



Course Information

Course Title	Nutrition
Course Prefix, Num. and Title	BIOL 1322
Division	Life Sciences
Department	Biology
Course Type	Academic General Education Course (from ACGM, but not WCJC Core)
Course Catalog Description	This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed.
Pre-Requisites	TSI satisfied in Reading and Writing
Co-Requisites	Enter Co-Requisites Here.

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	3:3:0
Lab/Other Hours	
Equated Pay Hours	3
Lab/Other Hours Breakdown: Lab Hours	Enter Lab Hours Here.
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics.

- I. Introduction to Nutrition
 - A. Classes of nutrients and major functions
 - B. Factors that influence our diets
- II. Planning a Healthy Diet
 - A. Dietary Reference Intakes (DRIs)
 - B. Major food groups
 - C. Current dietary guidelines
 - D. Food and dietary supplement labeling
- III. Carbohydrates: Sugars, Starches, and Fibers
 - A. Functions
 - B. Sources
 - C. Digestion and metabolism
 - D. Imbalances associated with carbohydrates
- IV. Lipids: Triglycerides, Phospholipids, Sterols, and Alcohol
 - A. Functions
 - B. Sources
 - C. Digestion and metabolism
 - D. Imbalances associated with lipids
- V. Proteins and Amino Acids
 - A. Functions
 - B. Sources
 - C. Digestion and metabolism
 - D. Imbalances associated with proteins
 - E. Calculation of RDA for protein
- VI. Fat-Soluble Vitamins: Vitamin A, Vitamin D, Vitamin E and Vitamin K
 - A. Functions
 - B. Sources
 - C. Deficiencies and toxicities
- VII. Water-Soluble Vitamins: B Vitamins and Vitamin C
 - A. Functions
 - B. Sources
 - C. Deficiencies and toxicities
- VIII. Water and Minerals
 - A. Functions
 - B. Sources
 - C. Deficiencies and toxicities
- IX. Energy Balance and Weight Control
- X. Life Cycle Nutrition
 - A. Pregnancy and Lactation
 - B. Infancy, Childhood, and Adolescence
 - C. Adulthood and the Later Years
- XI. Under nutrition

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

1. Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritious meals using nationally established criteria to meet recommended goals, and to evaluate food labels and the validity of nutritional claims.
2. Trace the pathways and processes that occur in the body to handle nutrients and alcohol through consumption, digestion, absorption, transport, metabolism, storage and waste excretion.
3. Discuss functions, sources, deficiencies, and toxicities of macro- and micronutrients, including carbohydrates, lipids, proteins, water, vitamins, and minerals.
4. Apply the concept of energy balance and its influences at the physical, emotional, societal, and cellular level to evaluate advantages and disadvantages of various methods used to correct energy imbalances.
5. Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenics, and supplements to maximize physical fitness and performance.
6. Describe health and disease issues related to nutrition throughout the life cycle, including food safety, corrective dietary modifications, and the influence of specific nutrients on diseases.

Methods of Assessment:

1. Exam questions and/or diet analysis project

Required text to be Supplied by Student:

Schiff. *Nutrition for Healthy Living*. McGraw-Hill. Current edition

Suggested Course Maximum: 36

List any specific or physical requirements beyond a typical classroom required to teach the course.

Classroom with computer and data projector

Course Requirements/Grading System:

Exam average (3-4 hourly exams)	60-80%
Final exam (at least 50% comprehensive)	20%
<u>Other (homework, quizzes, projects, etc.)</u>	<u>0-20%</u>
Total	100%

Grade Assignments (%):

A	100-90
B	89-80
C	79-70
D	69-60
F	Below 60

Curriculum Checklist:

Administrative General Education Course (from ACGM, but not in WCJC Core) – No additional documents needed.

Administrative WCJC Core Course. Attach the Core Curriculum Review Forms

Critical Thinking

Communication

Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

WECM Course -If needed, revise the Program SCANS Matrix and Competencies Checklist