

# Capital Area School of Practical Nursing

## Anatomy and Physiology with Normal Nutrition

### Course Syllabus

#### Course Information:

Time: 8:15 – 11:40 a.m.

Theory Contact Hours: 108.5

#### Instructor Information:

Kim Patterson RN BSN

Office: 217-585-1215 ext. 210

Email: kpatterson@caspn.edu

#### Classroom Performance and Student Expectations:

All policies are to be followed as outlined in the CASPN student handbook.

#### Methods of Evaluation:

Assignments, tests, and point distribution per individual faculty will be distributed with each course calendar.

#### Textbook:

Assessment Technologies Institutes. *Nutrition for Nursing*, 6<sup>th</sup> ed., Assessment Technologies Institute, 2016.

Herlihy, Barbara. *The Human Body in Health and Illness*. 6<sup>th</sup> ed., Elsevier, 2018.

Herlihy, Barbara. *Study Guide for The Human Body in Health and Illness*. 6<sup>th</sup> ed., Elsevier, 2018.

#### Course Description:

This course will introduce basic human anatomy and physiology to prepare students for a career in nursing. Emphasis is placed on developing an understanding of normal human anatomy and physiology, nutrition, pharmacology, and dosage calculations. Principles of biology, chemistry, and microbiology are also integrated throughout the course.

#### Course Objectives:

1. Describe the organization of the human body from cells to the whole organism
2. Identify the body systems including structure and general function.
3. Discuss basic principles of chemistry and physics as they relate to cellular functions and body mechanisms.
4. Describe the body's use of nutrients including the relationship between food, nutrition, and health.
5. Describe dietary practices in relation to cultural diversity
6. Review basic pharmacology principles and dosage calculations.

#### Content Units:

Review of Body Systems by Structure and Function

##### Unit Objectives:

1. Identify the body systems.
2. Describe the structure of each system.
3. Describe general functions of each system
4. Identify the regulatory mechanisms in maintaining homeostasis
5. Utilize correct medical terminology associated with each body system

##### Content Topics:

- a. Cells
- b. Tissue and membranes
- c. Integumentary system and body temperature
- d. Skeletal system
- e. Muscular system
- f. Nervous system
- g. Sensory system
- h. Endocrine system
- i. Heart
- j. Blood
- k. Blood vessels
- l. Lymphatic

- m. Immune
- n. Respiratory
- o. Digestive
- p. Urinary
- q. Water & electrolytes
- r. Acid base balance
- s. Reproductive

Content Unit:

Principles of Nutrition

Unit Objectives:

1. Review the role played by nutrition in maintaining good physical health.
2. Describe normal processes related to digestion, absorption, and metabolism of carbohydrates, proteins, and fats.
3. Describe the role water, vitamins, minerals, and electrolytes play in supporting body functions and processes.
4. Discuss physical, psychological, developmental, and cultural factors that affect a patient's nutritional status.
5. Use guidelines based on the USDA Food Pyramid when determining dietary recommendations for patients.
6. Discuss nutrition across the life span
7. Review nursing interventions that can assist patients in meeting their nutritional needs.
8. Demonstrate proper techniques that support a patient's nutrition needs.
9. Identify norms for body weight and BMI based on established standards.
10. Determine the significance of the balance between caloric intake and energy expenditure in relation to weight gain and loss.

**NOTE**

This syllabus is not a contract between the instructor and student enrolled. Content is subject to change. Students will be given notice of changes made in content, policies, or grading as they may occur.