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

Human Sciences

Department of Science

Division of Arts and Sciences South Plains College

Fall 2017

Assistant Professor: Keila Ketchersid, MS, RD, LD

HECO 1410 Science of Nutrition Course Information Fall 2017

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: <u>Understanding Nutrition</u> 14th Edition Whitney/Rolfes. A Diet and Wellness access code card must also be purchased from the bookstore. Textbook and access code are required. There is a looseleaf textbook access code bundle available for your purchase at the SPC bookstore. 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, 14th Edition Eleanor Noss Whitney / Sharon Rady Rolfes
ISBN-10: 128587434X | ISBN-13: 9781285874340
*Diet & Wellness Printed Access Code standalone: 9781285856230

- 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.
- iv. 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.
- v. **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.

- vi. 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.
- vii. **Pop Quizzes and Various Daily Activities –** May occur occasionally quizzes or various worksheets throughout the semester.
- viii. **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.
- ix. **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
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 925 if exempt from the final exam or 1025 including the final.

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

Lab Exams	Lab Reports	Presentation
1	17	1
2	2 8	
3	3 9	
	4 10	
Lecture Exams	5	Worksheets
1	6	1
2		2
3	Diet and Wellness (Blue Shee	ets)
4	1 4	
5	2 5	
	36	
Final Exam		

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.

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) <u>716-4606</u>, or Levelland (Student Services Building) <u>716-2577</u>.

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.

August 2017

Monday	Tuesday	Wednesday	Thursday
28 1 st Class Day -Intro to Course -Blackboard -Assignment #1	29	30 Chapter 1- An Overview of Nutrition -Tanita Measurements	31

September 2017

Monday	Tuesday	Wednesday	Thursday
4 Labor Day Holiday. No Class.	5	6 Chapter 1 Cont. Lab – Practice Exam Calculations (Pink Worksheet - due) Tanita Measurements	7
11 Chapter 2 – MyPlate -MyPlate Trivia -Three Day Food Record	12	13 Chapter 2 – Nutrition Labels Lab – Nutriton Lab/Cereal Assessment	14
18 Chapter 3 – Digestion, Absorption, and Transport Lab - Three Day Food Record -IT Center for Diet Analysis	19	20 Chapter 3 Cont. Lab- Millionaire Game for Review	21
25 EXAM # 1 (Chapters 1-3) Lab Exam #1 Nutrition Calculations and Digestive System Diagram	26	27 Chapter 4 – Carbohydrates Lab – Carbohydrate /Fiber Diet and Wellness	28

October 2017

Monday	Tuesday	Wednesday	Thursday
2 Chapter 4 Cont. Lab -Complete Carb Analysis -Blood Glucose Levels -Diabetes Risk Assessment	3	4 Chapter 5- Lipids Lab -Fat and Cholesterol Diet and Wellness	5
9 Chapter 5 Cont. Lab -Cholesterol Lab -Check your BP and Cholesterol	10	11 Chapter 6 – Proteins Lab -Protein Diet and Wellness	12
16 Chapter 6 Cont. Lab -Review Game for Exam 2	17	18 EXAM #2 (Chapters 4-6) Lab Exam #2	19
23 Chapter 7 – Metabolism Lab -Yellow Metabolism Worksheets	24	25 Chapter 7 Cont. EXAM #3 (Chapter 7 only)	26
30 Chapter 8 – Energy Balance and Body Compostion Lab- Cardiovascular Assessment	31		

November 2017			
Monday	Tuesday	Wednesday	Thursday
		1 Chapter 8 Cont.	2
		Lab -Yellow Metabolism Worksheets	
6 Chapter 9 – Weight Control -Exam Review	7	8 EXAM #4 (Chapters 8-9) Lab Exam #3	9
-Brainstorming Sessions			
13 Chapter 10 – Water- Soluble Vitamins	14	15 Chapter 10 Cont.	16 Last Day to drop Fall semester courses.
Project Introduction Online Registration Opens		Project Group Work	
20	21	22	23
Chapter 11 – Fat-Soluble Vitamins		Thanksgiving Holiday -NO CLASS!	
Lab -Vitamin Diet Analysis -Project Group Work			
27 EXAM #5 (Chapters 10-11)	28	29 Group Presentations	30

December 2017

Monday	Tuesday	Wednesday	Thursday
4 Group Presentations	5	6 Chapter 12 and 13- Water and the Major Minerals/Trace Minerals Take Home Exam # 6 Lab – Diet and Wellness Mineral and Fluid Intakes Final Exam Review	7
11 FINAL EXAM HECO 1410.002 10:15- 12:15 PM	12	13 FINAL EXAM HECO 1410.001 10:15- 12:15 PM	14

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