College of San Mateo
Course Outline

☐ New Course
☐ Update/No change
☐ Course Revision (Minor)
☒ Course Revision (Major)

Date: November 23, 2009

Department: Biol **Number:** 310

Course Title: Nutrition **Units:** 3.0

Total Semester Hours: **Lecture:** 48 **Lab:** 0 **Homework:** 96 **By Arrangement:** 0

Length of Course
- ☒ Semester-long
- ☐ Short course (Number of weeks___)
- ☐ Open entry/Open exit

Grading
- ☒ Letter
- ☐ Pass/No Pass
- ☐ Grade Option (letter or Pass/No Pass)

Faculty Load Credit (To be completed by Division Office; show calculations.)**: 3x16/3 = 3 FLC**

1. **Prerequisite** (Attach Enrollment Limitation Validation Form.)

None

2. **Corequisite** (Attach Enrollment Limitation Validation Form.)

None

3. **Recommended Preparation** (Attach Enrollment Validation Form.)

Eligibility for ENGL 838/848 or ESL 400 and completion of READ 400 or 405 with a grade of C of higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placements test of other measures

4. **Catalog Description** (Include prerequisites/corequisites/recommended preparation.)

BIOL 310 Nutrition (3) Minimum of 48 lecture hours per term. Recommended Preparation eligibility for ENGL 838/848 or ESL 400 and completion of READ 400 or 405 with a grade of C of higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placements test of other measures. Comprehensive introduction to the scientific principles of nutrition and the interrelationships of metabolism. Examines nutrient functions, food sources, and functions in the body, as well as health consequences of nutrient excesses, deficiencies and diet related chronic conditions. Emphasizes the physiological processes, including digestion and metabolism of nutrients. Students conduct a personal nutrition assessment. (AA: Area E5a or E5d, CSU: Area E,UC)

5. **Class Schedule Description** (Include prerequisites/corequisites/recommended preparation.)

310 nutrition. Comprehensive introduction to the scientific principles of nutrition and the interrelationships of metabolism. Examines nutrient functions, food sources, and functions in the body, as well as health consequences of nutrient excesses, deficiencies and diet related chronic conditions. Emphasizes physiological processes including digestion and metabolism of nutrients.

Recommended Preparation: eligibility for ENGL 838/848 or ASL 400 and completion of READ 400 or 405 with a grade of C of higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placements test of other measures. (AA: Area E5a or E5d, CSU: Area E,UC)

6. Student Learning Outcomes (Identify 1-6 expected learner outcomes using active verbs.)

Upon successful completion of the course, the student will be able to:

1. Apply principles of nutrition to everyday life to make decisions based upon scientifically proven facts about foods and nutrition
2. Analyze food sources to determine nutritional value
3. Develop a personal plan for food consumption in relation to biological and chemical make-up for a nutritionally healthy life
4. Discuss important problems in nutrition such as obesity, under nutrition, food mis-information, and fads.
5. Explain nutritional needs for pregnant mothers, infants, children, athletes, older adults, and chronic disease.

7. Course Objectives (Identify specific teaching objectives detailing course content and activities. *For some courses, the course objectives will be the same as the student learning outcomes. If this is the case, please simply indicate this in this section).*

Same as student learning outcomes

8. Course Content (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, you may attach a sample course syllabus with a timeline.)

The Role of Nutrition in Our Health (1 week)
Designing a Healthful Diet (1 week)
The Human Body: Are We Really What We Eat? (1 week)
Carbohydrates: Bountiful Sources of Energy and Nutrients (1 week)
Fat: An Essential Energy-Supplying Nutrient (1 week)
Proteins: Crucial Components of All Body Tissues (1 week)
Metabolism: From Food to Life (2 weeks)
Nutrients Involved in Energy Metabolism (1 week)
Nutrients Involved in Fluid and Electrolyte Balance (1 week)
Nutrients Involved in Antioxidant Function (1 lecture)
Nutrients Involved in Bone Health (1 lecture)
Nutrients Involved in Blood Health and Immunity (1 lecture)
CAchieving and Maintaining a Healthful Body Weight (1 week)
Nutrition and Physical Activity: Keys to Good Health (2 lectures)
Disordered Eating (1 lecture)
Food Safety and Technology: Impact on Consumers (1 lecture)
Nutrition Through the Lifecycle: Pregnancy and the First Year of Life (1 lecture)
Nutrition Through the Lifecycle: Childhood and Adolescence (1 week)
Nutrition Through the Lifecycle: Adulthood and the Later Years (1 week)
Global Nutrition (1 week)

9. Representative Instructional Methods (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Include examples of out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills.)
If hours by arrangement are required by this course, indicate the additional instructional activity which will be provided during this time.

Lectures accompanied by computerized demonstrations and presentations, and other supplementary materials.
Study guides
Discussions
Videos
Case studies
Writing assignments like journal keeping or summarizing current news articles
Research project -on current topics in human nutrition or issues in nutrition and food sources.

10. Representative Methods of Evaluation (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

Several exams consisting of multiple choice, and/or true/false, and/or matching questions. Short answer and essay questions.
Quizzes
Research project may take form of paper, web presentation, oral report, or poster
Assignments graded on accuracy, use of critical thinking skills, writing.

11. Representative Text Materials (With few exceptions, texts need to be current. Include publication dates.)

The Science of Nutrition. J. Thompson, M. Manore, and L. Vaughan. Benjamin Cummings. 2008.
Contemporary Nutrition: A functional Approach. A. M. smith. McGraw-hill, 2009.

Prepared by: _____
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Submission Date: _____