WILLIAM PATERSON UNIVERSITY COLLEGE OF SCIENCE AND HEALTH DEPARTMENT OF PUBLIC HEALTH

NUTRITION SYLLABUS (Winter 2019)

1. PBHL2210:80 NUTRITION: 3 credits Online

Description: A foundation study of human nutrition emphasizing its relationship to optimum physical and emotional health. Includes basics of sound nutrition requirements of various food elements, diet planning, dietary patterns for specific age groups, nutritional fads and weight control.

2. Course Prerequisites: None

3. Semester: Winter 2019

4. Instructor: Dr. Michele Grodner, Professor, Department of Public Health, UH 367 Office Hrs: by appt; grodnerm@wpunj.edu; 973 720-2525. (Please only contact by email; office phone will not be available.)

5. Required Text:

MindTap for Concepts and Controversies of Nutrition (Sizer and Whitney), Cengage, 14e. MindTap is web-based program that includes an eBook. MindTap includes numerous current assignments including videos and other engaging material. Directions for an access code for MindTap is posted in Course Materials on Bb and will be sent to students before the course begins.

6. Course Objectives/Student Learning Outcomes (SLOOS):

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

- 1. Describe the six nutrient classes including composition and role(s) in the body.
- 2. Identify and explain common nutritional disorders in the United States.
- 3. Critically assess population weight issues, relate to personal decisions about desirable weight, obesity, realistic weight loss plans and associated risks of eating disorders.
- 4. Discuss the Dietary Reference Intakes, Daily Values, and their usefulness in daily food selections through preparation of a written dietary analysis project in which knowledge and ideas are applied to student's personal nutritional status.

7. Topical Outline of Course Content:

- 1. Overview of Nutrition
 - a. Diet and health
 - b. Determinants of food choice
 - c. Science of nutrition
- 2. Standards and Guidelines
 - a. Dietary Reference Intakes

- b. Dietary Guidelines for Americans
- c. USDA Food Patterns
- d. MyPlate
- e. Food labels
- f. Food safety
- 3. Digestion, absorption, and metabolism
 - a. Organs of digestion
 - b. Mechanical and chemical digestion
 - c. Absorption and transport of nutrients
 - d. Metabolism of nutrients
- 4. Carbohydrates
 - a. Types and structures of carbohydrates
 - b. Function of carbohydrates: Energy and fiber
 - c. Digestion, absorption, and metabolism
 - d. Diabetes and hypoglycemia
- 5. Lipids
 - a. Types of lipids
 - b. Functions of triglycerides, phospholipids, and sterols
 - c. Essential fatty acids
 - d. Fats in foods
 - e. Digestion, absorption, and metabolism
- 6. Proteins
 - a. Types and structures of proteins
 - b. Functions of proteins
 - c. Protein in foods
 - d. Digestion, absorption, and metabolism
 - e. Protein deficiency and excess
- 7. Vitamins
 - a. Types and categories of vitamins
 - b. Functions of water-soluble vitamins
 - c. Functions of fat-soluble vitamins
 - d. Vitamins in foods
 - e. Absorption and transport
- 8. Water/Minerals
 - a. Water
- 9. Functions of water
 - a. Fluid balance
 - b. Characteristics of water quality
 - c. Minerals
- 10. Electrolytes and their functions
 - a. Major minerals and their functions
- 11. Trace minerals and their functions
 - a. Minerals in foods
 - b. Absorption and transport
- 12. Energy/Weight Management
 - a. Energy balance
 - b. Body weight versus body fat composition
 - c. Appetite and hunger

- d. Obesity health and cultural issues
- e. Healthy body weight characteristics
- f. Eating disorders
- 13. Fitness/Sports Nutrition
- 14. Nutrition and Diet-related Diseases
 - a. Heart disease
 - b. Hypertension
 - c. Type 2 Diabetes Mellitus
 - d. Metabolic syndrome
 - e. Cancer
 - f. Obesity
- **8. Teaching Methods:** Readings, Internet and e-textbook assignments.

9. Course Expectations:

- a. Reading Assignments: students are responsible for those chapters in the text that correspondence to the assignment topics.
- b. All assignments are listed for each chapter on MindTap. Assignments are to be completed through MindTap.
- c. Assignments will be graded through MindTap. (At some point in the course, grades may also show up on Bb.)
- d. Due dates are listed for the Assignments of each chapter. These due dates are to assist students to pace completion of all assignments by the end of the course on Monday, January 14th. ALL ASSIGNMENTS MUST BE COMPLETED BY January 14th by 11:59pm.

10. Grading

Assignments must be neatly prepared, typed, and well organized. Points will be deducted for poor grammar and spelling errors.

Assignments for 10 Chapters (100 pts for each Chapter) Total: 1000 pts

No extra credit assignments will be accepted or negotiated.

The grading scale is as follows:

A 93-100%	B+ 87-89	C+ 77-79	D+ 67-71	F<60
A- 90-92	B 83-86	C 72-76	D 60-66	
	B- 80-82			

SYLLABUS

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DUE DATE	Topic (tentative)	Chapter #
12/29	Chapter 1: Food Choices and Human Health	Ch1
12/30	Chapter 2: Nutrition Tools – Standards and Guidelines	Ch2
1/2	Chapter 3: The Remarkable Body	Ch3
1/3	Chapter 4: The Carbohydrates: Sugars, Starches, Glycogen, and Fib	er Ch4
1/4	Chapter 5: The Lipids: Fats, Oils, Phospholipids, and Sterols	Ch5
1/5	Chapter 6: The Proteins and Amino Acids	Ch6
1/6	Chapter 7: The Vitamins	Ch7
1/9	Chapter 8: Water and Minerals	Ch8
1/10	Chapter 9: Energy Balance and Healthy Body Weight	Ch9
1/11	Chapter 10: Nutrients, Physical Activity, and the Body's Responses	Ch10
1/14	Last day of course	