALYSIS ITEM: On your Spreadsheet Report (part of your All Daily Reports), closely examine the column that indicates the dietary fiber content of each food you recorded. List two sources of dietary fiber from the foods included in your Spreadsheet Report.

Demonstrates partial ability to utilize computer technology to assess dietary intake and activity levels compared to national recommendations.

Use reports from dietary analysis software to evaluate dietary patterns compared to nutrient standards.

DIETARY ANALYSIS ITEM: Look at your MyPlate Report and enter your intakes and recommendations for each of the MyPlate food groups. Then answer the questions below. Was your grains intake at least as much as your recommendation? [YES/NO] Was your vegetable intake at least as much as your recommendation? [YES/NO] Was your fruit intake at least as much as your recommendation? [YES/NO] Was your dairy intake at least as much as your recommendation? [YES/NO] Was your protein foods intake at least as much as your recommendation? [YES/NO]

l in the assessment of nutritional status.

Demonstrates adequate ability to describe how methods of modern science are used in the assessment of nutritional status.

Use data from nutritional assessments to assess nutritional status of individuals.

Demonstrates partial ability to describe how methods of modern science are used in the assessment of nutritional status.

Describe modern methods of body composition assessment.

UNIT 4 EXAM ITEM: A woman who is 5 feet 2 inches tall and weighs 98 pounds is classified as [underweight.]

UNIT 4 HOMEWORK ITEM: If you were a subject in a scientific study measuring body fatness, the scientists might assess your body composition using any of a variety of anthropometric measurements. Click and drag to match each measurement technique to its description. Underwater weighing = You are weighed on a standard scale . . . ; Air displacement = You are placed in a chamber . . . ; Bioelectric impedance analysis = You lie down and a clinician places electrode patches . . . ; Skinfold thickness = A clinician uses calipers . . . ; Dual-energy X-ray absorptiometry = You lie down and a machine emitting . . .

Impacts of scientific and technological developments.

Technology can be used to address nutritional problems of the contemporary world.

Demonstrates adequate ability to explore and examine how modern science and technology can be used to address nutritional problems of the contemporary world.

Describe an example of the use of modern science to address the global problem of undernutrition.

UNIT 4 EXAM ITEM: Which of the following is an example of genetic engineering?

[Changing DNA inside grape seeds so they produce their own pesticide to prevent attack by insects]

Demonstrates partial ability to explore and examine how modern science and technology can be used to address nutritional problems of the contemporary world.

Define sustainable agriculture.

UNIT 4 HOMEWORK ITEM: Which of the following is not true about sustainable agriculture? [Sustainable agricultural practices have a promising role in developed nations, but would not benefit farmers and consumers in developing nations.]

Natural scientific discoveries.

How do natural scientific discoveries influence food preferences and their implications to nutrient status.

Demonstrates adequate ability to examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.

Describe nutrition assistance programs that are available in the United States to address the problem of food insecurity.

UNIT 4 EXAM ITEM: The food assistance program developed in the 1960s to help low-income families purchase healthy foods is the [Supplemental Nutrition Assistance Program.]

Demonstrates partial ability to examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.

Identify social determinants of health that may influence nutritional status.

BEYOND THE BASICS (discussion-based activity): Food Insecurity on College Campuses

Obtaining nutrition information from the natural sciences.

How do we obtain nutrition information from the natural sciences.

Demonstrates adequate ability to evaluate reputable versus non-reputable sources of nutrition information.

Differentiate reputable versus nonreputable examples of nutrition information.

Demonstrates partial ability to evaluate reputable versus non-reputable sources of nutrition information.

List three "red flags" that can be used to identify nutrition misinformation.

UNIT 4 HOMEWORK ITEM: There are a number of criteria for identifying an unreliable diet. Click and drag to explain why each diet claim represents an unreliable, fad diet. [Promoting quick weight loss; Limiting food selections; Celebrity testimonials; No need to exercise; Expensive supplements]

UNIT 1 HOMEWORK ITEM: Recently, major nutrition organizations put together a list of red flags that they consider signals for poor nutrition advice. Drag the product's claim to the red flag that it most likely represents. [Promises of a quick fix; Recommendations based on a single study; Bias against traditional therapies; Claims that sound too good to be true]

Benchmark (1)

Demonstrates superficial ability to describe the basic biological aspects of nutrient requirements of humans.

Demonstrates ability to identify the six classes of essential nutrients.

UNIT 1 EXAM ITEM: Which of the following is an essential nutrient? [Carbohydrates]

Benchmark (1)

Demonstrates superficial ability to describe the complex interactions between nutrients and cellular processes.

Demonstrates ability to identify the three main functions of the six classes of essential nutrients.

UNIT 1 EXAM ITEM: Which of the following is a function of water? [Transports nutrients and wastes]

Demonstrates superficial ability to recognize linkages between nutrients and disease processes, body size, mental ability, and performance.

Demonstrates ability to identify correlations between dietary patterns and the leading noncommunicable diseases in the United States.

UNIT 2 EXAM ITEM: The major dietary factor to be concerned about in relation to heart disease is [saturated fat]

Demonstrates superficial ability to identify the links between nutrients on disease processes, mental ability and labor effectiveness.

Demonstrates ability to describe the roles of specific nutrients in supporting optimal physical performance.

UNIT 4 EXAM ITEM: Strength-trained athletes have higher protein needs than non-athletes because [amino acids are used to repair and rebuild muscle tissue after workouts.]

Demonstrates superficial ability to explain how nutrient requirements change throughout the lifespan.

Demonstrates knowledge that nutrient requirements change throughout the lifespan.

UNIT 3 EXAM ITEM: A 21-year-old woman has _____ iron requirements than a 21-year-old man. [higher]

on the human genome.

Demonstrates superficial ability to examine key events in the history of nutritional science, from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.

Differentiate between modifiable and nonmodifiable risk factors for noncommunicable diseases.

UNIT 2 HOMEWORK ITEM: Several of Linda's family members have died from heart disease-related complications. She realizes she is at high risk for cardiovascular disease, and some of this risk is attributable to her genetic makeup. Click and drag the following risk factors to show whether each is primarily due to genetics or lifestyle. Genetic risk factors: Defective gene that delays blood cholesterol removal; hereditary trait that causes high blood homocysteine. Lifestyle risk factors: Dietary pattern high in saturated and trans fat; Sedentary pattern of daily physical activity.

Demonstrates superficial ability to determine how nutritional information is derived from the scientific method of investigation.

Outline the steps of the scientific method of investigation.

UNIT 1 EXAM ITEM: A possible explanation for a natural phenomenon is a [hypothesis.]

ropriate tools, models, and analysis of data.

Demonstrates superficial ability to utilize computer technology to assess dietary intake and activity levels compared to national recommendations.

Use dietary analysis software to enter dietary data and generate reports.

DIETARY ANALYSIS ITEM: Upload All Daily Reports

Demonstrates superficial ability to describe how methods of modern science are used in the assessment of nutritional status.

Recall the ABCDEs of nutrition assessment.

UNIT 1 EXAM ITEM: Jeff, a world-class triathlete, visits a dietitian to obtain sports nutrition advice. During his visit, Jeff is asked to recall what he ate for the past 24 hours. Which part of a nutritional assessment is this?[dietary assessment]

Demonstrates superficial ability to explore and examine how modern science and technology can be used to address nutritional problems of the contemporary world.
Define biotechnology.

UNIT 4 EXAM ITEM: A collection of processes that involves the use of biological systems for altering and, ideally, improving the characteristics of plants, animals, and other forms of life is termed [biotechnology.]

Demonstrates superficial ability to examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.
Define food insecurity.

UNIT 4 EXAM ITEM: A condition in which a family does not have access to safe and nutritious food and water is called [food insecurity.]

Demonstrates superficial ability to evaluate reputable versus non-reputable sources of nutrition information.
List three credible sources of nutrition information.

UNIT 1 HOMEWORK ITEM: Justine has a full-time job and three small children. She is interested in learning more about preparing healthy meals for her kids and asks her primary care provider for a referral to a nutrition professional. What is the credential of the nutrition professional who has completed a baccalaureate degree program approved by the Accreditation Council for Education in Nutrition and Dietetics, performed at least 1200 hours of supervised professional practice, passed a national registration examination, and meets continuing education requirements? [Registered Dietitian Nutritionist]

Mapping HN2210 learning objectives to University ELOs for Natural Science foundation courses. Below are the 5 learning objectives outlined for the natural science foundation GEs at OSU. In red , we include specific learning objectives for HN2210 that align with the natural science GE courses. .

ELO#1 Explain basic facts, principles, theories and methods of modern science;

Examine and describe the basic biological aspects of nutrient requirements of humans.

Describe the complex interactions between various nutrients upon physiological and cellular processes.

Recognize the linkages between nutrients and disease processes, body size, mental ability, and performance.

Identify the links between nutrients and disease processes, body size, mental ability and labor effectiveness (sport).

Describe how methods of modern science are used in the assessment of nutritional status

Determine how nutritional information is derived from the scientific method of investigation.

Explain how nutrition requirements change throughout the lifespan (pregnancy to adulthood)

ELO#2 Describe key events in the development of science and recognize that science is an evolving body of knowledge;

Examine key events in the history of nutritional science from the early discovery of the essential nutrients to the current discovery of the effects of nutrients on the human genome.

Evaluate reputable versus non-reputable sources of nutrition information.

ELO #3 Examine the inter-dependence of scientific and technological developments;

Explore and examine how of modern science and technology can address nutritional problems of the contemporary world.

Describe how methods of modern science are used in the assessment of nutritional status

ELO #4 Recognize social, ethical, and philosophical implications of scientific discoveries and analyze the potential of science and technology to address problems of the contemporary world;

Examine the diverse social and cultural patterns that influence food preferences and their implications to nutrient status.

ELO #5 Collect data and analyze that data during a significant laboratory or field experience; describe the process of doing science; and describe the power and limits of this process.

Utilize computer technology to assess and analyze dietary intake and activity levels compared to national recommendations.