

Biology 45 ONLINE

Introduction to Human Nutrition

WINTER 2023



INSTRUCTOR

ANNA MILLER, MS, RD

EMAIL

MillerAnna@fhda.edu

Please write "BIO45" in the subject. I try to respond to e-mail within 24-48 hours

FOLLOW ME ON INSTAGRAM

"DeAnzaNutrition"

OFFICE HOURS

On Zoom: Mondays and Fridays 11 am – 1 pm
and by appointment

During the week of final exams, office hours are by appointment only

OFFICE LOCATION

I will not be on campus this quarter

Welcome to Biology 45. My hope is you will be able to apply what you learn in this course to your professional and life. This class will undoubtedly affect how you think about food, diets and health. We often have complex relationships with food and may approach the topic of nutrition with trepidation and bias. I invite you to have an open mind as you explore this dynamic and powerful topic.

Cheers,

Ann

COURSE DESCRIPTION Biological function and chemical classification of nutrients. Effects of nutritional deficiencies and excesses. Recommended nutrient intakes and the role of diet in the development of chronic disease.

CANVAS: This course resides on the course management system called Canvas. It is accessible from MyPortal. The course will open Thursday before the first day of the quarter.

⇒ **IMPORTANT:** Faculty are required **by law** to clear their rosters of "no shows" during the first week. To keep your spot in this class, not be identified as a "no show" and therefore dropped, **log onto the course on Canvas** and complete these **2 quick and easy tasks** by **midnight Thursday** night of the first week (9/29):

1. Fill out a short questionnaire (*Welcome to Bio 45 Survey*). Doing so will earn you 5 points.
2. Take a short quiz (*What Do You Know...*). This will also earn you 5 points regardless of how you answer.

(Students who add the class after registration closed will have 2 days to do these tasks, after they register)

⇒ **Not doing these 2 tasks by the deadline will get you dropped as a "no show"**. Get in touch with me in the first few days of the quarter if there is a hardship that prevents your completing these 2 quick tasks.

STUDENT LEARNING OBJECTIVES:

1. Evaluate a meal plan or a diet for meeting the criteria of a healthy diet.
2. [Demonstrate a coherent understanding of the relationship between diet and the major chronic diseases.

PREREQUISITES: Biology 40 A, B and C (Human Anatomy and Physiology). **Advisory:** EWRT 1A or ESL5

REQUIRED TEXTBOOK: Understanding Nutrition by Whitney and Rolfes, **16th edition** 2020. This textbook can be rented from the DeAnza bookstore. E-versions can be found on the internet.

COMMUNICATION

I communicate with you in a variety of ways. One is through bi-weekly Announcements, on Mondays and Fridays (and sometimes other days). *Read all announcements.* **You are responsible for the information communicated.** In addition to these, I leave comments with exam/assignment scores and send messages through the Canvas Inbox or e-mail. Check your Canvas inbox and your e-mail SPAM folder regularly. Don't miss any communiques. **NOTE:** I do my best to respond to messages within 24- 48 hours.

GRADING PROCEDURE

Orientation Quiz	10 points
Welcome to Bio 45 Survey	5 points
Welcome Quiz: What Do You Know?	5 points
2 Feedback Surveys (5 points each)	10 points
Points for Discussions	15 points
3 midterm exams**	240 points
Diet Assignment	100 points
Final Exam	<u>65 points</u>
Total Possible Points	450 points

Get ready for Online Learning!

Watch this video:

<https://apps.3cm mediasolutions.org/oei/modules/intro/story/>

Watch even if you've taken an online course before

**4 midterm exams are given. The lowest midterm exam score is dropped from your cumulative score.

GRADING SCALE

A+ = 96.0 – 100 %	B+ = 86.0 – <89.01 %	C+ = 77.0 – <79.01 %	D+ = 67.0 – 69.01 %	F = <59.0%
A = 92.0 – <96.0	B = 82.0 – <86.0	C = 69.01 – <77.0	D = 63.0 – <67.0	
A- = 89.01 – <92.0	B- = 79.01 – <82.0	C- <i>there is no C-</i>	D- = 59.01 – <63.0	

✓ Be aware of the last day to drop with a "W". If you realize after this date that you are not getting the grade that you desire, please do not ask me to drop you. College procedures do not allow me to do so. Know your grade throughout the course so there are no surprises in the last week of the quarter.

⇒ If you need accommodations or services due to a **disability**, register with the **Disability Support Services**: <https://www.deanza.edu/dsps/dss/>.

ORIENTATION QUIZ

This quiz will consist of 10 True/False and Multiple choice questions, taken from the information found in the Orientation Module and this syllabus. **It will be open from Monday--the first day of the quarter--at 6 am until the following Sunday night at 11:59 pm.** You will have 2 tries to take it. The higher score is kept.

WEEK 1 QUIZ: WHAT DO YOU KNOW...

This 10 question quiz *What Do You Know?* is one of the **2 tasks** to be done in the first few days of the quarter to hold your spot in Bio 45. It earns you 5 points, regardless of how you answer the questions.

PRACTICE QUIZZES AND WORKSHEETS

There will be many practice quizzes and worksheets offered throughout the quarter. They are designed and offered to help you in your process of learning. Take them and be sure you check the answer keys once they are posted. This will help your score on the corresponding exams.

BONUS POINT OPPORTUNITIES! ☺

10 Bonus Points are offered in this class. If you submit Part 1 of the Diet Assignment early, by the date listed on the last page, you will earn 5 Bonus Points. If you submit Part 2 of the Diet Assignment early, by the date listed you will earn 5 more Bonus Points! These points can REALLY boost your grade on the Diet Assignment ☺. **Partial submissions will not earn Bonus Points**--submissions must be complete to receive them.

WEEKLY ZOOM MINI-LECTURES

Starting in **Week 2** of the quarter there will be a 1 hour Zoom Mini-Lecture each week on Thursday from 8 – 9 pm. This time will be spent explaining some of the more challenging topics from the previous week. NO new material will be presented. Attending is not required -- they will be recorded and posted on Canvas.

POINTS FOR DISCUSSIONS

One Asynchronous Discussion will occur in each of 5 weeks (Weeks 3-7). The discussion will open on a Friday morning and close 10 days later, Sunday night. Fully participating on one discussion will earn 5 points. (Your submissions must meet the discussion prompts to earn all 5 points) A maximum of 15 Points can be earned. Points from one discussion do not roll over to another discussion. Therefore, to receive 15/15 points you will need to receive 5/5 points on 3 discussions **FYI:** These points are not “bonus points”; they are included in the total points earned in Bio 45. **But they are easy points to earn** (compared to an exam or assignment) You WILL want 15/15 points to boost your standing in the class. So, do your best to participate in at least 3 discussions and follow the discussion prompts carefully

EXAMS

- There will be 4 Midterm Exams and 1 noncumulative Final Exam
 - The lowest score of the 4 Midterm Exams will be dropped from your cumulative score. The Final Exam score cannot be dropped. (If you're happy with your scores on Exams 1, 2 & 3, you don't have to take Exam 4)
 - **There are no make-up exams.** If you miss a midterm exam, that is the one that is dropped
 - The exams will consist of 40 True/False, Multiple Choice and Short Answer questions
 - You may use **one 4"x6" index card with notes** during the Midterm Exams. You will be able to use more notes on paper during the Final Exam. Details will be explained on Canvas.
 - You will have 45 minutes to take each Midterm Exam and 2 hours to take the Final Exam
- ⇒ **All exams are taken on Canvas WHILE you are on ZOOM with your VIDEO turned ON.** This is a requirement. Exams taken while not visible on Zoom will not be accepted: The score will be 0.
- In-ear headphones, head sets, masks or hats **cannot** be worn while taking exams. Nonelectric earplugs to block out sounds are fine.

OPTIONAL EXAM REVIEW SESSIONS

Exam review sessions will take place on Zoom before each exam. Dates and times will be posted on Canvas. Participation is optional but strongly recommended. The sessions will be recorded and posted on Canvas.

WHAT WILL BE ON EACH EXAM?

Exam 1 covers Introduction through (including) Digestion (Weeks 1+2)

Exam 2 covers Carbohydrates and Lipids (Weeks 3+4)

Exam 3 covers Protein & Energy Metabolism (Weeks 5+6)

Exam 4 covers the topics: Diabetes/Metabolic Syndrome, Heart Disease, Cancer and Phytochemicals, and the topics around body weight (Weeks 7+8)

The Final Exam is NOT cumulative

It covers the topics Vitamins, Minerals, Water and Dietary Supplements. (Weeks 9-11)) It is 65 questions and worth 65 points. Any quantity of notes are allowed to use, but your notes must be on paper. Details about the notes you can use will be posted on Canvas 2 weeks before the Final Exam

WHEN ARE THE EXAMS?

You will have 4 choices of times on these dates to take the 45 minute Midterm Exams:

5:00 pm OR 6:15 pm OR 7:30 pm OR 8:45 pm

Midterm Exam 1: Tuesday Jan 31

Midterm Exam 2: Tuesday Feb 14

Midterm Exam 3: Tuesday Feb 28

Midterm Exam 4: Tuesday Mar 15

You will have 3 choices of times to take the 2 hour **Final Exam on Tuesday March 28**

4:00 pm OR 6:15 pm OR 8:30 pm

A maximum of 30 students will be allowed to take the exam at any given time slot. Be prepared to have a second choice option for the time you will take an exam.

THE DIET ASSIGNMENT

- This assignment is divided into 3 parts: Keeping a Food Record for 3 days and collecting labels/nutrition information about foods eaten out (Part 1), analyzing the foods on a nutrient analysis program and getting reports with data about your food intake (Part 2), and evaluating and assessing your diet (Part 3).
- The assignment—all 3 parts—is graded once towards the end of the quarter. All 3 parts must be submitted to receive a Diet Assignment score.
- You are strongly encouraged to complete Parts 1 and 2 of the Diet Assignment early in the quarter and not try to do all 3 parts right before it's due. Completing Parts 1 & 2 early will increase the likelihood that you'll earn a high score 😊.
- To encourage early submissions, IF you submit Parts 1 & 2 by the deadlines listed on the course schedule and your submissions are complete (ie nothing is missing, each component of Parts 1 & 2 is complete), each submission will earn 5 Bonus Points. 😊 10 Bonus Points can REALLY make a difference in your grade.
- The assignment can be submitted late (with a point deduction), up to 4 days past the due date and not later.
 - **10 points will be deducted from your score**
 - This drops your grade 1 full grade
 - This heavy late penalty is an **incentive** for you to submit it **on time**
 - Working on the diet assignment after the due date will rob you of needed time to prepare for the Final Exam and likely result in a lower score on it
 - The point deduction is the same regardless of when it is submitted within those 4 days late
 - **ADVICE:** If getting an A is your goal, plan to finish the Diet Assignment by the due date.
- **Students repeating Bio 45 must keep a *current* Food Record--they may not use a Food Record from before**

This assignment is a big part of your grade and requires significant effort and time in order to do well on it. It also has the potential to be more than an assignment: ***It can be personally relevant to you and your family.***

ACADEMIC INTEGRITY

Any student found taking part in any form of **academic dishonesty** will receive no points or grade for the academic task (ie exam or assignment) that was completed without academic honesty.

A few examples of academic dishonesty are:

- *Having someone other than yourself take an exam or quiz*
- *Any form of plagiarism*
- *Giving your academic work to another student to plagiarize*
- *Communicating with anyone other than your instructor during an exam: Talking, text message, e-mail, etc.*
- *Looking at material (books, papers, websites) other than what is permitted during an exam*
- *Turning in another person's Diet Assignment (or any part of it), representing it as your own*
- *Copying parts of the Diet Assignment from another person's work*
- *For students who are repeating Bio 45: Turning in your Diet Assignment from a previous quarter*
- *Lying to an instructor or college official to improve your grade*

NOTE: The Office of the Dean of Student Affairs & Activities maintains a record of students who have engaged in academic dishonesty.

SYLLABUS CHANGE POLICY

Information contained in this course syllabus may be subject to change with reasonable advance notice, as deemed appropriate by the instructor. Updates to the syllabus will be posted on Canvas.

✓ Know This!

- Sometimes the process of learning is frustrating and difficult. Oftentimes it is satisfying. Learning requires considerable effort and patience. With appropriate strategies, that effort brings you results: **mastering the material.**
- If you need to receive an “A” or a “B” in this class read the **Strategies for Doing Well in Biology 45**, on Canvas. (You’ll see it when you go through the **Orientation Module**). Plan to put the time and effort to help you to succeed. Do not wait until the end of the quarter to act if it becomes evident that you are not earning the grade that you need or want.
- **Doing well in this class requires TIME**, at least 15 hours a week (maybe more). Remember, you are not sitting in class for nearly 4 hours a week in addition to out-of-class time studying. You’re doing it all on your own time. Make that time happen!
- **Time Management Skills are essential for staying on top of the material in this course.** Evaluate your priorities. **It is truly not ideal to take this class at a time that if you are stretched too thin.** Be realistic as to what you can accomplish with what time and energy you have to devote to this class. Countless students have reported to me – at the end of the quarter – “I didn’t believe what you said at the beginning of the quarter, *but...you were right!*”
- BE SURE you check out the **DeAnza Online Education Website**: <https://www.deanza.edu/online-ed/index.html>. Bookmark the **Student Resource Hub**: <https://www.deanza.edu/online-ed/students/remoteteaching.html>. If you have questions or run into problems, start here for finding answers.
- Read the **Biology/Chemistry Review** on Canvas (You’ll see it when you go through the Orientation Module). You should be comfortable with this material. If not, update your knowledge in those areas at the beginning of the quarter.

Learning takes TIME. There are no shortcuts to learning and mastering skills.

OTHER IMPORTANT INFORMATION

- **Tom Nguyen** is the **Biology Division counselor**. He is a great resource available to you. He can be reached through e-mail: nguyentom@fhda.edu
- Check out the **Student Success Center** on campus: <https://www.deanza.edu/studentsuccess/> It offers many resources to help students succeed in their academic pursuits.
- If you are or have ever battled an **eating disorder** and this course/the diet assignment has the potential of setting you back in your recovery process, please feel free to discuss your situation with me. Some accommodations are possible.

FREQUENTLY ASKED QUESTIONS



Q. Can I use an earlier edition of the textbook?

A. It is ideal to use the current edition. **You will be at a disadvantage if you use an older edition.** That said, it's acceptable to use an edition one earlier, but be aware that there are changes from edition to edition. I'm sorry the textbook is very expensive. There are more budget-friendly options: The textbook is available for rent and can be found in an e-format on the internet.

Q. How do I get in touch with you?

A. The fastest way is to e-mail me: Milleranna@fhda.edu. Write "Bio 45" in the subject of your email. Messaging through Canvas is also possible. And don't forget about the 4 hours of office hours on Zoom that I am available to speak with you: Every Friday and Monday from 11 am until 1 pm. Not free then? I'll be happy to make an appointment to speak with you on another day and/or time.

Please message me ONLY for private/personal questions. All questions about the course itself – exams, the diet assignment, quizzes, etc. should be posted on the discussion **Have a Question? Post it HERE** on Canvas.

Q. What happens if I can't take or miss an exam?

A. One midterm exam score is dropped (the lowest of the 4) so that will be the one that is dropped. If something unavoidable prevents you from taking a second exam, contact me **before** the exam, or in the case of an emergency, as soon as possible after the exam.

Q. Do I have to take Exam 4 if I took and am happy with my scores on Exams 1, 2 & 3?

A. No, you do not. (And not studying for Exam 4 can really help you out at that extra busy time of the quarter)

Q. Do I have to eat a healthy diet to do well in this class?

A. No! Your grade in this class is not at all based on how well you eat. You don't need to change your diet while taking this course. (But many students do, as a result of things they learn ☺)

Q. Are there ways I can boost my points in this class?

A. Yes! You can earn up to **10 Bonus Points**. Read about this on Page 2 of this syllabus. There are **other ways** I help you out:

- You can take the Orientation Quiz twice – the higher score is kept (and you have 60 minutes per try)
- The lowest midterm gets dropped ☺
- There are 45 "easy points" to earn:
 - The Orientation Quiz (10 pts)
 - Filling out the Welcome survey (5 pts)
 - Filling out 3 Feedback Surveys (5 pts each; 15 pts total)
 - Asynchronous discussions (5 pts each; 15 pts total. Make sure you participate and follow the discussion prompts carefully so you will earn 15/15 points.
 - **Getting 45/45 points (100%) REALLY helps your standing in the class at the end of the quarter**

Follow this advice
from Bio 45 students
who got As:

✓ Create a schedule for yourself: Dedicate certain days/hours each week for Bio 45 and commit to that schedule ✓ Use Anna's Friday and Monday TO DO lists. Try to get all of those things done each week ✓ If you fall behind, catch up as soon as possible ✓ Read all of the Announcements! ✓ Get Parts 1 & 2 of the diet assignment done early to receive **10 Bonus Points** ✓ Spend more time studying for the exams than you think you'll need ✓ Read the VLs more than once ✓ **Use the exam study guides** ✓ Attend the Exam Review Sessions ✓ Make your 4x6" card with notes to use during midterm exams ✓ Ask Anna for help if you feel lost or struggling too much ✓ Attend the Mini-Lectures ✓ Watch the Mini-Lecture Recordings -- even if you were there. The repetition is helpful ✓ Do the practice quizzes/worksheets ✓ Read what gets posted on the **Have A Question** Discussion ✓ Ask questions when you're confused ☺



*HL means "Highlight", the section that follows a chapter. HL 1 is the highlight after chapter 1

**E refers to Appendix E, C refers to Appendix C; F refers to Appendix F. Pages in an appendix are numbered

Week	Date	Topic	Reading Assignments 16 th edition of the textbook	Exams/Due Dates
1	Jan 9-15	Introduction Where do we get our information about nutrition? Research	VL #1 (Virtual Lecture, on Canvas) Textbook: p. 3-17; 25-26 ; HL 1*	The deadline to have completed the 2 tasks: Thu 11:59 pm Orientation Quiz Closes Sun 11:59 pm
2	Jan 16-22	Nutrition Assessment Dietary Assessment Energy Calculations Digestion	VL #2 Textbook: p. 22-25, 55 (the How To Box), E1-6**; E11-14** 17-21, 35-39, 46-47, Chapter 3, HL 3	
3	Jan 23-29	Carbohydrates	VL #3 Textbook: Chapter 4, HL4; p.50	
4	Jan 30 - Feb 5	Lipids	VL #4 Textbook: Chapter 5, HL 5	Tuesday: Exam 1 Deadline to submit Part 1 of the Diet Assignment: Sat 11:59 pm to receive bonus points
5	Feb 6-12	Protein	VL #5 Textbook: Chapter 6; p.638; HL2	
6	Feb 13-19	Energy Metabolism	VL #6 Textbook: Chapter 7; C10-C14**	Tuesday: Exam 2 Deadline to submit Part 2 of the Diet Assignment: Sat 11:59 pm to receive bonus points
7	Feb 20-26	Diet and Chronic Disease: Heart Disease Cancer and Phytochemicals Diabetes and Metabolic Syndrome	VL #7 Textbook: p. 522-524; 560-566 p. 576-580, HL 13 p. 564; 570-576; p. 521-522; p. 244-245	
8	Feb 27- Mar 5	Energy Balance, Body Composition, Weight Management	VL #8 Textbook: Chapters 8 & 9 E11-13; F0-F1** HL 9	Tuesday: Exam 3
9	Mar 6-12	Overview of Vitamins & Minerals Water Sodium & Potassium Hypertension Calcium & Osteoporosis; Iron	VL #9 Textbook: p.289-92,363,387-9, HL11 p. 353-362 p.364-367, 368-9 (fig12.12) p. 566-569 p. 370-374, HL12 p. 389-398	
10	Mar 13-19	Vitamins	VL #10 Textbook: Chapters 10 & 11	Tuesday: Exam 4 Diet Assignment Due Sat Mar 18th 11:59 pm
11	March 20-26	Dietary Supplements	VL #11 Textbook: HL10, HL18, p. 57	
12	Tue Mar 28	Final Exam	4-6 pm OR 6:15-8:15 pm	OR 8:30 – 10:30 pm

Have a wonderful Winter Quarter!

The Quarter at a Glance!

Here is a calendar of the 12 weeks of Biology 45. Use it to help you stay on top of the tasks

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Jan 8	9 WEEK 1 Orientation Quiz opens	10	11	12 Midnight Deadline to complete the 2 tasks on Canvas	13	14
15 Orientation Quiz closes at 11:59pm	16 WEEK 2	17	18	19 Zoom Mini-Lecture 8-9 pm	20 Discussion 1 Opens	21
22	23 WEEK 3	24	25	26 Zoom Mini-Lecture 8-9 pm	27 Discussion 2 Opens	28
29 Discussion 1 closes	30 WEEK 4 Exam 1 Review on Zoom 8-9 pm	31 Exam 1	Feb 1	2 Zoom Mini-Lecture 8-9 pm	3 Discussion 3 Opens	4 Deadline to submit Part 1 to earn Bonus Points
5 Discussion 2 closes	6 WEEK 5	7	8	9 Zoom Mini-Lecture 8-9 pm	10 Discussion 4 Opens	11
12 Discussion 3 closes	13 WEEK 6 Exam 2 Review on Zoom 8-9 pm	14 Exam 2	15	16 Zoom Mini-Lecture 8-9 pm	17 Discussion 5 Opens	18 Deadline to submit Part 2 to earn Bonus Points
19 Discussion 4 closes	20 WEEK 7	21	22	23 Zoom Mini-Lecture 8-9 pm	24	25
26 Discussion 5 closes	27 WEEK 8 Exam 3 Review on Zoom 8-9 pm	28 Exam 3	Mar 1	2 Zoom Mini-Lecture 8-9 pm	3	4
5	6 WEEK 9	7	8	9 Zoom Mini-Lecture 8-9 pm	10	11
12	13 WEEK 10 Exam 4 Review on Zoom 8-9 pm	14 Exam 4	15	16 No Mini-Lecture	17	18 Diet Assignment Due
19	20 WEEK 11	21	22 Last day to submit Diet Assignment Late	23 No Mini-Lecture	24	25
26	27 WEEK 12 Final Exam Review on Zoom 8-9:30 pm	28 Final Exam	29	30	31 The End of Winter Quarter!	