

# Biology 45 ONLINE

## Introduction to Human Nutrition

SPRING 2024



### INSTRUCTOR

ANNA MILLER, MS, RD

### EMAIL

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

### FOLLOW ME ON INSTAGRAM

"DeAnzaNutrition"

### OFFICE HOURS

Mondays and Fridays 11 am – 1 pm and by appointment **on Zoom only**

*During final exams week, office hours are by appointment only*

Welcome to Biology 45. My hope is you will be able to apply what you learn in this course to your professional and personal 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, nonjudgmental mind as you explore this dynamic and powerful topic.

Cheers,

*Anna*

**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 for those who want to get a head start.

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

**Task #1:** Fill out a short questionnaire (*Welcome to Bio 45 Survey*). Doing so will earn you 5 points.

**Task #2:** Take a short quiz (*What Do You Know...*). Also earns you 5 points regardless of your answers. (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 could cause you to be 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 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, **16<sup>th</sup> edition** 2020. This textbook can be rented from the DeAnza bookstore and e-versions can be found on the internet.

## COMMUNICATION

I communicate with you in a variety of ways:

- Announcements. **Read all Announcements.** *You are responsible for the information in all announcements.*
- **Comments and Feedback** on Canvas with exam and assignment scores. **Read all Comments**
- Private messages and group chats on **Pronto**.
  - **Pronto is the fastest and easiest way to communicate with me**
- Messages through the **Canvas Inbox** I do my very best to respond to messages within 24- 48 hours

## GRADING PROCEDURE

Orientation Quiz	10 points
Tasks #1 & 2 (5 points each)	10 points
Participating on Pronto	5 points
Feedback Survey (5 points each)	15 points
Points for Discussions	10 points
4 Exams*	320 points
Diet Assignment	<u>100 points</u>
Total Possible Points	470 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**

\*5 exams are given. The lowest exam score is dropped from your cumulative score.

## GRADING SCALE

**A+** = 456-470 points    **B+** = 409-420 points    **C+** = 362-373 points    **D+** = 315-326 points    **F** = <282 points  
**A** = 437-455            **B** = 390-408            **C** = 327-361            **D** = 296-314  
**A-** = 421-436            **B-** = 374-389            **C-** = there is no C-    **D-** = 282-295

✓ **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 6 am Monday--the first day of the quarter--until the following Sunday night at 11:55 pm.** You will have 2 tries to take it. The higher score is kept.

## PRONTO PARTICIPATION

We will be using Pronto, a real-time communication tool where you can ask questions, send direct messages to me or a classmate, participate on group chats and form private group study sessions. I will share resources, tips and send reminders. Downloading the Pronto app and participating on a Pronto group chat during the first 2 weeks of the quarter earns 5 easy points 😊. **These are NOT extra credit** - they are points built into the course. Instructions for downloading and using Pronto will be on Canvas.

## DISCUSSIONS

There will be 2 asynchronous discussions in the early weeks of the quarter. Fully participating on a discussion earns 5 points for a total of 10 points. Each discussion will be open for 10 days – from Friday morning until Sunday night. **These are not extra credit points** -- they are part of the total points for the course.

## FEEDBACK SURVEYS

There will be 3 Feedback Surveys. Each will take <5 minutes to complete and earns 5 points each 😊. **They are not extra credit points** - they are part of the total points for the course. Each survey will be open for 1 week only and must be submitted within that time frame.

## PRACTICE QUIZZES AND WORKSHEETS

There will be many practice quizzes and some worksheets offered throughout the quarter. They are designed and offered **to help you in your process of learning**. (Scores are not recorded; They do not earn any points) Take them and be sure you check the answer keys once they are posted to help you to do well 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 course schedule, 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 😊. **Submissions must be 100% complete to receive bonus points.**

## RECORDED VIDEO MINI-LECTURES

Each week there will be a 1 hour recorded Mini-Lecture posted on Canvas. Although no new material will be presented, students WILL find it useful to see and hear some of the material from that week presented. *This will not replace 1 week of lecture that would occur in a face-to-face section of Bio 45, but it IS helpful.* Plan on watching all of them, from beginning to end, at least once. Take notes while you watch. Be clear: **They do not replace reading the Virtual Lectures.**

## EXAMS

- There will be 5 Exams. The lowest score will be dropped from your cumulative score. If you're happy with your scores on Exams 1, 2, 3 & 4 **you don't have to take Exam 5.**
- **There are no make-up exams.** If you miss an 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"x 6" index card with notes on both sides** during an exam (or a 4x6" piece of paper)
- You will have 50 minutes to take the exams
- **You MUST have a simple calculator** to use during some exams. **The calculator on a phone or computer is not permitted.** A scientific calculator is also not permitted. Plan ahead to get one in time for the exams.  
⇒ All exams are taken on Canvas **WHILE you are on ZOOM with your VIDEO turned ON.** This is a requirement. Check the dates and times below and make sure you ARE available to take the exams. Exams taken while not visible on Zoom will not be accepted: The score will be 0.

### WHAT WILL BE ON EACH EXAM?

**Exam 1** All of the topics from Weeks 1 & 2 (Introduction through (including) Digestion)

**Exam 2** Topics from Weeks 3 & 4 (Carbohydrates & Lipids)

**Exam 3** Topics from Weeks 5 & 6 Protein & Energy Metabolism

**Exam 4** The topics from Weeks 7, 8 & 9:

- Diet and Chronic diseases + Phytochemicals
- Body Weight
- Overview of the Micronutrients
- Dietary Supplements

**Exam 5** Topics from Weeks 10 & 11 (Water, Vitamins, Minerals)

### WHEN ARE THE EXAMS?

**Exam 1:** Tuesday Apr 30

**Exam 2:** Tuesday May 14

**Exam 3:** Wednesday May 29

**Exam 4:** Tuesday June 11

**Exam 5:** Tuesday June 25

You will have 3 choices of times to take the Exams:

- 5:00 pm ON CAMPUS)
- 7:00 pm or 8:00 pm ONLINE

## OPTIONAL EXAM REVIEW SESSIONS

A 1 hour exam review session will take place on Zoom from 8-9 pm the night before each exam. The sessions will be recorded and posted on Canvas. Be there in real time or watch the recording -- it WILL very likely lead to your earning a higher score on the exam.

## THE DIET ASSIGNMENT

- The Diet Assignment is divided into 3 parts:
  - Keeping a Food Record for 3 days and collecting labels/nutrition information about foods eaten out
  - Analyzing the foods on a nutrient analysis program and getting reports with data about your food intake
  - Evaluating and assessing your diet
- 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 wait 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**, up to 4 days past the due date and not later.
  - **BUT....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**
  - 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:

- *Looking at material (books, papers, websites) other than what is permitted during an exam*
- *Navigating away from Canvas while taking an exam (except Zoom)*
- *Communicating with anyone other than your instructor during an exam: Talking, text message, e-mail, etc.*
- *Reproducing any part of the exam*
- *Sharing your answers to exam questions to another student or prospective student*
- *Having someone other than yourself take an exam*
- *Any form of plagiarism*
- *Giving your academic work to another student to plagiarize*
- *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.

## ✓ 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.

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

- **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 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.

### 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](mailto:nguyentom@fhda.edu)
- Check out the **Student Success Center** on campus: <https://www.deanza.edu/studentssuccess/> 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 the instructor?

A. The BEST (and fastest) way is to **message me on Pronto.**

You can also drop in during the 4 hours of office hours on Zoom: 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 send a private message ONLY for private/personal questions. All questions about the course itself – exams, the diet assignment, quizzes, about nutrition, etc. should be posted to the **whole class**, in a **Pronto Chat** or on Canvas on the **Have a Question** Discussion (That way, others benefit from your question and my answer).

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

A. One exam score is dropped (the lowest of the 5) 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 5 if I took and am happy with my scores on Exams 1, 2, 3 & 4?

A. No, you do not. (And not studying for Exam 5 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 exam score gets dropped 😊
- **There are 50 “easy points” to earn. Earn them all!**
  - The Orientation Quiz (10 pts)
  - Tasks #1 & 2 in the first few days of the quarter (10 pts)
  - Downloading the Pronto App and participating on Pronto (5 pts)
  - Filling out 3 Feedback Surveys (5 pts each; 15 pts total)
  - Discussion Points (2 Discussions; 5 pts each; 10 pts total)
  - **Getting 50/50 points (100%) REALLY helps your standing in the class at the end of the quarter**

### 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.

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. ✓ If you fall behind, catch up as soon as possible ✓ Stay Connected - Get the **Pronto App** and use it ✓ 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** ✓ Use the **Exam Roadmaps** ✓ Attend the Zoom Exam Review Sessions ✓ Make notes to use during exams ✓ Ask Anna when you have questions ✓ Watch the Mini-Lecture Recordings **twice** ✓ Do all of the practice quizzes/worksheets ✓ 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 <sup>th</sup> edition of the textbook	Exams/Due Dates
1	Apr 8-14	Introduction Where do we get our information about nutrition? Research	<b>VL #1</b> (Virtual Lecture, on Canvas) <b>Textbook:</b> p. 3-17; 25-26 ; HL 1*	<b>Thursday 11:55 pm:</b> Deadline to do <b>2 tasks</b> <b>Sunday 11:55 pm</b> <b>Orientation Quiz</b>
2	Apr15-21	Nutrition Assessment Energy Calculations Dietary Assessment Digestion	<b>VL #2</b> <b>Textbook:</b> p. 22-25, 55 (the How To Box), E1-6**; E11-14** 17-21, 35-39, 46-47, Chapter 3, HL 3	
3	Apr22-28	Carbohydrates	<b>VL #3</b> <b>Textbook:</b> Chapter 4, HL4; p.50	
4	Apr 29 – May 5	Lipids	<b>VL #4</b> <b>Textbook:</b> Chapter 5, HL 5	<b>Tuesday: Exam 1</b> <b>Saturday:</b> Deadline to submit <b>Part 1 of the Diet Assignment</b> to receive bonus points <b>Sunday: Discussion #1</b> closes
5	May 6-12	Protein	<b>VL #5</b> <b>Textbook:</b> Chapter 6; p.638; HL2	
6	May 13-19	Energy Metabolism	<b>VL #6</b> <b>Textbook:</b> Chapter 7; C10-C14**	<b>Tuesday: Exam 2</b> <b>Saturday:</b> Deadline to submit Part 2 of the Diet Assignment to receive bonus points <b>Sunday: Discussion #2</b> closes
7	May 20-26	Diet and Chronic Diseases and Phytochemicals	<b>VL #7 + Textbook:</b> p. 522-524; 560-566; p. 576-580, HL 13 p. 564; 570-576; 521-522 p. 244-245	
8	May 27- June 2	Monday is Memorial Day Energy Balance, Weight Management	<b>VL #8</b> <b>Textbook:</b> Chapters 8 & 9 E11-13; F0-F1** HL 9	<b>Tuesday: Exam 3</b>
9	Jun 3-9	Overview of the micronutrients Dietary Supplements	<b>VL #9</b> (this VL is short!) <b>Textbook:</b> p. 289-292; 363; 387-9; HL 11 HL 10, HL 18, p. 57-8	
10	Jun 10-16	The Vitamins	<b>VL #10</b> <b>Textbook:</b> Chapters 10 & 11	<b>Tuesday: Exam 4</b> <b>Saturday:</b> <b>Diet Assignment Due</b>
11	Jun 17-23	Water The Minerals: Sodium, Calcium & Iron (and Potassium)	<b>VL #11</b> <b>Textbook:</b> p. 353-362 p. 364-367; 368-9 (fig 12.12) p. 370-374; HL12; p.389-398	<b>Wednesday 11:55 pm:</b> Deadline to submit <b>Diet Assignment LATE</b>
	Tue Jun 25			<b>Tuesday: Exam 5</b>

Have a Wonderful Spring Quarter!

## Spring 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
April 7	8 <b>WEEK 1</b> Orientation Quiz opens	9	10	11 <b>Midnight Deadline</b> to complete the <b>2 tasks</b> on Canvas	12	13
April 14 <b>Orientation Quiz</b> closes at 11:55pm	15 <b>WEEK 2</b>	16	17	18	19	20
21	22 <b>WEEK 3</b>	23	24	25	26 Discussion 1 Opens	27
April 28	29 <b>WEEK 4</b> Exam 1 Review on Zoom 8-9 pm	30 <b>Exam 1</b>	<b>May 1</b> Feedback Survey #1 opens	2	3	4 Deadline to submit <b>Part 1</b> to earn Bonus Points
May 5 Discussion 1 closes	6 <b>WEEK 5</b>	7	8 Feedback Survey #1 closes	9	10 Discussion 2 Opens	11
May 12 <i>Mother's Day</i>	13 <b>WEEK 6</b> Exam 2 Review on Zoom 8-9 pm	14 <b>Exam 2</b>	15	16	17	18 Deadline to submit <b>Part 2</b> to earn Bonus Points
May 19 Discussion 2 closes	20 <b>WEEK 7</b>	21	22	23	24	25
May 26	27 <b>WEEK 8</b> Memorial Day	28 Exam 3 Review on Zoom 8-9 pm	29 <b>Exam 3</b>	30 Feedback Survey #2 opens	31	<b>June 1</b>
June 2	3 <b>WEEK 9</b>	4	5	6 Feedback Survey #2 closes	7	8
June 9	10 <b>WEEK 10</b> Exam 4 Review on Zoom 8-9 pm	11 <b>Exam 4</b>	12	13	14	15 <b>Diet Assignment Due</b>
16	17 <b>WEEK 11</b>	18	19 Late Diet Assignment Feedback Survey #3 opens	20	21	22
23	24 <b>WEEK 12</b> Exam 5 Review on Zoom 8-9 pm	25 <b>Exam 5</b>	26 Feedback Survey #3 closes	27 Course Grades will be submitted	28 End of Spring Quarter	<i>Have a terrific summer!</i>