GAVILAN COLLEGE
5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: AH 11 DIVISION: 10 ALSO LISTED AS: BIO 11

TERM EFFECTIVE: Fall 2022 CURRICULUM APPROVAL DATE: 03/09/2021

SHORT TITLE: NUTRITION

LONG TITLE: Nutrition

Units	Number of Weeks	Type	Contact Hours/Week	Total Contact Hours
3	18	Lecture:	3	54
		Lab:	0	0
		Other:	0	0
		Total:	3	54
		Total Learning Hrs:	162	

COURSE DESCRIPTION:

This course is an introductory nutrition course designed to introduce the general education and/or health interested student to the principles of nutrition which can be used professionally and/or personally. Nutrition will explore the science of nutrition, provide nutrient recommendations, explore the functions of digestion & metabolism, and discuss the impact that nutrition has on the human body; both anatomically and physiologically. This course will discuss macronutrients, water, vitamins, minerals, healthy body weight, performance nutrition, and specific nutritional needs throughout a person's lifetime. The student will analyze their personal diet record by utilization of a computerized nutrition program. AH 11 will address the impact of nutrition for chronic disease, food safety principles, and food poverty in the United States and our world. (C-ID NUTR 110). ADVISORY: Chemistry 30A.

PREREQUISITES:

Completion of , as , with a grade of or better.

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

02 - Lecture and/or discussion

05 - Hybrid

71 - Dist. Ed Internet Simultaneous

72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:

By the end of this course, a student should:

1. Apply nutrition principles & current dietary guidelines to analyze a personal diet record via a computer database.

2. Identify function and sources of nutrients to apply dietary guidelines and current nutrition recommendations, with a focus on accurate and reliable nutrition resources.

3. Demonstrate basic knowledge of nutrient digestion, absorption, & metabolism with an emphasis on the relationship between nutrition and health.

4. Differentiate among food habits and practices related to traditional foods and preparation techniques in selected cultures or religions.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date: 03/09/2021

3 Introduction

Food Choices and Human Health: 1-2 sentence description on each title.

- Discuss the 6 classes of nutrients; concept of nutrient density; assess reliable nutrition resources & information.

3 Nutrition Tools: Standards & Guidelines

- Address Dietary Guidelines & Dietary Reference Values; explore food labels; define phytochemical & the potential health benefits.

3 The Remarkable Body

- Summarize body fluid circulation, digestion, metabolism, & excretory functions; discuss the effects of moderate vs heavy drinking.

3 The Carbohydrates: Sugar, Starch, Glycogen, and Fiber

- Discuss the importance of carbohydrates in the diet; conversion of carbohydrates to glucose; difference between type 1 & 2 diabetes & hypoglycemia.

3 The Lipids: Fats, Oils, Phospholipids, and Sterols

- Body functions, storage, & use of lipids; link of dietary lipids to blood lipoproteins; hydrogenation & health effects; discuss essential fatty acids.

3 The Protein & Amino Acids

- Discuss proteins & amino acids functions in the body; recommended daily protein intake needs; advantages vs disadvantages of vegetarian diet vs meat eater's diet.

3 The Vitamins

- Distinguish between fat vs water-soluble vitamins; recommended intake, function, food sources, and symptoms of toxicity & deficiency of the vitamins.

3 Midterm

3 Water & Minerals

- Importance & functions of water; fluid & electrolyte and acid & base balance concepts in relation to the human body; 7 major mineral & 9 trace minerals- recommended intake, function, food sources, and symptoms of toxicity & deficiency.

3 Energy Balance

- Health risks of underweight vs overweight persons; metabolic events occur with energy deficit vs surplus; healthy body weight; risk factors associated with eating disorders and obesity.

3 Performance Nutrition

- Physical fitness benefits; importance of specific nutrients for athletes; optimal diet to support physical performance.

3 Nutrition & Chronic Diseases

- Identify the relationship between risk factors & chronic diseases; causes, risk factors, & managements of cardiovascular disease & diabetes.

3 Food Safety

- Discuss microbial food-borne illness & prevention methods; common food-borne illnesses among certain food categories; advantages/disadvantages of organic vs conventional foods.

3 Food Technology

- Natural toxins, pesticide residues, and contaminants in foods; food safety practices; advantages/disadvantages of genetic engineered foods.

3 Life Cycle Nutrition: Mother and Infant

- Nutrition importance before and after pregnancy & during lactation; evidence against alcohol during pregnancy; challenges associated with childhood obesity.

3 Child, Teen, and Older Adult

- Nutrient needs during early & middle childhood, adolescents, & during aging; nutrient drug interactions; challenges with regularly eating along.

3 Hunger and the Future of Food

- Discuss food insecurity in the United States; extent of poverty & starvation in the world; world food supply & the steps to ensure a sustainable food supply.

3 Final Exam

METHODS OF INSTRUCTION:

Lecture, group discussion, class participation, written assignments, exams, quizzes, & applicable videos.

OUT OF CLASS ASSIGNMENTS

Required Outside Hours: 108

Assignment Description: ASSIGNMENTS:

Diet Analysis Project:

1. Required.
2. Purpose: this provides the student an introspective opportunity for self-reflection & self-awareness via a 3 day diet recall. The student details their 3 day diet intake of all meals via a nutrition program which tracks their nutritional values. The student then enters their data into a table to see where their 3 day intake compares to recommended daily nutrient values and summarize their findings.
3. Format: must be typed. See guidelines & grading rubric in Diet Analysis Project.
4. Grading: This project is worth a maximum of 40 points.

Class Participation Assignments:

1. Required.
2. Purpose: The class discussion is designed to highlight nutrition topics which we are currently learning in lecture.
3. Grading: These assignments are due on the dates specified in the course syllabus. The student can earn a maximum of 10 points per each completed assignment. No late assignment will be accepted past the due date.

Nutrition Food Label Assignment:

1. Required.
2. Purpose: have students apply nutritional knowledge while deciphering food products in hopes to make better nutritional food choices.
3. Instructions: The student will choose 2 different food products to compare nutritional values based on their nutritional fact labels. They will compare the 2 food products by filling out a table and answer some summary questions.
4. Format: Typed. To include images of 2 nutrition food labels, completed table and summary questions.
5. Grading: This project is worth a maximum of 20 points.

METHODS OF EVALUATION:

Writing assignments

Percent of total grade: 30.00 %

30-40% Class discussions/participation including: discussion topics & small/large class discussion

Problem-solving assignments

Percent of total grade: 30.00 %

30-40% Individual Assignments including: Personal Dietary Analysis Project- utilizes computerized software to complete personal dietary analysis. Nutrition Food Label Assignment Discussion Topics/Class Participation

Objective examinations

Percent of total grade: 40.00 %

40-50% Objective examinations & quizzes: Multiple choice/Select All that Apply True/false Matching items Completion Short answer/Essay

REPRESENTATIVE TEXTBOOKS:
Sizer and Whitney. Nutrition Concepts and Controversies. Cengage,2020.
ISBN: ISBN: 9781337906371
Reading Level of Text, Grade: 13th grade

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:
- GAV E, effective 202130
- GAV E2, effective 201570
- GAV F, effective 202130

CSU GE:
- CSU E, effective 202130
- CSU E2, effective 200850

IGETC:

CSU TRANSFER:
- Transferable CSU, effective 202130

UC TRANSFER:
- Transferable UC, effective 202130

SUPPLEMENTAL DATA:
Basic Skills: N
Classification: Y
Noncredit Category: Y
Cooperative Education:
Program Status: 1 Program Applicable
Special Class Status: N
CAN: FCS2
CAN Sequence: XXXXXXXX
CSU Crosswalk Course Department: NUTR
CSU Crosswalk Course Number: 110
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: C
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000378205
Sports/Physical Education Course: N
Taxonomy of Program: 123020