Lassen Community College Course Outline

HLTH-25 Understanding Nutrition 3.0 Units

I. Catalog Description

Scientific concepts of nutrition related to the function of nutrients in basic life processes and current health issues with emphasis on individual needs. Analyze your diet, construct a nutritional diet, and interpret eating disorders, plan adequate diets for children, infants, pregnancy, athletes, adults and the elderly. Evaluate food additives. Appraise world hunger problems. This course has been approved for correspondence, hybrid and online delivery.

Recommended Preparation: Successful completion of ENGL105 or equivalent assessment placement.

Transfers to both UC/CSU
CSU GE Area: E
51 Hours Lecture, 102 Outside of Class hours, 153 Total Student Learning Hours
Scheduled: Fall, Spring

II. Coding Information

Repeatability: Not Repeatable, Take 1 Time
Grading Option: Graded or Pass/No Pass
Credit Type: Credit - Degree Applicable
TOP Code: 083700

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

1. Analyze and evaluate nutrition information to make recommendations for dietary improvement
2. Apply dietary guidelines and current nutrition recommendations to plan food choices to create an adequate and balanced diet for different populations

B. Course Objectives

Upon completion of this course the student will be able to:

1. Identify function and sources of nutrients
2. Demonstrate basic knowledge of nutrient digestion, absorption and metabolism
3. Plan food choices which will create an adequate and balanced diet.
4. Scientifically analyze and evaluate nutrition information
5. Analyze the nutritional adequacy of a given dietary intake.
6. Interpret the relationship of food, nutrition, and health at various stages in the life cycle.
7. Integrate psychological, sociological, cultural, and biological aspects which influence the formation of one's food habits.
8. Criticize popular literature for valid nutrition information.
9. Appraise the seriousness of world hunger problems and urgency of dealing with malnutrition locally as well as nationally and internationally.
10. Utilize a computer database to evaluate a personal diet record.

IV. Course Content

A. How food affects you
1. Elements from nutrients
2. Nutrient use
3. Excess and inadequate intake
4. Effects of nutrition over time
5. Nutrition research methods

B. Functions and sources of nutrients
1. Physiology for nutrition
   a. Digestion process
   b. Cell nutrient use
   c. Excretion of waste products
2. Water in the body
   a. Water loss
   b. Water availability
   c. Adequate intake
3. Energy sources
   a. Energy values in food
   b. Energy needs in the body
   c. Calculating K-calories from fat, protein, and carbohydrates
4. Carbohydrates
   a. Function
   b. Types and amounts
   c. Assess your intake
5. Lipids
   a. Functions
   b. Types and amounts
   c. Major health problems
   d. Assess your intake
6. Proteins
   a. Structure and function
   b. Amino acids
   c. Assess your intake
7. Vitamins
   a. Structure and function
   b. Structure and function
   c. Food content in vitamins
8. Minerals
   a. Function
   b. Bioavailability
   c. Evaluate mineral intake

C. Scientific principles to analyze and evaluate nutrition information

D. Dietary guidelines and current recommendations
1. Rating yourself nutritionally; diet analysis
2. Rating and designing nutritional plans for others: children, infants, pregnancy, athletes, adults and the elderly
   a. Nutrition for pregnancy and lactation
   b. Nutrition for growing
      1. Intake for children

2. Intake for adolescence
c. Nutrition for adults
1. Health status change
2. Medication and nutrition
3. Alcohol and nutrition
4. Needs of special groups

E. Digestion, absorption, and metabolism of nutrients

F. Why you eat what you do?
1. Cultural factors
2. Innate factors
3. Techniques to change food habits

G. Health, fitness, and disease
1. Energy imbalance and weight debate
a. Fat status
b. Estimating ideal weight
c. Techniques for losing weight

H. Eating disorders
a. Signs of disordered eating
b. Biological, personal, and societal factors
c. Treatment

I. Effects of food processing
1. Micronutrient content of food
2. Food handling and storage
3. Environmental contaminants
4. Additives

V. Assignments

A. Appropriate Reading
Academic and professional journals, essays, and articles

B. Writing Assignments
Weekly assignments consisting of assessment sheets which correlate to text chapter and aid the student in analyzing their own diet. One 750 word written report on nutrition research, cultural or world food conditions, food habits, food additives and storage, or nutrition based disease. Give an oral report to the class regarding their topic.

C. Expected Outside Assignments
These will include 15 assessment guides, one 750 word report, and weekly reading assignments.

D. Specific Assignments that Demonstrate Critical Thinking
Students will record their diet one day each week to analyze for nutrient density, content, k calories, nutrients, vitamins and minerals according to text and classroom subject. Students will be able to select a balanced diet including knowing the reasons for doing so.

VI. Methods of Evaluation

Traditional Classroom Instruction
An out-of-class assignment: fifteen (15) assessment exercises requiring basic math and reading skills which evaluate 24 hour personal menus. One 750 word essay and verbal report on nutrition research, nutrition-based disease, food habits, cultural or world food conditions, or food additives and storage. Reading assignments are given weekly. Four

(4) examinations plus one (1) comprehensive final of mixed essay, multiple choice, matching and true/false questions.

Correspondence Delivery

Same as face to face with the exception of the desired use of proctored exams and exclusion of participation in classroom activities. Students will be expected to complete assignments and activities equivalent to in-class assignments and activities. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

Online Delivery

Students will be evaluated using online methods. Online students will complete assignments as described in the course outline using a variety of online methods such as online submission of research papers, asynchronous and synchronous discussions (chat/forum), online quizzes and exams, postings to online website, and email communications in lieu of traditional classroom assignments and evaluation methods.

Hybrid Evaluation

All quizzes and exams will be administered during the in person class time. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous (chat/forum) will be evaluated for participation and to maintain effective communication between instructor and students.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

☒ **Traditional Classroom Delivery** ☒ Correspondence Delivery

☒ Hybrid Delivery ☒ Online Delivery

Traditional Classroom Instruction

Lecture, discussion and audio-visual media will be utilized.

Correspondence Delivery

Assigned readings, instructor-generated typed handouts, typed lecture materials, exercises and assignments equal to face to face instructional delivery. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

Online Delivery

Online written lectures and/or video lectures will be made available to students online. Students will be expected to participate in forum-based discussions and online exercises/assignments contained on website. Additionally, discussion papers, email communications, postings to forums, and web-links will comprise the method of instruction.

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. Each semester a minimum of 17 hours, or 1/3 of the lecture hours, will be taught face-to face by the instructor and the remaining hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of exercises/assignments, lectures, visual aids, and practice exercises. Online delivery will consist of exercises/assignments, lecture posts, discussions, adding extra resources and other media sources as appropriate.

VIII. Representative Texts and Supplies

Sizer & Whitney, *"Nutrition Concepts and Controversies",* 15th, Edition, 2019, Cengage Learning, ISBN 9781337906371

IX. Discipline/s Assignment

Health, Biological Sciences, Nutritional Science/Dietetics

X. Course Status

Current Status: Active
Original Approval Date: 3/27/1990
Revised By: Carrie Nyman
Curriculum/Academic Standards Committee Revision Date: 03/15/2022