COURSE OUTLINE OF RECORD

Number: HLED G135  TITLE: Nutrition and Health

ORIGINATOR: Leilani Johnson  EFF TERM: Fall 2010
FORMERLY KNOWN AS:

CROSS LISTED COURSE:

SEMESTER UNITS: 3.0
HRS LEC: 54.0  HRS LAB: 0.0  HRS OTHER: 0.0
CONTACT HRS TOTAL: 54.0
STUDY NON-CONTACT HRS RECOMMENDED: 108.0

CATALOG DESCRIPTION:
This course provides an integrated overview of the physiological, psychological and sociological concepts of nutrition and health. Topics will cover many different aspects and views of nutrition and how it affects health throughout the life cycle.

JUSTIFICATION FOR COURSE:

PREREQUISITES:

COREQUISITES:

ADVISORIES:

ASSIGNED DISCIPLINES:
Health

MATERIAL FEE: Yes [  ] No [X] Amount: $0.00
CREDIT STATUS: Noncredit [  ] Credit - Degree Applicable [X]  Credit - Not Degree Applicable [  ]
GRADING POLICY: Pass/No Pass [  ] Standard Letter [X]  Not Graded [  ]  Satisfactory Progress [  ]
OPEN ENTRY/OPEN EXIT: Yes [  ] No [X]
TRANSFER STATUS: CSU Transferable[  ]  UC/CSU Transferable[X]  Not Transferable[  ]
BASIC SKILLS STATUS: Yes [  ] No [X]  LEVELS BELOW TRANSFER: Not Applicable

CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable
NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course

OCCUPATIONAL (SAM) CODE: E

REPEATABLE ACCORDING TO STATE GUIDELINES: No [X]  Yes [  ] NUMBER REPEATS:

REQUIRED FOR DEGREE OR CERTIFICATE: No [  ] Yes [X]
Associate in Arts: Liberal Arts: Emphasis in Social Behavior and Self-Development(Associate in Arts)

GE AND TRANSFER REQUIREMENTS MET:
CSU GE Area E: Lifelong Understanding and Self-Development
   E1 - Lifelong Understanding and Self-Development

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:
HLED G135-Nutrition and Health

1. identify the basic principles of human nutrition and relate them to a healthy, functioning human body.
2. compare and contrast fad diets, food fallacies, and nutritional controversies.
3. assess the arguments for and against vitamin and mineral supplementation.
4. apply the principles of nutrition to personal lifestyles.
5. analyze diets and create and design a plan of action for improving diet and eating habits.

COURSE OBJECTIVES:
1. recognize the basic physiological principles of nutrition and health.
2. describe nutritional information based on physiological principles and discuss the attitudes and values that influence our nutrition choices.
3. differentiate the influence of culture, socioeconomic conditions and personal behaviors as well as the social impact on nutrition and health.
4. apply the principles of nutrition to their own personal lifestyle.
5. analyze individual diets and create and design a plan of action for improving personal nutrition and health.

COURSE CONTENT:

LECTURE CONTENT:
A. Introduction to Nutrition – A basic understanding of what nourishes you.
   1. Food choices
      a. Sensory influences
      b. Cognitive influences
      c. Environmental influences (including physiological, psychological and sociological aspects)
   2. Tools for Healthy Eating
      a. Dietary Reference Intake
      b. Food Guidance System
         a. MyPlate
         b. Changes in Diet
         c. Foods that nourish
         d. Physical Activity
         e. Eating Behavior
         f. Food Labels
         g. Serving sizes
         h. Health tips
   3. Dietary guidelines
      a. Dietary guidelines for Americans
      b. Use of the guidelines
   B. Community Health and Nutrition
      1. Cultural and Religious Influences
      2. Food Insecurity and Health Issues
      3. Hunger at Home and Abroad
      4. Socioeconomic Factors
      5. Other Factors
         a. Economic
         b. Political
         c. Education
         d. Sociological
         e. Technology
   C. Nutrients, their Recommended Daily Allowance (RDA), and other guidelines
      1. Carbohydrates
      2. Lipids
      3. Proteins
      4. Vitamins
5. Minerals
6. Water

D. Energy Balance and Weight Management
1. Factors affecting energy needs
2. Problems associated with obesity and underweight
3. Basal metabolism
4. Physical activity
5. Thermogenesis
6. Definition and problems of obesity and underweight
7. Determining ideal body weight
   a. body fat percentage
   b. bone structure
   c. body style
   d. medical
   e. psychological
   f. sociological
   g. self image
8. Eating Disorders
   a. medical
   b. psychological
   c. sociological
   d. self image
9. Appetite regulation
   a. Physiological
   b. Psychological/Sociological

E. Life Cycle Nutrition
1. Pregnancy
   a. Nutrition before conception
   b. Physiology of pregnancy
   c. Maternal weight gain
   d. Food choices for pregnant women
2. Infant growth
   a. Growth and development
   b. Energy and nutrient needs
   c. Breast milk or formula
   d. Solid foods
3. Preschool children
   a. Growth and development
   b. Energy and nutrient needs
   c. Allergies
   d. Hypersensitivities
4. School age children
   a. Physical growth and development
   b. Energy and nutrient needs
   c. Nutrient related concerns
      1. Variety of foods
      2. Balanced diet and activity
      3. Healthy eating habits
      4. Media influence
5. Teenage years
   a. Growth and development
   b. Energy and nutrient needs
   c. Weight and body composition
   d. Immunity
   e. Taste and smell
f. Gastrointestinal changes

6. Adults
   a. Energy and nutrient needs
   b. Vitamins and minerals
   c. Supplements

F. Human digestion and absorption
   1. The Gastrointestinal tract
      a. Organs of the GI tract
      b. Organization of the GI tract
   2. Digestion
      a. Physical breakdown of food
      b. Chemical breakdown of food
   3. Absorption
      a. Stomach
      b. Small intestine
      c. Large intestine
   4. GI disorders and nutrition
      a. Constipation
      b. Diarrhea
      c. Diverticulosis
      d. Heartburn and reflux disease
      e. Irritable bowel syndrome
      f. Colorectal cancer

G. Sources and use of energy
   1. Energy sources for muscle use
      a. Carbohydrates
         1. Intake
         2. Carbohydrate loading
      b. Fat
      c. Protein
   2. Energy pathways
      a. Bioenergetics
         1. Anerobic energy pathway (without oxygen, lactic acid production)
         2. Aerobic energy pathway (with oxygen)
      3. Dietary strategies for athletes

H. Adaptions and energy use with activity
   1. Muscles and muscle fibers
   2. Endurance training
   3. Optimal nutrition for athletic performance
   4. Dietary strategies

I. Food Safety
   1. Safe food practices
      a. Buying food
      b. Storing food
      c. Preparing food
      d. Cooking food
      e. Serving food
   2. Genetically modified foods
      a. Plant genetics
      b. Genetic engineering
      c. Risks and benefits
      d. Regulations
METHODS OF INSTRUCTION:

A. Lecture:
B. Online:
C. Independent Study:

INSTRUCTIONAL TECHNIQUES:

Encouragement of cooperation amongst students; Student benefit from the use of small group and peer learning instructional approaches. If these are encouraged they will be more willing to participate in classes well as study with others outside of the class.

Frequent student-faculty contact in and out of the classroom; Communication between students and faculty is important for the learning process.

Classroom discussions related to text, web or article readings; Discussions that occur in the class help the students to see other prospective of the material and allow the instructor to immediately see what students have learned.

COURSE ASSIGNMENTS:

Out-of-class Assignments
Web assignments, wellness assessment assignment, research of nutrition and health topics and how they are impacting our country as a whole.

Writing Assignments
Specific assignments to include papers, article reviews, and projects to encourage student development and greater nutrition and health awareness.

Reading Assignments
Reading assignments will consist of readings from the textbook, instructor assigned websites and current articles related to topics being covered.

METHODS OF STUDENT EVALUATION:

Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Essay Examinations
Projects (ind/group)

Demonstration of Critical Thinking:
- Evaluation of nutrition information for accuracy and reliability - Nutritional analysis project to evaluate personal nutrition habits and creating an individualized nutritional plan.

Required Writing, Problem Solving, Skills Demonstration:
Specific assignments to include papers, article reviews, and projects to encourage student development and greater nutritional awareness.

TEXTS, READINGS, AND RESOURCES:

TextBooks:

LIBRARY:
Adequate library resources include: Non-Print Materials

Comments:

Attachments: