

**CAREER TECHNOLOGY CENTER OF LACKAWANNA COUNTY  
PRACTICAL NURSING PROGRAM**

Course Title: Nutrition

Description: Introduction to the basic principles of nutrition

Placement: Level II                      Total Hours: 25

Parallel Courses: Nursing Skills II / Medical-Surgical Nursing I

Instructor: Ann Millan, MSN

Course Outcomes:

Upon completion of this course the student will:

1. Utilize the nursing process in provision of care & health promotion of individual patients and families experiencing chronic and acute health problems by identifying altered nutritional needs.
2. Demonstrate satisfactory performance of psychomotor skills needed in caring for individual patients and families experiencing chronic & acute health care problems.
3. Apply critical thinking & the problem solving skills in planning care for individual patients and families experiencing chronic and acute health problems receiving pharmacotherapy and maintenance of altered nutritional needs.
4. Utilize verbal, non-verbal, written, and electronic means to communicate with individual patients, families, faculty & members of the health care team receiving pharmacotherapy and provide information regarding altered nutritional needs.
5. Demonstrate accountability by personal practice, adhering to a nursing code of ethics, and identifying the role of the nurse as an advocate for the individual patient experiencing chronic & acute health care problems receiving pharmacotherapy and maintenance of altered nutritional needs.
6. Utilize educational opportunities for personal growth in provision of care & health promotion of individual clients experiencing chronic & acute health care problems receiving pharmacotherapy and maintenance of altered nutritional needs.
7. Demonstrate values, attitudes & personal qualities reflecting a commitment to respect human dignity & individual rights.

Revised 06/19

### Unit Outline:

1. Course Introduction
2. Food Nutrition and Health
3. Nutrients
  - Carbohydrates, Fats and Proteins
4. Vitamins
5. Minerals
6. Water
7. Phytochemicals, Supplements, Herbal therapy
8. Clinical Nutrition
  - Age and diets
  - Diet Therapy
  - Food and Drug Interactions
  - Enteral Nutrition
  - TPN/lipid
9. Class Presentations

### Evaluation:

Course grade will be determined by:

- Exams  $\frac{3}{4}$  ( four exams)
- Presentation  $\frac{1}{4}$

Nutrition implements the program's philosophy and objectives by introducing the basic principles of nutrition and utilizing the nursing process to identify and care for patients with altered nutritional needs. This process will involve continued development of critical thinking activities and interactions that will promote decision making in order to maintain the nutritional needs of simple to complex dietary requirements and disease related conditions that alter nutritional care.

Revised 6/19

**COURSE TITLE: NUTRITION**

STUDENT COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>At the end of the unit the student will:</p> <p>1. Identify course outcomes.</p>	0.5	<p>1. Course Introduction</p> <ul style="list-style-type: none"> <li>● Course outcomes</li> <li>● Course content</li> <li>● Evaluation tools</li> </ul> <p>Exams Class</p>		Classroom	
<p>2. Define basic nutritional terms. Discuss food and drug interactions. Plan a diet using food guide.</p>	3	<p>2. Food Nutrition and Health</p> <ul style="list-style-type: none"> <li>● Basic definitions</li> <li>● Importance of balanced diet</li> <li>● Energy sources</li> <li>● Tissue building</li> <li>● Regulation and Control</li> <li>● Optimal nutrition</li> <li>● Undernutrition</li> <li>● Malnutrition</li> <li>● Nutrient standards</li> <li>● Food guides</li> <li>● Food and drug interactions</li> </ul>	Lecture #1 Power points Discussion, Handouts		Exam 1 Lecture 1 (Food and Health)
<p>3. Demonstrate and discuss the importance of nutrients for the necessity of energy, building tissue and regulating body functions.</p>	3	<p>3. Nutrients</p> <ul style="list-style-type: none"> <li>● Carbohydrates</li> <li>● Fats</li> <li>● Proteins</li> </ul>	Lecture #2 Powerpoints Discussion/ Magazine Articles		Exam 2 Lecture 2(Nutrients)

**COURSE TITLE: NUTRITION**

STUDENT COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
4. Discuss the importance of vitamins related to health issues Identify vitamin deficiency disorders.	4	4. Vitamins <ul style="list-style-type: none"> <li>● Fat-Soluble</li> <li>● Water-soluble</li> <li>● Vitamin Deficiency and Disorders</li> </ul>	Lecture # 3 Powerpoints Discussion Handouts	Classroom	
5. Discuss the importance of daily mineral requirements and identify deficiency disorders.	4	5. Minerals <ul style="list-style-type: none"> <li>● Major Minerals</li> <li>● Minor Minerals</li> <li>● Deficiency and Disorders</li> </ul>	Lecture #4 Powerpoints Discussion Handouts		Exam # 3 Lecture 3,4 (vitamins, minerals)
6. Discuss the importance of adequate water intake to maintain body homeostasis.	1	6. Water <ul style="list-style-type: none"> <li>● Function</li> <li>● Requirements</li> <li>● Balance of system</li> <li>● Acid-base balance</li> </ul>	Lecture #5 Powerpoints Discussion Handouts		

**COURSE TITLE: NUTRITION**

STUDENT COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>7. Discuss how dietary supplements and herbs can affect the health of patients.            Identify herbal and drug interactions.            Identify benefits of GMO/probiotics.</p>	2	<p>7. Phytochemical, Dietary supplements, and herbs.</p> <ul style="list-style-type: none"> <li>● Probiotics</li> <li>● GMO/organic</li> <li>● Herbal therapy</li> </ul>	<p>Lecture # 6 Powerpoints            Discussion            Handouts/ magazine articles</p>	Classroom	
<p>8. Identify different nutritional needs of varying ages.            Identify therapeutic diets and patient diagnosis.            Design a therapeutic diet.            Calculate IV doses.            Discuss feeding strategies.            Demonstrate setting up feeding via pump/GT bolus.            Administer medications via GT.</p>	4.5	<p>8. Clinical Nutrition</p> <ul style="list-style-type: none"> <li>● Nutrition throughout the life cycle</li> <li>● Therapeutic diets</li> <li>● Restricted/enhanced diets</li> <li>● Enteral Nutrition</li> <li>● TPN/Lipid Infusion</li> <li>● Medications/labs</li> <li>● Feeding strategies</li> <li>● Dysphagia</li> </ul>	<p>Lecture # 7 Powerpoints            Discussion Handouts/Videos</p>	Lab	<p>Lecture 5, 6, 7            Exam # 4            (water, herbs, clinical nutrition)</p>
<p>9. Class presentations-            Students will work in groups, research, discuss, and present a project on a nutritional topic of choice.</p>	3	<p>Presentation</p>	<p>Self-guided research. Current peer-review articles, respected internet web sites.</p>		<p>Graded Presentation</p>



## Nutrition Class Presentation

Students will choose groups and a topic by the first week of class. The group will prepare and present a 15 minute presentation to the class. The topic must be related to education on nutritional topics. Suggested topics would include but not limited to teaching a patient about a gluten free diet, CHO counting, weight loss programs, increasing healthy foods in a child's diet, behavior modification and weight loss, and benefits of a Mediterranean diet. The topic must be approved by the instructor.

**To be distributed to instructor one week prior to the presentation:**

1. Outline of the topic
2. Two or three main outcomes
3. Five multiple choice questions on your topic to be presented to the class as a quiz
4. Bibliography or citing of research materials

Students will be graded on the following points:

1. Preparation
2. Professional Appearance
3. Organization
4. Communication
5. Stimulation of discussion and questions
6. Response to questions presented by the class
7. Originality and creativity
8. Utilization of visual aids

Nutrition Class Presentation Grading Sheet

Student or Group: \_\_\_\_\_

Topic: \_\_\_\_\_

Date of Presentation: \_\_\_\_\_

Length of Presentation: \_\_\_\_\_

	Not at all 1	Below Average 2	Average 3	Above Average 4	Exceptional 5	TOTAL
1. Professional Appearance						
2. Outline preparation <ul style="list-style-type: none"> <li>● Outcomes</li> <li>● Quiz questions</li> <li>● Citing sources</li> <li>● Given to instructor</li> </ul>						
3. Organizes presentation in a clear, logical manner						
4. Communicates ideas clearly						
5. Evidences continuity (flows easily)						
6. Stimulates and encourages class discussion						
7. Responds to questions in a knowledgeable manner						
8. Demonstrates originality and creativity in the presentation						
					SCORE	



## References

- American Institute for Cancer Research (2019). *Phytochemicals: The cancer fighters in your foods*. Retrieved from [https://www.aicr.org/reduce-your-cancer-risk/diet/elements\\_phytochemicals.html](https://www.aicr.org/reduce-your-cancer-risk/diet/elements_phytochemicals.html)
- Brody, J. (2018, April). Are g.m.o. foods safe? *The New York Times*. Retrieved from <https://www.nytimes.com/2018/04/23/well/eat/are-gmo-foods-safe.html>
- Budd, G. M., & Peterson, J. A. (2014). The obesity epidemic, part 1: Understanding the origins. *American Journal of Nursing*, 114 (12), 40-48.
- Budd, G. M., & Peterson, J. A. (2014). The obesity epidemic, part 2: Nursing assessment and intervention. *American Journal of Nursing*, 115 (1), 38-48.
- Burton, M., Smith, D., & Ludwig, L. (2019). *Fundamentals of Nursing Care Concepts, Connections, & Skills*. (3rd ed.). Philadelphia, PA: F.A. Davis Company.
- Byrne, P., Pendell, D., & Graff, G. (October, 2014). *Labeling of genetically modified foods*. Colorado State University Extension. Retrieved from <http://www.ext.colostate.edu/pubs/foodnut/09371.html>
- Dudek, Susan. (2018). *Nutrition Essentials for Nursing Practice*. (8th ed.). Philadelphia, PA: Wolters Kluwer.
- Food and Agriculture Organization of the United Nations. (2015). *Why is organic food more expensive than conventional foods?* Retrieved from <http://www.fao.org/organicag/oa-faq/oa-faq5/en/>
- Ford, S.(2018). *Roche's introductory clinical pharmacology*. (11th ed.). Market Street, Philadelphia, PA : Lippincott Williams & Wilkins.
- Hogan, M., McKinney, D. (2012). *Comprehensive Review for NCLEX-PN, Reviews and Rationales*. (2<sup>nd</sup> ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.
- Kubacka, B. (2014). A balancing act-Achieving glycemic control in hospitalized patients. *Nursing 2014*, 44 (1), 30-38.
- Lutz, Carroll., Mazur E., & Litch, N. (2015). *Nutrition and Diet Therapy*. (6th ed.). Philadelphia, PA: F.A. Davis Company.
- Mangels, A. (2018). Malnutrition in older adults. *American Journal of Nursing* 2018, 118(3), 34-42.
- McCarthy, M., & Martindale, R. (2015). The menu? Delivering evidence-based nutritional therapy. *Nursing 2015*, 45(8), 37-43.
- National Center for Complementary and Integrative Health (NIH). (2018). *Probiotics in depth*. US Department of Health and Human Services. Retrieved from <https://nccih.nih.gov/health/probiotics/introduction.htm>

## References Cont.

Nwankwo, R., & Funnell, M. (2016). What's new in nutrition for adults with diabetes? *Nursing 2016*, 46 (3), 28-33.

Perry, A., Potter, P., & Ostendorf, W. (2020). *Nursing interventions and clinical skills.* (7<sup>th</sup> ed.). St. Louis, MO: Elsevier.

PrepU. NCLEX-PN. Kluwer-Lippincott, Williams & Wilkins, Web. 2019.

Simmons, S. (2014). Taking the bite out of food allergies. *Nursing 2014*, 44 (12), 44-53.

Additional information websites:

<http://www.cdc.gov/nutrition>

<http://www.diabetes.org/>

<http://www.fda.gov>

<http://www.nutrition.gov>.