Human Nutrition | Lecture

**Academic Year 2020-2021**

# Course Information

| **Course Numbers** | **Total Credits** | **Time Requirement** |
|---|---|---|
| **NUTR204** | **4 (Lecture only)** | **75 hrs** |

# Course Details
**Recommended Prerequisites**

High School Diploma or equivalent; General Education courses are highly recommended

**Course Description**

In this course, students learn about the six classes of nutrients, and their general roles in the human body. This course includes the concept of food as fuel, the estimation of energy based on the quantity of macronutrients, essential nutrients, and nutrition research. It provides students with the educational requirements and professional credentialing of a nutritionist, dietary guidance from the Food and Nutrition Board, U.S. Department of Health and Human Services, and U.S. Department of Agriculture. Students review the components of food and supplement labels, and discuss the digestion of food, absorption of nutrients, and elimination of solid waste products. Students learn about different types of macromolecules including carbohydrates, proteins, and lipids, food sources of each, and the general pathways for their digestion, absorption, and metabolism and their roles in the diet, human physiology, and health. Biochemical processes such as gluconeogenesis and lipogenesis are also discussed. Basic information about both vitamins and minerals, including their food sources, dietary adequacy, toxicity and deficiency consequences, and impact on overall health, is provided. Functions and sources of water, mechanisms for maintaining fluid balance, and dehydration and water intoxication are discussed. Students learn about the body composition, the various components of energy expenditure, and a variety of useful weight management options along with the major types of eating disorders. Students also learn the principles of nutrition for children and adolescents, elderly, during pregnancy and for fitness.

**Lecture and Laboratory Communication**

A website will be set up on Canvas by your instructor.
Log in with your Username and password: **https://scuhs.instructure.com**

**Faculty Information**

Refer to the Canvas course webpage for this information.

**Class Meeting Times**

Refer to Canvas course webpage for this information.

# Instructional Materials
**Required Text(s)**

Lecture**:** Human Nutrition: Science for Healthy Living by Tammy Stephenson and Wendy Schiff, 2nd edition (Connect©)

# Course Purpose

**Student Learning Outcomes**

At the conclusion of this course, a successful student should be able to:

1.  Demonstrate thorough knowledge and understanding of the fundamental principles and core concepts of human nutrition.

2.  Apply their knowledge to appraise scientific and technical literature in the field of nutrition

3.  Assess problems in the field of nutrition and develop solutions or strategies to solve those problems based on logic and the knowledge acquired during this course.

4.  Professionally construct and express their ideas, thoughts, and concepts in nutrition through written and verbal communication.

## Course Schedule

**(subject to slight modifications by the instructor)**

| Day | Lecture | Assessment |
|---|---|---|
| 1 | Module 1: Introduction to Nutrition<br>Module 2: Evaluating Nutrition Information<br>Module 3: Basis of a Healthy Diet<br>Module 4: Human Digestion, Absorption, and Transport | Reading Assignments, Quizzes, Exams |
| 2 | Module 5: Carbohydrates (Sugars, Starches, and Fiber)<br>Module 6: Lipids (Triglycerides, Phospholipids, and Sterols)<br>Module 7: Proteins (Amino Acids) | Reading Assignments, Quizzes, Exams |
| 3 | Module 8: Metabolism (Energy from Food)<br>Module 9: Fat-Soluble Vitamins<br>Module 10: Water-Soluble Vitamins | Reading Assignments, Quizzes, Exams |
| 4 | Module 11: Water and the Major Minerals<br>Module 12: Trace Minerals<br>Module 13: Energy Balance, Obesity, and Weight Management | Reading Assignments, Quizzes, Exams |
| 5 | Module 14: Eating Disorders and Disordered Eating<br>Module 15: One of the discretionary modules<br>Module 16: One of the discretionary modules | Reading Assignments, Quizzes, Exams |

## Tentative Grading Procedures

**Lecture**

| Assessment | Points per assignment | Total number of assignments |
|---|---|---|
| **Reading Assignment** | 20 | 15 (1 per module) |
| **Quiz** | 30 | 15 (1 per module) |
| **Module Exam** | 50 | 15 (1 per module) |

## Grading scale:

Please note letter grades will be assigned only at the end of the trimester.

**A** = 90% to 100%

**B** = 80% - less than 90%

**C** = 70% - less than 80%

**D** = 60% - less than 70%

**F** = less than 60%

**W** = Withdrawal

## Academic Integrity

Visit SCU's **Academic Integrity** page to review policies for professionalism and academic integrity.

## Teaching Methods and Activities

The course will follow a linear format, meaning you will complete all the modules in sequence. The material in each module will include a combination of readings, videos, and written and interactive assignments. You'll also complete an exam at the end of each module. You may engage in discussions with your peers throughout the course. You can read about each of the course components below. Each module takes about 5 hours to finish. The flow of the modules on Canvas should be followed.

The course requires a significant time commitment from students. This commitment is both in terms of reading lecture PowerPoints prior to reading the chapters, as well as reviewing the material and doing "Check Your Understanding" activities after. Not every topic will be covered in great depth, but students are expected to study each topic in detail.

**Introduction:** These sections introduce the content covered in each module and outline the learning objectives. Reading the Introduction will help you identify the central concepts of the module and connect what you will learn to the broader context of the course.

**Lecture Outline:** These sections contain the lecture slides for each chapter. They provide a comprehensive summary of the chapter. Reading the lecture slides prior to doing the reading assignments on Learning Smart will help you to formulate your thoughts and promote active learning.

**Reading Assignment:** These sections are created on "Connect" through SmartBook. They improve reading productivity and provide students with better knowledge retention. SmartBook is an intelligent eBook that applies the adaptive technology of LearnSmart to ensure a focus on content the student hasn't learned while also promoting long-term retention of learned material. Learn more about this technology at LearnSmart.

**Key Point:** Its content helps you gain a deeper understanding of the concepts presented in the learning modules and in the textbook. Often, Key Point pages feature animations, games, videos, or other interactive learning resources.

**Check Your Understanding:** On Check Your Understanding pages, you will practice the module content you've covered using interactive study tools. These interactive study tools will help you assess your progress and identify areas for improvement. Additionally, interactives give you an opportunity to review and apply information presented in your course and in the online textbook before taking exams.

**Exams:** There will be 1 exam given at the end of each module for a total of 15. There will be questions that come directly from the textbook chapters, activities, and videos. Questions may come in the form of multiple choices, free response, or fill in the blank. Students will have 30 minutes to complete each exam. These exams are all on Connect. Please pay attention to the due dates. They are final and will not be extended. You must use Remote Exam Proctoring software to proctor your exams (all 15 exams). You need to have both video and audio on. You need to start the recording prior to starting the test and end after finishing the test. Your face should be in the field of view.

**Online Learning at SCU:** MySCU is SCU's online campus portal. It includes SCU's learning management system (Canvas). It acts as a single point of access for a variety of campus information. It houses resources such as university policies, campus safety procedures, financial aid forms, class schedules, campus news, library databases, and other electronic resources for faculty, staff, and students. Incoming students receive login credentials and learn to navigate MySCU during orientation.

**Self-Directed Learning:** Online courses require motivation, time management, and self-discipline on the part of the learner. Creating a self-directed learning plan will help you improve your independent study skills. Creating a routine weekly study schedule and a quiet working space will help you stay on pace with the class.

**Online Etiquette:** Follow the professional and online etiquette guidelines below when interacting with your peers and facilitator in the online environment, including discussion boards - Disagree with others with respect in the form of constructive feedback. Support your position with academic citations from the text or academic literature. Write clearly and concisely and stay on topic. Do not simply repeat what others have said but provide new information or analysis. If you quote another student's post, be sure to place it in quotation marks. Be mindful that the written word may be misinterpreted by others without hearing your tone and in the absence of face-to-face cues. Avoid the use of strong or offensive language. Check your spelling and grammar before sending emails or posting to the discussion boards.

## Best Practices for Studying

- Watch the videos and read the lecture outlines and the highlighted areas of the chapters in each module to become comfortable with some of the terms associated with each topic. Review each chapter after you finish reading assignments to enhance your understanding of what was covered. Take notes when you do the reading assignments.

- Participate by doing the assignments on time and by asking questions either through Canvas.

- Stay on top of the homework and assignments. Do the assigned problems as close to the time as when the topic is covered to increase the depth of your understanding of specific concepts. It will help you learn the material more efficiently and effectively.

- Do not wait until the night before the homework is due to start the assignment. You will get more out of it if you take the time to really learn the concepts and review the material without being rushed.

- Stay focused by finding an environment where you can study with few distractions.

## University Policies

### Accommodations

As a learning-centered community, Southern California University of Health Sciences recognizes that all students should be afforded the opportunity to achieve their academic and individual potential. The University recognizes and supports the standards set forth in Section 504 of the Rehabilitation Act and

the American with Disabilities Act (ADA). In accordance with its mission and federal and applicable state laws, the University is committed to making reasonable accommodations for qualified applicants for admission and enrolled students with disabilities. A student who needs accommodation(s) due to a disability should contact the Academic Support Office located in the Learning Resource Center.

### Faculty and Dr./Patient Relationships

SCU faculty are highly skilled. However, per University Policy, health care is offered to students through the University Health System only. Neither preclinical nor clinical faculty can provide advice, assessment, treatment, or other elements that would be considered part of a Doctor-Patient relationship outside of a clinical setting established for that purpose.

### Learning Activities

Students are expected to spend at least two hours for each lecture hour of course time per week in activities and assessments outside the classroom. Examples of activities include but are not limited to writing papers; reading articles or text; small group work; presentations; completing assignments; preparation for assessments; online activities and other activities that do not include direct instructor interaction and involvement.

All university policies apply to this course and all others. For full policy information please consult the university SCU Policy Manual. For a quick reference guide to the following policies: make-up examination, F-challenge examination, grade posting, results of failing grades, student support information, syllabus amendments, special needs, student conduct, and attendance, please consult the academic policies document housed on the **Online Student Services .**