



## Syllabus

### BIO 127N – 3 Human Nutrition and Biology (Online Only)

#### Course Information

Course Title: Human Nutrition and Biology (Online Only)

Course Prefix/Number: BIO 127N – 3

Semester: Fall 2025 (8/18/2025 to 12/5/2025)

Class Days/Times: ONLINE

Credit Hours: 4

#### Instructor Information

Name: Casey Jones

E-mail: [cjones@tocc.edu](mailto:cjones@tocc.edu)

Contact: Please contact me using a Canvas message before directly by email.

#### Course Description

Course Description: Principles of nutrition presented in the context of human biology. Includes chemistry, digestion, absorption, and metabolism of nutrients. Also includes biological and nutritional perspectives on various health issues such as cardiovascular disease, hypertension, cancer, diabetes, and osteoporosis. Lectures and labs are integrated into this class.

## Course Syllabus

### Student Learning Outcomes

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1. Analyze and compare healthful diets using several sources, including food labels, the Nutrition Facts panel, USDA Food Patterns, and digital analysis tools.
2. Explain how the human body digests, absorbs and eliminates foods with each organ of the digestive tract.
3. Describe the functions of carbohydrates, lipids, and proteins in the body and the roles these macromolecules play in metabolism.
4. Identify functions of specific vitamins and minerals and how they act as electrolytes, antioxidants, and essential nutrients in bone and blood material.
5. Explain changes in nutrient needs for fetal development based on physiologic changes in pregnant women during the course of a pregnancy. Identify nutrient requirements for lactation and explain nutrient needs during stages of infant growth.
6. Use the scientific method to investigate diet. Comprehensively collect accurate data, analyze evidence, and communicate findings.

### Course Structure

This course is **asynchronous** and fully online so students will work on their own independent time. The class will not meet at a set time. Lecture material will include videos and open online resources. Students will post and read discussion comments, compose short essays, complete assignments, and record dietary data to analyze and interpret. Live virtual meetings with the instructor will be scheduled to examine understanding, give feedback, tutoring and clarification of course content.

### Course Learning Materials and Textbook Information

*The textbooks are cost-free digital textbooks available online at these two links.*

[Nutrition: Science and Everyday Application. Subtitle:v. 2.0. Authors:Alice Callahan, PhD; Heather Leonard, PhD, RDN; and Tamberly Powell, MS, RDN](#)

CLICK the “**Read Book**” button at the bottom of the webpage to read the book online

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## Policies and Expectations

### Accountability

#### Evaluations and Grading & Assignments:

90 and above is an A

80 - 89 is a B

70 - 79 is a C

60 - 69 is a D

Under 60 is Failing

**Your grade will be determined by the following:**

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Item	Percent
Essays	50
Case Studies	10
Research	10
Labs	10
Discussions	10
Final	10

#### ***Attendance Policy***

You are expected to submit discussion posts, lab reports and other assignments each week. These submissions will count for attendance. Four unexcused absences (unsubmitted work for four weeks) may result in withdrawal and a “W” or “Y” will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergencies. If you will be absent, please notify the instructor by email (cjones@tocc.edu) or message in Canvas as soon as possible.

#### ***Academic Integrity:***

Violations of scholastic ethics are considered serious offenses by San Carlos Apache College. Students may consult the SCAC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.

## Course Syllabus

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written submission must clearly be original. You may paraphrase in your own words from content produced by AI tools, publications, books and other materials. You must also properly cite the reference.

### **Instructor Withdrawals**

Students who have missed four consecutive classes (or the equivalent), or have not submitted any assignments nor taken any quizzes by the 45th day census report, due on [date of 45th day found in Academic Calendar on SCAC website], are assumed NOT to be participating in the class and may be withdrawn at the faculty member's discretion.

### **Student Withdrawals**

Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [withdrawal deadline date found in Academic Calendar on SCAC website] if you do not expect to complete the class; otherwise, you may receive an "F" grade.

## **RESPECT**

### ***Equal Access Statement/Disability Accommodations***

San Carlos Apache College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

### ***Title IX***

San Carlos Apache College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

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## Course Syllabus

### ***Conduct: Bias, Bullying, Discrimination and Harassment***

San Carlos Apache College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

## RESILIENCE

### ***Incomplete Policy***

Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

### ***Special Withdrawals (Y) Grade***

The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale, with documentation, for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

## Course Syllabus

**OPENNESS****Courses Outline and Important Dates**

Due	Topic	Essays	Publication	Case Study	Lab	Discussion
Week 1	Unit 1 Diet	Essay 1 Outline	1	Food Labels	1	1
Week 2	Unit 2 Information Literacy	Essay 1 Draft	2	Atkins Diet	2	2
Week 3	<b>Essay 1</b>	Essay 1 Final	-	-	-	-
Week 4	Unit 3 Molecules of Life	-	3	Paleo Diet	3	3
Week 5	Unit 4 Carbohydrate s	Essay 2 Outline	4	Energy Drinks	4	4
Week 6	Unit 5 Lipids	Essay 2 Draft	5	Lipids	5	5
Week 7	Unit 6 Protein	Essay 2 Draft	6	Cancer	6	6
Week 8	<b>Essay 2</b>	Essay 2 Final	-	-	-	-
Week 9	Unit 7 Energy Balance	Essay 3 Outline/Draft	7	Healthy Weight	7	7
Week 10	<b>Essay 3</b>	Essay 3 Final	-	-	-	-
Week 11	Unit 8 Vitamins	Essay 4 Outline	8	Creatinine	8	8
Week 12	Unit 9 Minerals	Essay 4 Draft	9	Calcium	9	9
Week 13	<b>Essay 4</b>	Essay 4 Final	-	-	-	-
Week 14	Unit 10 Physical Activity	Essay 5 Outline/Draft	10	Genes	10	10
Week 15	Unit 11 Lifespan nutrition	<b>Essay 5 Final</b>	11	Lactation	11	11
Week 16	FINAL EXAM	REVIEW	-	-	-	-

**Make-up policy:**

Late assignment submissions will be accepted if approved by the instructor. Grading will be delayed on late submissions. Late submissions must be accompanied by a message notifying the instructor of the assignment title in Canvas and the extenuating circumstances for the late submission.

## Assignment Descriptions

### Discussion Posts

Each week, students will post research questions on a discussion topic. The topic will be related to the reading for the week. All written compositions are required to be unique. Narratives must never be copied and pasted. Pasting full sentences is plagiarism. Students will face disciplinary action for academic dishonesty for copying and pasting full sentences or narratives from any other author or textbook. In-text citations with paraphrasing that include the author and year at the end of the sentence are acceptable, but **pasting full sentences from other authors with quotations is not acceptable**. Students will be required to read and reply to other students' research questions in the discussions. Students must post appropriate commentary and be considerate of their peers and classmates.

### Publication Research

Students will review primary source scientific research articles from peer-reviewed journals and not secondary information from entertainment-based web pages. Research will provide more depth than book topics and focus on individual students' interests. Students will choose research publications that other students have not chosen. **Sentences must never be copied and pasted with quotation marks from other authors, websites, or books**. Science writing avoids all quotation marks. You must paraphrase or rephrase in your own words instead. All written compositions are required to be unique. Narratives must never be copied and pasted. Pasting full sentences is plagiarism. Students will face disciplinary action for academic dishonesty for copying and pasting full sentences or narratives from any other author. In-text citations with paraphrasing that include author and year at the end of the sentence is acceptable, but pasting full sentences from other authors with quotations is not acceptable. Students may not copy from ChatGPT and other AI composition assistant tools; rather, they will need to rephrase or paraphrase what is generated with the help of AI tools.

### Labs (Food Journals, Diet Analysis)

Students will record every item they eat and drink for one day each week but may omit any items they wish to refrain from disclosing for personal reasons. Information from Food Journal Labs will remain confidential and not be made available to other students. Students will use the Food Journals to identify nutrients, minerals, vitamins, fats, carbohydrates, proteins, quantities, and patterns in their diets. Students will use the free version of the Chronometer app to track and calculate food items. Students also have the option to use basic spreadsheets such as Google Sheets.

### Essays

Students will use the textbook readings, lab entries, and publications to compose essays. The prompt for each essay is one of the learning outcomes for the course. Students show evidence of fulfilling course learning outcomes by completing the essays. Students will submit outlines

## Course Syllabus

and drafts and revise them based on instructor feedback before submitting final drafts.

**Sentences must never be copied and pasted with quotation marks from other authors, websites, or books.**

Science writing avoids all quotation marks. Information from other sources will be paraphrased or rephrased in the words and voice of the student. All written compositions are required to be unique. Narratives must never be copied and pasted. Pasting full sentences is plagiarism. Students will face disciplinary action for academic dishonesty for copying and pasting full sentences or narratives from any other author. In-text citations with paraphrasing that include author and year at the end of the sentence is acceptable, but pasting full sentences from other authors with quotations is not acceptable.

Students may use AI tools to assist in the composition of written materials. The tool must be stated in the methods part of the essay. Students will describe how they revised what the AI tool generated.

## Case Studies

Case Studies are critical thinking and problem solving exercises based on factual or historical cases and real people. Students are prohibited from copying and pasting answers to these assignments from other sources. Students will work in groups to complete Case Study Assignments.

## Communication

### ***Faculty/Student Communication***

A faculty member will respond to a student's communication within 24 hours of receiving the communication excluding weekends and college closures. If a course is online a faculty will login their Canvas classroom a minimum of three times per week spread evenly throughout the week and respond to any discussion posts and check on student progress in the course.

### ***Course Feedback:***

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within 24 hours. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.

## WISDOM

### SCAC General Education Learning Outcomes

#### ***Apache Wisdom***

Learning from the teachings carried on from Apache elders and other community leaders, students will appreciate their unique history, language, and culture as a source of strength for their personal, family, academic, and career aspirations.

#### ***Critical Thinking***

Approach critical issues, problems, or questions using creativity and deductive reasoning, evaluating evidence, acknowledging diverse perspectives and contexts, and synthesizing one's own viewpoint into ongoing conversations and debates.

#### ***Communication***

Effectively express ideas orally and in writing. Good communication includes understanding one's audience, organizing one's thoughts, acknowledging and integrating outside sources, using the most recent technology, and following the accepted writing and citation conventions of the particular discipline.

#### ***Environmental Literacy***

Students will understand their connection to social, cultural, physical, and global environments. Students will consider and evaluate strategies for cultural, community and global sustainability.

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A Syllabus Signature will be Recorded in the Canvas Assignment “**Syllabus Signature**”. Go to Canvas and begin the **Start Here** module to access the Syllabus Signature assignment.