

# CEP535 Nutritional Health Strategies for the Prevention and Treatment of Disease

(3 credit hours)
Course Syllabus

#### **Course Description**

This course will introduce good practices for a healthy lifestyle. The course will integrate the nutrition care process as well as the latest scope and standards of a healthy dietetics. It will focus on the pathophysiology of chronic and debilitating diseases and introduce pathophysiological and metabolic basis for nutritional management in the prevention and treatment of such diseases. The topics covered will emphasize clinical or diet therapy based on nutritional needs, along with the need for a healthy lifestyle. The course will also cover latest concepts in the nutrition care processes along with assessment, intervention, monitoring and evaluation.

### **Course Learning Outcomes**

By the end of this course, you will be able to:

- 1. Discuss and assess the role of nutrition to maintain good health.
- 2. Make connections between life-style choices and risk factors for degenerative diseases.
- 3. Define and identify risk factors for chronic diseases.
- 4. Define and identify disease types, cause, symptoms and prevention methods through proper nutrition.
- 5. Demonstrate competency in connecting pathophysiology to appropriate nutrition therapy practices and identify expected outcomes to underlying disease processes.
- 6. Apply knowledge for treatment that reflects the latest research and evidence- based nutritional care to specific problems and cases.

## Required Textbook(s) and Resources

Nelms, M., & Sucher, K. P. (2019). *Nutrition therapy and pathophysiology* (4th ed.). Cengage Learning.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the <u>Tiffin University Library</u>.

#### **Time Commitment**

Effective time management is possibly the single most critical element to your academic success. To do well in this online class you should plan your time wisely to maximize your learning through the completion of readings, forum posts, and assignments. Because of our accelerated, seven-week term, TU online courses are designed with the expectation that you dedicate a little over **six (6)** hours per credit hour to course activities and preparation **each week**. For example, for successful completion of a three-credit, seven-week online course you should reserve roughly **twenty (20) hours per week**.

To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

- 1. All times assume Eastern Time (GMT-4).
- 2. Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.
- 3. Unless otherwise noted, initial assignments or forum posts are due by 11:55 p.m. ET on Wednesdays.
- 4. Additional assignments or follow-up forum posts are due by **11:55 p.m. ET** on **Saturdays**, and
- 5. Major assignments and reflections are typically due by 11:55 p.m. ET on Sundays.

## **Learning Activities**

This nutrition course provides a variety of learning activities across 7 weeks to develop knowledge and skills related to the role of nutrition in health and disease management. You will participate in weekly forums focused on applying concepts to patient case studies. There are also weekly quizzes to assess understanding of key principles and assignments to demonstrate the ability to develop evidence-based nutrition plans for sample patients. The activities aim to build proficiency in nutrition assessment, diagnosis, intervention, monitoring, and evaluation for conditions like diabetes, cardiovascular disease, cancer, and gastrointestinal disorders. You will synthesize your learning in a comprehensive final project creating a nutrition and exercise program for a patient case study.

#### **Grading and Points Distribution**

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Forum	Forum	Forum	Forum	Forum	Forum	Forum	
Activity 1.1 (n/a)	Activity 2.1	Activity 3.1	Activity 4.1	Activity 5.1	Activity 6.1	Activity 7.1	280
Activity 1.2	(40)	(40)	(40)	(40)	(40)	(40)	

(40)							
Quiz Activity 1.3 (20)	Quiz Activity 2.2 (20)	Quiz Activity 3.2 (20)	Quiz Activity 4.2 (20)	Quiz Activity 5.2 (20)	Quiz Activity 6.2 (20)	<b>Quiz</b> Activity 7.2 (20)	140
Assignment Activity 1.4 (70)	Assignment Activity 2.3 (70)	Assignment Activity 3.3 (70)	Assignment Activity 4.3 (70)	Assignment Activity 5.3 (70)	Assignment Activity 6.3 (70)	Assignment Final Activity 7.3 (160)	580
130	130	130	130	130	130	220	1000

## **Grading Scale**

A: 90-100% | B: 80-89% | C: 70-79% | F: <69%

# **Course Schedule and Weekly Checklist**

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Start Here	☐ MON: Activity 1.1: Introduce Yourself
Week 1:	□ WED: Activity 1.1: Introduce Yourself - Optional Secondary Post
Health Promotion	☐ WED: Activity 1.2: Nutrition's Role in Health - Initial Post
Disease Risk Factors	☐ WED: Activity 1.3: Quiz
Nutrition Care Process	<ul> <li>SAT: Activity 1.2: Nutrition's Role in Health - Follow-up Post</li> </ul>
	☐ SUN: Activity 1.4: Fluid and Electrolyte Balance
Week 2:	<ul><li>□ WED: Activity 2.1: Energy Imbalance and Consequences</li><li>- Initial Post</li></ul>
Endocrine Disorders	☐ WED: Activity 2.2: Quiz
Diabetes Management	<ul><li>□ SAT: Activity 2.1: Energy Imbalance and Consequences</li><li>- Follow-up Post</li></ul>
Eating Disorders	☐ SUN: Activity 2.3: Diabetes Nutrition Therapy
Week 3: Heart Health	□ WED: Activity 3.1: Cardiovascular System's Nutritional Needs - Initial Post

Atherosclerosis Prevention Cardiovascular Disease	<ul> <li>WED: Activity 3.2: Quiz</li> <li>SAT: Activity 3.1: Cardiovascular System's Nutritional Needs - Follow-up Post</li> <li>SUN: Activity 3.3: Hypertension and Atherosclerosis Management</li> </ul>
Week 4:  Metabolic Disorders  Vitamin Deficiencies  Mitochondrial  Disorders	<ul> <li>WED: Activity 4.1: Metabolic Disorders and Nutrition - Initial Post</li> <li>WED: Activity 4.2: Quiz</li> <li>SAT: Activity 4.1: Metabolic Disorders and Nutrition - Follow-up Post</li> <li>SUN: Activity 4.3: Mitochondrial Disorder Nutritional Plan</li> </ul>
Week 5: GI Disorders IBS and Celiac Disease Liver and Pancreas	<ul> <li>WED: Activity 5.1: Gastrointestinal Health and Diet - Initial Post</li> <li>WED: Activity 5.2: Quiz</li> <li>SAT: Activity 5.1: Gastrointestinal Health and Diet - Follow-up Post</li> <li>SUN: Activity 5.3: Gastrointestinal Concerns: A Nutrition Approach</li> </ul>
Week 6: Cancer Nutrition Neurological Conditions Dementia and Epilepsy	<ul> <li>WED: Activity 6.1: Neurological Disorders: A Dietary Perspective - Initial Post</li> <li>WED: Activity 6.2: Quiz</li> <li>SAT: Activity 6.1: Neurological Disorders: A Dietary Perspective - Follow-up Post</li> <li>SUN: Activity 6.3: Neoplastic Care and Neurological Prevention</li> </ul>
Week 7: Respiratory Health Kidney Disease Nutrigenomics	<ul> <li>WED: Activity 7.1: Respiratory and Kidney Health Insights - Initial Post</li> <li>WED: Activity 7.2: Quiz</li> <li>SAT: Activity 7.1: Respiratory and Kidney Health Insights - Follow-up Post</li> <li>SUN: Activity 7.3: Comprehensive Nutrition and Exercise Plan</li> </ul>

#### **Tips for Success**

Successful online learning requires a good deal of self-discipline and self-direction. As seekers of the truth, we should be willing to challenge and review one another's academic work in a spirit of respectful comradery and constructiveness. Your course is a place for you to stretch and grow as you benefit from the expertise, knowledge, experience and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge, understanding and application.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

#### For More Information:

Be sure to review the Support, Policies, and Procedures addendum.