

HECO 1410 (4 : 3 : 3)
Science of Nutrition

Human Sciences

Department of Science

Division of Arts and Sciences
South Plains College

Fall 2021

Associate Professor:
Keila Ketchersid, MS, RD, LD

**HECO 1410 Science of Nutrition
Course Information
Fall 2021**

Course Title: HECO 1410 Science of Nutrition
Instructor: Keila Ketchersid, MS, RD, LD
Office: Science Building, Office 68
Office Hours: T/R 10:00 – 12:00 PM 1:00 -2:30 PM
F 10:30 AM –11:30 PM (or by appointment)
Will also be able to accommodate virtual meetings.
Phone: 806-716-2325
E-mail: kketchersid@southplainscollege.edu

Course Title: HECO 1410 Science of Nutrition

Department: Science

Discipline: Human Sciences

Course Number: HECO 1410

Course Title: Science of Nutrition

Credit: 4 (Lecture: 3 Lab: 1)

This course satisfies a core curriculum requirement: Yes/ Elective hours, **does not satisfy a natural lab science requirement.**

Prerequisites: None

Available Formats: Face to Face

Campuses: Levelland

Course Description: The course is the study of the nutrients found in foods and utilization of those nutrients by the body. Designed to convey the basic principles of nutritional science.

Course Specific Instructions: Blackboard is our communication tool outside of class. A syllabus, power point notes for class, e-mails, and announcements, are all posted on Blackboard. Familiarity with the navigation of Blackboard is crucial for success in the course.

Course Purpose/ Rationale/ Goal: The purpose of the course is to introduce students to the six classes of nutrients, carbohydrate, lipids, protein, vitamins, minerals, and water. Students will discover food sources of the nutrients, digestion, absorption, and metabolism of the nutrients, as well as their relationships to chronic disease. Over-consumption and toxicities are also addressed where they are appropriate.

General Course Information: Lecture

Textbook Info/Inclusive Access:

- Textbook: The textbook and resources for this course are available in digital form through the TexBook program at South Plains College. That means the e-book edition of the textbook and/or all required resources are provided in the Blackboard portion of the course from the first day of class. The fee for the e-book/resources is included in the student tuition/fee payment, so there is no textbook or access card to purchase for this course.
- E-book features: e-book features include the ability to hear the text read aloud, highlight, take notes, create flash cards, see word definitions, build study guides, print select pages, and download up to 20% of the book for offline access.

Upgrading to a physical textbook: Students who would like a printed textbook can do an online search to find the most affordable option using the following information:

Understanding Nutrition ISBN:0357447514. ISBN-13:9780357447512

- Calculator – Simple 4 function calculator required. You will not be allowed to use your cell phone or graphing calculator on exams.
- Attendance -Attendance will be taken each class meeting with a sign-in sheet. Students who have an A or 1 or less absence at the end of the semester are eligible to be exempt from the Final Exam.

Minimum Computer Requirements:

- Personal computer with Pentium processor with at least 32 MB of memory, a minimum 2 GB hard drive, running Windows 8 or later.
- Web Browser: Google Chrome is most compatible with MindTap.
- A high speed internet connection.
- Microsoft Office and Microsoft PowerPoint and Word software (a recent version, preferably 2016 or higher).
- Windows Media Player (the latest version).
- Soundcard and functioning speakers.
- Knowledge of how to navigate Google Chrome web pages and how to deal with pop-up blockers and other devices and warnings on Google Chrome.
- Knowledge of how to download files from the Google Chrome and find them on your computer once they are downloaded.
- Knowledge of basic operations of Microsoft Word and Microsoft PowerPoint.
- Knowledge of how to view and adjust videos with Windows Media Player.

Grading Policies:

- **Lecture Exams: 6 Major Exams** will be given during the semester. **No make-up exams** will be given if the exam is given via an online format. If you miss an exam online you will receive a 0.
- **Lab Exams: 3 Lab Exams** will be given during the semester. **No make-up lab exams** will be given via an online format. If you miss an exam online you will receive a 0.
- **Diet and Wellness Activities:** Students will complete 5-7 Diet and Wellness activities during the semester. **If you do not complete the initial Three Day Food Record and Diet and Wellness Report, you will not be able to complete the remaining nutrient reports.**
- **Mindtap Activities** – Approximately 2 per chapter. These will be assigned via the Mindtap Link.
- **Lab Reports:** Students will complete 10 lab reports, dates for turning them in will be specified by instructor.
- **Project:** Students will be required to participate in a group project/presentation. The project entails presentation skills, creativity, technology skills, public speaking, and nutrition knowledge, More details will be given at assigned time of project.
- **Lecture Final Exam:** Final exam will be comprehensive, covering Chapters 1-13. Students who have an earned an A (90% or above) during the semester will not be required to take the final exam.
- **Pop Quizzes and Various Daily Activities** – May occur occasionally quizzes or various worksheets throughout the semester.
- **Class and Online Participation:** All students are asked to participate in class discussions and will be frequently asked to give an overview of the chapters and to discuss points they find would be helpful to be covered in class. Students may also be asked to view video lectures and discussions online via Blackboard.
- **Cheating will not be accepted in this class.** If you are found cheating on any assignment or test, you will immediately be dropped from the course with an F.

PLEASE SILENCE YOUR CELL PHONE IN LECTURE AND LAB, NO TEXTING DURING CLASS!!!!

Expected Course Learning Outcomes:

- Discuss the various factors influencing food habits and choices.
- Identify the components of a healthy diet.
- Discuss the six classes of nutrients, their food sources, and functions in the body, deficiencies, and toxicities.
- Distinguish the sound nutrition information from faddism and quackery.
- Describe the principles of digestion, absorption, and metabolism of the nutrients.
- Calculate individual energy expenditure and needs.
- Explain the association between nutrition and chronic disease.
- Evaluate personal dietary intake for nutritional adequacy.

Core Objectives to be integrated into HECO 1410 as required by the THECB (Texas Higher Education Coordinating Board):

- Teamwork
- Communication
- Empirical and Quantitative Skills
- Critical Thinking

Suggestions for success in HECO 1410:

- Before each class:
- Read the Chapters- highlight important sections. Use explanations and definitions found in columns on sides of text.
- Class: Attend all classes as specified by instructor or listen to available video content. Take detailed lecture notes and ask questions. Participate in class and team discussions. You may record lectures.
- After each class: Review lecture notes.
- Studying for Exams:
 - Study daily as we cover chapters. Do not wait until the night before the exam.
 - Prepare flash cards with possible test questions.
 - Re-read chapters.
 - Use much detail in completing your review sheet.

Grade Itemization

6 Major Exams (100 pts/each)	600 points
3 Lab Exams (25 pts/each)	75 points
10 Lab Reports (10 pts/each)	100 points
5 Diet and Wellness Activities (10 pts/each)	50 points
Presentation	100 points
Final Exam	<u>100 points (unless exempt)</u> 1025 points (95% of your Final Grade)
~ 13 Mindtap Activities	195 points (5% of your Final Grade)

KEEP A RECORD OF ALL YOUR GRADES- KEEP ALL RETURNED PAPERS.

Lab Exams

1 _____
2 _____
3 _____

Lecture Exams

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

Final Exam

1 _____

Lab Reports

1 _____ 7 _____
2 _____ 8 _____
3 _____ 9 _____
4 _____ 10 _____
5 _____
6 _____

Diet and Wellness (Blue Sheets)

1 _____ 4 _____
2 _____ 5 _____
3 _____ 6 _____

Presentation

1 _____

Mindtap Activities

1 _____ 10 _____
2 _____ 11 _____
3 _____ 12 _____
4 _____ 13 _____
5 _____
6 _____
7 _____
8 _____
9 _____

4.1.1.1. Diversity Statement

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

4.1.1.2. Disabilities Statement

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

4.1.1.3. Non-Discrimination Statement

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

4.1.1.4 Title IX Pregnancy Accommodations Statement If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact Crystal Gilster, Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

COVID-19

If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376.

Fall 2021 Dates

Schedule is subject to change due to Instructor's Discretion.

August /September 2021

Monday	Tuesday	Wednesday	Thursday
30 1 st Class Day -Intro to Course -Blackboard -Cengage/Mindtap -Assignment #1	31	1 Chapter 1- An Overview of Nutrition -Tanita Measurements	2

September 2021

Monday	Tuesday	Wednesday	Thursday
6 Labor Day Holiday	7	8 Chapter 1 Cont. Lab – Practice Exam Calculations Pink Worksheet -Tanita Measurements	9
13 Chapter 2 – MyPlate -MyPlate Trivia -Three Day Food Record	14	15 Chapter 2 – Nutrition Labels Lab – Nutrition Lab/Cereal Assessment	16
20 Chapter 3 – Digestion, Absorption, and Transport Lab - Three Day Food Record -Diet and Wellness Report	21	22 Chapter 3 Cont. Lab- Millionaire Game for Review	23
27 EXAM # 1 (Chapters 1-3) Lab Exam #1 Nutrition Calculations and Digestive System Diagram	28	29 Chapter 4 – Carbohydrates Lab – Carbohydrate /Fiber Diet and Wellness	30

October 2021

Monday	Tuesday	Wednesday	Thursday
4 Chapter 4 Cont. Lab -Complete Carb Diet and Wellness -Blood Glucose Levels -Diabetes Risk Assessment	5	6 Chapter 5- Lipids Lab -Fat and Cholesterol Diet and Wellness	7
11 Chapter 5 Cont. Lab -Cholesterol Lab -Check your BP and Cholesterol	12	13 Chapter 6 – Proteins Lab -Protein Diet and Wellness	14
18 Chapter 6 Cont. Lab -Review Game for Exam 2	19	20 EXAM #2 (Chapters 4-6) Lab Exam #2	21
25 Chapter 7 – Metabolism Lab -Yellow Metabolism Worksheets	26	27 Chapter 7 Cont. EXAM #3 (Chapter 7 only)	28

November 2021

Monday	Tuesday	Wednesday	Thursday
1 Chapter 8 – Energy Balance and Body Composition Lab- Cardiovascular Assessment	2	3 Chapter 8 Cont. Lab -Yellow Metabolism Worksheets	4
8 Chapter 9 – Weight Control -Exam Review	9	10 Exam #4 (Chapters 8-9) Lab Exam #3	11
15 Chapter 10 – Water-Soluble Vitamins Project Introduction	16	17 Chapter 10 Cont. Project Group Work	18
22 Chapter 11 – Fat-Soluble Vitamins Lab -Vitamin Diet and Wellness -Project Group Work	23	24 Thanksgiving Holiday.	25 
29 EXAM #5 (Chapters 10-11)	30		

December 2021

Monday	Tuesday	Wednesday	Thursday
		1 Group Presentations	2 Last Day to drop Fall semester courses
6 Chapter 12 – Water and the Major Minerals Possible Take Home Exam or Poster Project -Mineral and Fluid Intakes	7	8 Chapter 13 Trace Minerals Exam # 6 (Ch 12-13) or Poster Project -Lab – Diet and Wellness Mineral and Fluid Intakes -Final Exam Review	9
13 FINAL EXAM HECO 1410.001 9:30 AM Class 10:15- 12:15 PM HECO 1410.002 1:00 PM Class 1:00 – 3:00 PM	14	15	16