

Tompkins Cortland Community College
Master Course Syllabus

Course Discipline and Number: BIOL 114
Course Title: Essentials of Nutrition

Year: 2023-2024
Credit Hours: 3

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for Students with Disabilities: *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

An integration of basic nutritional science, diet and clinical nutrition. Basic concepts in chemistry, biochemistry and physiology are included, as well as diet assessment of the normal individual. A variety of consumer topics are considered. BIOL 114 fulfills the SUNY General Education Natural Sciences requirement, but is not a laboratory science course. Prerequisites: Prior completion or concurrent enrollment in ENGL 100; MATH 090 and RDNG 116 if required by placement testing. 3 Cr. (3 Lec.) Fall and spring semesters.

Course Context/Audience

This course fulfills the SUNY General Education Natural Sciences requirement. Students who are weak in biology may benefit from taking BIOL 100 or BIOL 101 before taking this course.

Basic Skills/Entry Level Expectations

Writing: WC College level writing skills are required. See course co-requisites or pre-requisites.

Math: M4 MATH 090 if required by placement testing.

Reading: R4 Before taking this course, students must satisfactorily complete RDNG 116 or have assessment indicating that no reading course was required.

Course Goals

Upon successful completion of this course, the student will:

1. Know the major classes of nutrients and their roles in the human body.
2. Be familiar with the structure and function of the human digestive system.
3. Understand the principles for healthful eating, weight control, and physical fitness.
4. Demonstrate an understanding of the relationship between nutrition and human illness.

Course Objectives/Topics

Objective/Topic	% Course
Introduction to nutrients and tools for assessing the human diet.	10%
Structure and function of the human digestive system	10%
Nutrients (carbohydrates, lipids, protein, vitamins, water, and minerals)	50%

Energy, cellular respiration and fermentation, weight management, and fitness	20%
Special topics (nutrition as a factor in chronic diseases; supplements; maternal and child nutrition; sports nutrition; social issues; etc.)	10%

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<p>Students will be able to</p> <ul style="list-style-type: none"> ➤ develop meaningful questions to address problems or issues. ➤ gather, interpret, and evaluate relevant sources of information. ➤ reach informed conclusions and solutions. ➤ consider analytically the viewpoints of self and others. 	<p>Discussion of topics such as nutrition as a factor in chronic diseases; supplements; maternal and child nutrition; sports nutrition; social issues; etc. should encourage students to explore these issues. Short papers on one or more of these topics are recommended.</p> <p>Class discussion should include how to evaluate various sources of information. Students can gather information and develop an individualized diet and exercise program for themselves using text and online resources.</p> <p>Debates and in-class discussions are recommended.</p>
SOCIAL/GLOBAL AWARENESS OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<ul style="list-style-type: none"> ➤ Students will begin to understand how their lives are shaped by the complex world in which they live. ➤ Students will understand that their actions have social, economic and environmental consequences. 	<p>Consideration of individual health choices as they impact public health and welfare; costs of medical services, etc. Students can research the cost of lifestyle choices such as obesity on public health, costs, insurance, etc.</p> <p>Consideration of organic and local food choices as they pertain to environmental impact and sustainability. Students can research where their food comes from, and calculate costs associated with long-range hauling of food. For example, the cost of transporting apples from Washington state to NY, when NY produces large numbers of apples.</p>

Instructional Methods

This is a non-lab classroom course. Methods used to promote learning should include, but are not limited to, discussions, demonstrations, case studies and lecture. On-line enhancement via WebCT or other venue is encouraged. The Diet Analysis CD, available from the publisher, is excellent and can be bundled with the textbook.

Methods of Assessment/Evaluation

Method	% Course Grade
Homework and/or quizzes	30-70%
Exams	30-60%

Term paper	0-40%
Personal diet tracking and analysis project	0-40%

Text(s)

Essentials of Nutrition, Whitney & Rolfes, 10th Edition, © 2005 Wadsworth Thomas Learning.

Bibliography

Brown, Judith E. Nutrition Through the Life Cycle. © 2002: Thomson/Wadsworth.

Klimis-Zacas, Dorothy (editor). Nutrition 05/06 Annual Editions. 17th edition. McGraw-Hill/Dushkin.

Thompson, Janice and Melinda Manore. Nutrition: An Applied Approach. © 2005: Pearson Benjamin Cummings.

Whitney, Ellie and Sharon Rady Rolfes. Understanding Nutrition. 10th edition. © 2005: Thomson/Wadsworth.

Other Learning Resources

Audiovisual

The film, *The Universe Within*, published by Nova provides excellent visuals for the digestive system.

Electronic

Resources for current issues on nutrition and health or social issues surrounding nutrition can be found on npr.org

Classroom enhancement materials should be posted online by the instructor.

American Dietetic Association. Online: www.eatright.org © 2006.

National Institute of Health. Department of Health and Human Services. Online: www.health.nih.gov © 2006.

United States Department of Agriculture. Online www.mypyramid.gov © 2006.

Other

No resources specified