

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

Human Sciences

Department of Science

Division of Arts and Sciences
South Plains College

Spring 2018

Assistant Professor:
Keila Ketchersid, MS, RD, LD

**HECO 1410 Science of Nutrition
Course Information
Spring 2018**

Course Title: HECO 1410 Science of Nutrition
Instructor: Keila Ketchersid, MS, RD, LD
Office: Science Building, Rm. 117 B
Office Hours: T/R 10:00 – 12:00 PM 1:00 -2:30 PM
F 9:00 AM –12:00 PM (or by appointment)
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.

I. General Course Information: Lecture

- A. **Textbook: Understanding Nutrition 15th Edition Whitney/Rolfes** packaged with a Cengage Mindtap Access Code. **The access code is mandatory. There is a looseleaf textbook access code bundle available for your purchase at the SPC bookstore.** If you prefer an ebook, you can purchase the access code and ebook package online. This is a new text with a lot of updates. If you have an older edition, you are responsible for gathering the new material. Updates will not be provided to you.

Understanding Nutrition Bundle, 15th Edition / Eleanor Noss Whitney / Sharon Rady Rolfes

ISBN: 9781337881555

- B. Calculator – Simple 4 function calculator required. You will not be allowed to use your cell phone or graphing calculator on exams.
- C. Attendance:
- i. Students are expected to attend all classes. Attendance will be taken each class meeting. You are responsible for signing the role sheet, if you forget you will be counted as absent. I have the option to drop any student after missing four classes with an X or an F whether or not these absences or consecutive or not and whether or not they are excused or not. It is very difficult to catch up after missing 2 weeks of class. Classes will begin at scheduled time. Do not be late. **You will not be allowed to enter class if we have already started lecture.** If you must miss a class or need special arrangements for entering late please notify me ahead of time. Students who do not miss more than one class during the semester will be exempt from the final.
 - ii. Labs must be attended each time. You will be counted absent if you attend lecture but leave during the lab. **I will not give make-up labs.**
- D. **Grading Policies:**
- i. **Lecture Exams: 5 Major Exams** will be given during the semester. **No make-up exams** will be given. If you miss an exam you will receive a 0.
 - ii. **Lab Exams: 3 Lab Exams** will be given during the semester. **No make-up lab exams** will be given.
 - iii. **Diet And Wellness Activities:** Students will complete 5-7 Diet And Wellness activities during the semester. Assignments are to be turned in at the beginning of class and no assignments will be accepted after this time even if completed in class. Will need the Cengage Access Code.
 - iv. **Mindtap Activities** – Approximately 1 per chapter. Will need the Cengage Access Code.
 - v. **Lab Reports:** Students will complete 10 lab reports, dates for turning them in will be specified by instructor. No make-up labs will be given.

- vi. **Project:** Students will be required to participate in a group project/presentation. The project entails presentation skills, creativity, technology skills, public speaking, nutrition knowledge, and food preparation. More details will be given at assigned time of project.
- vii. **Lecture Final Exam:** Final exam will be comprehensive, covering Chapters 1-13. Grade on the exam will be counted twice. Students who miss 0-1 classes or have an earned an A (90% or above) during the semester will not be required to take the final exam.
- viii. **Pop Quizzes and Various Daily Activities** – May occur occasionally quizzes or various worksheets throughout the semester.
- ix. **Class 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.
- x. **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!!!!**

II. 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

III. Suggestions for success in HECO 1410:

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

Grade Itemization

5 Major Exams (100 pts/each)	500 points
3 Lab Exams (25 pts/each)	75 points
10 Lab Reports (10 pts/each)	100 points
13 Mindtap Activities	85 points
5 Diet and Wellness Activities (10 pts/each)	50 points
Presentation	100 points
Final Exam	200 points (unless exempt)

Assignments and Exams are subject to change due to instructor discretion.

Total all points then divide by 910 if exempt from 1110 the final exam or including the final.

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

Lab Exams

1 _____
2 _____
3 _____

Lecture Exams

1 _____
2 _____
3 _____
4 _____
5 _____

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 _____

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.

ADA 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 through the Guidance and Counseling Centers at Reese Center (Building 8) [716-4606](tel:716-4606), or Levelland (Student Services Building) [716-2577](tel:716-2577).

Note to students with disabilities: If you have a disability-related need for reasonable academic adjustments in this course, provide the instructor with a letter of accommodation from the Disability Services Office. If you need immediate accommodations or physical access, please arrange to meet with the Disability Services Office before the next class meeting.

January 2018

Monday	Tuesday	Wednesday	Thursday
15 Martin Luther King Holiday.	16	17 1 st Class Day -Intro to Course -Blackboard -Cengage -Assignment #1	18
22 Chapter 1- An Overview of Nutrition -Tanita Measurements	23	24 Chapter 1 Cont. Lab – Practice Exam Calculations (Pink Worksheet - due) -Tanita Measurements	25
29 Chapter 2 – MyPlate -MyPlate Trivia -Three Day Food Record	30	31 Chapter 2 – Nutrition Labels Lab – Nutrition Lab/Cereal Assessment	

February 2018

Monday	Tuesday	Wednesday	Thursday
5 Chapter 3 – Digestion, Absorption, and Transport Lab - Three Day Food Record -IT Center for Diet Analysis	6	7 Chapter 3 Cont. Lab- Millionaire Game for Review	8
12 EXAM # 1 (Chapters 1-3) Lab Exam #1 Nutrition Calculations and Digestive System Diagram	13	14 Chapter 4 – Carbohydrates Lab – Carbohydrate /Fiber Diet and Wellness	15
19 Chapter 4 Cont. Lab -Complete Carb Analysis -Blood Glucose Levels -Diabetes Risk Assessment	20	21 Chapter 5- Lipids Lab -Fat and Cholesterol Diet and Wellness	22
26 Chapter 5 Cont. Lab -Cholesterol Lab -Check your BP and Cholesterol	27	28 Chapter 6 – Proteins Lab -Protein Diet and Wellness	

March 2018

Monday	Tuesday	Wednesday	Thursday
5 Chapter 6 Cont. Lab -Review Game for Exam 2	6	7 EXAM #2 (Chapters 4-6) Lab Exam #2	8
12 Spring Break	13	14	15
19 Chapter 7 – Metabolism Lab -Yellow Metabolism Worksheets	20	21 Chapter 7 Cont. EXAM #3 (Chapter 7 only)	22
26 Chapter 8 – Energy Balance and Body Composition Lab- Cardiovascular Assessment	27	28 Chapter 8 Cont. Lab -Yellow Metabolism Worksheets	29

April 2018

Monday	Tuesday	Wednesday	Thursday
2 Easter Holiday.	3	4 Chapter 9 – Weight Control -Exam Review	5
9 Exam #4 (Chapters 8-9) Lab Exam #3	10	11 Chapter 10 – Water-Soluble Vitamins Project Introduction	12
16 Chapter 10 Cont. Project Group Work Online Registration Opens	17	18 Chapter 11 – Fat-Soluble Vitamins Lab -Vitamin Diet Analysis -Project Group Work	19
23 EXAM #5 (Chapters 10-11)	24	25 Group Presentations	26 Last Day to drop Fall semester courses.
30 Chapter 12 – Water and the Major Minerals Possible Take Home Exam or Poster Project -Mineral and Fluid Intakes			

May 2018

Monday	Tuesday	Wednesday	Thursday
	1	2 Chapter 13 Trace Minerals Take Home Exam # 6 (Ch 12-13) -Lab – Diet and Wellness Mineral and Fluid Intakes -Final Exam Review	3
7 FINAL EXAM HECO 1410.001 9:30 Class 10:15- 12:15 PM	8	9 FINAL EXAM HECO 1410.002 1:00 Class 10:15- 12:15 PM	10

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