BOONE CAREER AND TECHNICAL CENTER SCHOOL OF PRACTICAL NURSING NUTRITION COURSE SYLLABUS

MISSION: Boone Career and Technical Center enriches lives locally, regionally, and globally by providing occupational education and training for lifelong learning and professional success.

VISION: Your Goals. Our Mission

PROGRAM OF STUDY: PRACTICAL NURSING

COURSE: Practical Nursing- Nutrition

Term: 1

Theory Hours:25 HoursClinical Hours:25 HoursSocial Sciences Hours:8 Hours

Program Coordinator/Instructor: Paula Webb, RN pholstei@k12.wv.us

Instructor Office Location: 107

Instructor Phone: (304) 369-4585

Instructor Office Hours: Monday – Friday, 2:30 p.m. – 3:00 p.m.

Course Description:

The nutrition course introduces students to the foundational scientific principles of nutrition and their applications in person-centered care. Content includes basic principles of nutrition, including the relationship of food, nutrition, and health; essential nutrients (carbohydrates, fats, proteins, vitamins, minerals, water and electrolyte balance); digestion, absorption, and metabolism; and energy balance. This course explores nutritional needs throughout the lifespan, community nutrition and health care, food habits, and cultural patterns, weight management, and physical fitness. Students will apply nutrition concepts to clinical nursing care for diverse patient needs.

Required Text and Other Materials Needed:

Williams' Basic Nutrition and Diet Therapy, 16th Ed., Nix ISBN 9780323674577

Course Goals:

Upon successful completion of this course, the student will be able to apply principles of nutrition to meet the care needs of patients across the lifespan and with a broad range of illnesses, conditions, and disease processes. Students will be able to address patient's learning needs with regard to nutrition and health and educate patient and their families to promote optimal health and well-being.

Course Schedule/Topic Outline:

| TERM 1: January 5 – April 24, 2026 | | |
|------------------------------------|---|--|
| 1. Jan. 5 – 9 | Chapter 1: Food, Nutrition, and Health (1 Hour) | |
| Theory 1 | Health Promotion | |
| Lab 1 | Functions of Nutrients | |
| | States of Nutrition | |
| | Nutrient and Food Guides for Health Promotion | |
| | Skills Lab: Diet Analysis (1 Hour) | |
| 2. Jan. 12 – 16 | Chapter 2: Carbohydrates (1 Hour) | |
| Theory 2 | Nature of Carbohydrates | |
| Lab 2 | Functions of Carbohydrates | |
| | Food Sources of Carbohydrates | |
| | Digestion of Carbohydrates | |
| | Recommendations for Dietary Carbohydrate | |
| | Chapter 3: Fats (30 min) | |
| | The Nature of Fats | |
| | Functions of Fat | |
| | Food Sources of Fat | |
| | Digestion of Fats | |
| | Recommendations for Dietary Fat | |
| | Chapter 4: Proteins (30 min) | |
| | The Nature of Protein | |
| | Functions of Protein | |
| | Food Sources of Protein | |
| | Digestion of Protein | |
| | Recommendations for Dietary Protein | |
| | Skills Lab: Choose my Plate Meal Planning (2 Hours) | |
| 3. Jan. 19 – 23 | Chapter 5: Digestion, Absorption, and Metabolism (1 Hour) | |
| Theory 2 | Digestion | |
| Lab 2 | Absorption and Transport | |
| | Metabolism | |
| | Errors in Digestion and Metabolism | |
| | Chapter 6: Energy Balance (1 Hour) | |
| | Human Energy System | |
| | Energy Balance | |
| | Physical Activity | |
| | Thermic Effect of Food | |
| | Total Energy Expenditure | |
| | Recommendations for Dietary Energy Intake | |
| | Skills Lab: Research Genetic Defects that affect metabolism; Energy | |
| | Expenditure Calculations, Food Label Analysis (2 Hours) | |

| 4. Jan. 26 – 30 | Chapter 7: Vitamins (1 Hour) |
|-----------------|---|
| Theory 2 | The Nature of Vitamins |
| Lab 2 | Section 1: Fat-Soluble Vitamins |
| | Vitamin A (Retinol) |
| | Vitamin D (Calciferol) |
| | Vitamin E (Tocopherol) |
| | Vitamin K |
| | Section 2: Water-Soluble Vitamins |
| | Vitamin C (Ascorbic Acid) |
| | Thiamin (Vitamin B1) |
| | Riboflavin (Vitamin B2) |
| | Niacin (Vitamin B3) |
| | Vitamin B6 |
| | • Folate |
| | Cobalamin (Vitamin B12) |
| | Pantothenic Acid |
| | Biotin |
| | Choline |
| | Chapter 8: Minerals (1 Hour) |
| | Nature of Minerals in Human Nutrition |
| | Major Minerals |
| | Trace Minerals |
| | Mineral Supplementation |
| | Skills Lab: Create a patient education brochure on select |
| | vitamin/mineral (2 Hours) |
| 5. Feb. 2 – 6 | Chapter 9: Water and Electrolyte Balance (1 Hour) |
| Theory 1 | Body Water Functions and Requirements |
| Lab 2 | Water Balance |
| | Acid-Base Balance |
| | Skills Lab: (Anatomage) Osmosis, Cell membrane transport (2 Hours) |
| 6. Feb. 9 – 13 | Chapter 17: Nutrition Care (1 Hour) |
| | Therapeutic Process |
| Theory 2 | Phases of the Care Process |
| Lab 2 | Diet-Drug Interactions |
| | Chapter 18: Gastrointestinal and Accessory Organ Problems (1 Hour) |
| | Upper Gastrointestinal Tract |
| | Lower Gastrointestinal Tract |
| | Food Intolerances and Allergies |
| | Gastrointestinal Accessory Organs Claim to Bright Control Contro |
| | Skills Lab: Patient Care Plans & NCLEX Case Studies (2 Hours) |

| 7. Feb. 16 – 20 | HESI Midterm (2 Hours) |
|-----------------|---|
| | Chapter 13: Community Food Supply and Health (30 min) |
| Theory 3 | Food Safety and Health Promotion |
| Lab 2 | Food Technology |
| | Food-Borne Disease |
| | Food Needs and Costs |
| | Chapter 14: Food Habits and Cultural Patterns (30 min) |
| | Social, Psychologic, and Economic Influences on Food Habits |
| | Cultural Development of Food Habits |
| | Changing American Food Patterns |
| | Skills: Virtual grocery shopping w/ budget- select items needed for |
| | one week of healthy meals considering food labels and safety (2 Hrs) |
| 8. Feb. 23 – 27 | Chapter 15: Weight Management (30 min) |
| | Obesity and Weight Control |
| Theory 1 | A Sound Weight-Management Program |
| Lab 2 | Food Misinformation and Fads |
| | Underweight |
| | Chapter 16: Nutrition and Physical Fitness (30 min) |
| | Physical Activity Recommendations and Benefits |
| | Dietary Needs During Exercise |
| | Athletic Performance |
| | Skills: NCLEX Case Studies- Energy Balance and Weight Mgmt (2 Hrs) |
| 9. Mar. 2 – 6 | Chapter 10: Nutrition During Pregnancy and Lactation (30 min) |
| | Nutrition Demands of Pregnancy |
| Theory 2 | General Concerns |
| Lab 2 | Lactation |
| | Chapter 11: Nutrition During Infancy, Childhood, Adolescence (1 Hr) |
| SSI 8 Hours | Growth and Development |
| | Nutrition Requirements for Growth |
| | Nutrition Requirements During Infancy |
| | Nutrition Requirements During Childhood |
| | Nutrition Requirements During Adolescence (12 to 18 Yr Old) |
| | Chapter 12: Nutrition for Adults: The Early, Middle, Later Years (30 m) |
| | Adulthood: Continuing Human Growth and Development |
| | The Aging Process and Nutrition Needs |
| | Clinical Needs of the Elderly |
| | Community Resources |
| | Alternative Living Arrangements |
| | Skills: NCLEX Case Studies, Meal Planning across the Lifespan (2 Hr) |
| | SSI: Growth and Development= Infancy – Older Adult (8 Hours) |

| 10. Mar. 9 – 13 | Chapter 19: Coronary Heart Disease and Hypertension (1 Hour) | |
|----------------------------|---|--|
| | Coronary Heart Disease | |
| Theory 1 | Hypertension | |
| Lab 2 | Education and Prevention | |
| | Skills: NCLEX Case Studies, Meal Plan- CAD, Heart Failure, HTN (2 Hr) | |
| 11. Mar. 16- 20 | Chapter 20: Diabetes Mellitus (1 Hour) | |
| | The Nature of Diabetes | |
| Theory 1 | The Metabolic Pattern of Diabetes | |
| Lab 2 | General Management of Diabetes | |
| | Medical Nutrition Therapy | |
| | Skills: NCLEX Case Study, Meal Planning for Diabetes Mgmt (2 Hours) | |
| 12. Mar. 23 – 27 | Chapter 21: Kidney Disease (1 Hour) | |
| | Basic Structure and Function of The Kidney | |
| Theory 1 | Disease Process and Dietary Considerations | |
| Lab 2 | Nephron Diseases | |
| | Kidney Failure | |
| | Kidney Stone Disease | |
| | Skills: NCLEX Case Study, Care Plans for Kidney Disease (2 Hours) | |
| 13. Mar. 29 – | Chapter 22: Surgery and Nutrition Support (1 Hour) | |
| Apr. 3 | Nutrition Needs of General Surgery Patients | |
| | General Dietary Management | |
| Theory 2 | Special Nutrition Needs After Gastrointestinal Surgery | |
| Lab 2 | Special Nutrition Needs for Patients With Burns | |
| | Chapter 23: Nutrition Support in Cancer and HIV (1 Hour) | |
| | Section 1 Cancer | |
| | Nutrition Complications of Cancer Treatment | |
| | Medical Nutrition Therapy in the Patient With Cancer | |
| | Cancer Prevention | |
| | Section 2 Human Immunodeficiency Virus | |
| | Medical Management of the Patients With HIV/Aids | |
| | Medical Nutrition Therapy in the Patient With HIV | |
| | Skills: NCLEX Case Study, Care plans- Surgery, Cancer (2 Hours) | |
| SPRING BREAK: April 6 - 10 | | |
| 14. April 13 – 17 | Nutrition Review and Exam Prep | |
| | (1 Hour) | |
| 15. Apr. 20 -24 | HESI Final Exam | |
| | (3 Hours) | |

Evaluation:

The assessment and grading of student performance in this course is based on the following activities: attendance, participation, assignments, unit tests, skill sessions, clinical rotations, and a final exam. Students must successfully pass all the skill competencies in order to pass this course and/or progress in the program. Students may re-attempt a skill competency up to three times in order to progress in the course.

Students must score 80% or above to

successfully complete this course and

progress to the next course.

Grading Scale

94 - 100 = A

86 - 93 = B

80 - 85 = C

70 - 79 = D

0 - 69 = F

Course Policies:

See the School of Practical Nursing Policy and Procedure Manual

School Policies:

See BCTC Adult Student Handbook

Support Services:

- 1. The Individual Career Plan (ICP) is a planning tool that is used for career preparation, career growth and lifelong learning goals. All adult education students will complete an Individual Career Plan.
- Students will be counseled on attendance and grades at mid-term and as needed by program instructors.
- 3. Students who fail a course must remediate with the Adult Learning Center. Please call 304-369-4585 for more information.

Awards and Honors:

Outstanding students will be invited to become a member of the National Technical Honor Society. Students are recommended by the career & technical instructor.

Criteria for nomination:

- GPA of 4.0 (A)
- Exemplary Conduct & Attitude
- Leadership
- Teamwork
- Exemplary Attendance

Discrimination Prohibited:

As required by federal law and regulations, the Boone County Board of Education does not discriminate on the basis of sex, race, color, religion, disability, age or national origin in its employment practices or in the administration of any of its educational programs and activities. Inquiries may be directed to Anthony Tagliente, Safe Schools coordinator, Boone County Board of Education, 69 Avenue B, Madison, WV, 25130 phone 369-8276.

SPECIAL NEEDS: If you need accommodations because of a disability, have emergency medical information to share with me, or need special arrangements in case the building must be evacuated, please inform me immediately.

Instructor retains the right to adjust the course schedule and revise the course syllabus as needed.