**ESSEX COUNTY COLLEGE**

**Biology and Chemistry Division**

**HSC 102 *–* Nutrition through the Life Cycle**

**Course Outline**

**Course Number & Name:**  HSC 102 Nutrition through the Life Cycle

**Credit Hours:**  3.0 **Contact Hours:**  3.0 **Lecture:** 3.0 **Lab:**  N/A **Other:**  N/A

**Prerequisites**:  Grade of “C” or better in HSC 101

**Co-requisites:** N/A **Concurrent Courses:** N/A

**Course Outline Revision Date:**  Fall 2010

**Course Description**: The study of Nutrition through the Life Cycle will enable the student to focus on nutrition during the periods of rapid growth and body changes from pregnancy and lactation to the older adult. Nutrition requirements and meal planning for the mother, infant, toddlers, preschool, school-aged child, adolescent, young middle and older are explored. Physical growth and psychosocial development for each stage are examined using Erick Erickson’s theory of human development. Select eating problems and other nutrition-related conditions are examined.

**Course Goals:** Upon successful completion of this course, students should be able to do the following:

1. explain the requirements for achieving and maintaining a healthy body weight;
2. explain the effect of improper dieting on nutrient balances in the body; and

3. explain the changes in nutritional requirements from in utero through old age.

**Measurable Course Performance Objectives (MPOs)**: Upon successful completion of this course, students should specifically be able to do the following:

1. Explain the requirements for achieving and maintaining a healthy body weight:

1.1 *explain what is meant by a healthful weight*;

1.2 *define the terms underweight, overweight, obesity, and morbid obesity;*

1.3 *discuss the potential health risks of each of the following weight classifications: underweight, overweight, obesity, and morbid obesity*;

1.4 *describe methods that can be used to assess body composition or risk for obesity;* and

1.5 *develop a healthful diet by utilizing various nutritional guidelines*

**Measurable Course Performance Objectives (MPOs)** (continued):

2. Explain the effect of improper dieting on nutrient balances in the body:

2.1 *compare and contrast disordered eating behaviors and clinical eating disorders;*

2.2 *discuss the possible contribution of genetic, biological, and environmental factors to the development of an eating disorder;*

2.3 *describe the symptoms and health risks of anorexia nervosa, bulimia nervosa, and binge-eating disorder;* and

2.4 *describe the various treatment and prevention options available for people with anorexia nervosa, bulimia nervosa, or binge-eating disorder*

3. Explain the changes in nutritional requirements from in utero through old age:

3.1 *explain the relationship between fetal development, physiologic changes in the pregnant woman, and increasing nutrient requirements during the course of a pregnancy;*

3.2 *describe the growth and activity patterns of toddlers and preschoolers*;

3.3 *describe how micronutrient needs change as a child matures from school-aged years to adolescence*; and

3.4 *identify and discuss current theories of human aging and how each relates to nutrient intake and/or status of older adults*

**Methods of Instruction**: Instruction will consist of lecture with onscreen presentations, discussion, case studies and course-related instruction.

**Outcomes Assessment:** All grading components are analyzed to determine the level of student performance on these assessment instruments in regards to meeting course objectives.  The results of this data analysis are used to guide necessary pedagogical and/or curricular revisions.

**Course Requirements:** All students are required to:

1. Attend classes and be on time for each class.
2. Participate in class discussions and activities.
3. Take all exams as scheduled.

**Methods of Evaluation:** Final course grades will be computed as follows:

**% of**

**Grading Components final course grade**

* **5 or more Chapter Examinations** (dates specified by the instructor)  **100%**

Exams will provide evidence of the extent to which students meet course objectives.

**Academic Integrity:** Dishonesty disrupts the search for truth that is inherent in the learning process and so devalues the purpose and the mission of the College. Academic dishonesty includes, but is not limited to, the following:

* plagiarism – the failure to acknowledge another writer’s words or ideas or to give proper credit to sources of information;
* cheating – knowingly obtaining or giving unauthorized information on any test/exam or any other academic assignment;
* interference – any interruption of the academic process that prevents others from the proper engagement in learning or teaching; and
* fraud – any act or instance of willful deceit or trickery.

Violations of academic integrity will be dealt with by imposing appropriate sanctions. Sanctions for acts of academic dishonesty could include the resubmission of an assignment, failure of the test/exam, failure in the course, probation, suspension from the College, and even expulsion from the College.

**Student Code of Conduct:** All students are expected to conduct themselves as responsible and considerate adults who respect the rights of others. Disruptive behavior will not be tolerated. All students are also expected to attend and be on time for all class meetings. No cell phones or similar electronic devices are permitted in class. Please refer to the Essex County College student handbook, *Lifeline*, for more specific information about the College’s Code of Conduct and attendance requirements.

**Course Content Outline:** based on the text **The Science of Nutrition**, by Thompson, Monroe & Vaughn; published by Pearson/Benjamin Cummings; ISBN #: 10-0-8053-9435-4

**Week Chapter/Topic**

1 Chapter 11: Nutrients Involved in Bone Health

2 Chapter 12: Nutrients Involved in Blood Health and Immunity

**Exam 1** on Chapters 11 and 12

3 – 4 Chapter 13: Achieving and Maintaining a Healthful Body Weight

5 Chapter 14: Nutrition and Physical Activity: Keys to Good Health

**Exam 2** on Chapters 13 and 14

6 – 7 Chapter 15: Disordered Eating

Chapter 16: Food Safety and Technology: Impact on Consumers

8 Chapter 16: Food Safety and Technology: Impact on Consumers (continued)

**Exam 3** on Chapters 15 and 16

9 Chapter 17: Nutrition Through the Lifecycle: Pregnancy and the First Year of Life

10 – 11 Chapter 18: Nutrition Through the Lifecycle: Childhood and Adolescence

**Exam 4** on Chapters 17 and 18

12 – 13 Chapter 19: Nutrition Through the Lifecycle: Adulthood and the Later Years

14 – 15 Chapter 20: Global Nutrition

**Exam 5** on Chapters 19 and 20