# J. Sargeant Reynolds Community College Course Content Summary

Course Prefix and Number: NSG 170 Credits: 6

Course Title: Health/Illness Concepts

**Course Description:** Focuses on the nursing care of individuals and/or families throughout the lifespan with an emphasis on health and illness concepts. Includes concepts of nursing care for the antepartum client and clients with common and predictable illnesses. Provides supervised learning experiences in college nursing laboratories, clinical/community settings, and/or simulated environments. Prerequisites: BIO 142 or BIO 232; NSG 100, NSG 106, NSG 130, and NSG 200. Lecture 4 hours. Laboratory 6 hours. Total 10 hours per week.

**General Course Purpose:** The purpose of this course is to introduce the advanced beginner student to concepts related to care of clients with predictable outcomes

### **Course Prerequisites and Co-requisites:**

Prerequisites: BIO 142 or BIO 232; NSG 100, NSG 106, NSG 130, and NSG 200.

### **Student Learning Outcomes:**

Upon completing the course, the advanced beginner student will be able to

- a. Accurately assess clients who are experiencing common and predictable health problems;
- b. Use nursing process and evidence-based care related to the concepts of fluid and electrolytes, cellular regulation, metabolism, sexuality, reproduction, thermoregulation, gas exchange and perfusion;
- c. Prioritize safety measures in the care of clients with varied health problems;
- d. Use evidence to support and plan appropriate nursing care;
- e. Recognize the impact of personal beliefs, values and attitudes in the development of professionalism and professional behaviors;
- f. Use technology and information management tools to plan and provide safe and effective patient care; and
- g. Compare and contrast the roles of the health team members in the planning and provision of client care

### **Major Topics to Be Included:**

- a. Fluid and Electrolytes (F&E) Concept
  - Basic principles of F&E
  - Risk factors related to imbalances in F&E
  - Prevention strategies of F&E
  - Assessment and diagnostics
  - Nursing process related to imbalances in F&E
  - Skills related to intravenous therapy and blood transfusion
  - Pharmacological interventions: types of IV fluids, electrolyte replacements
  - Exemplars: specific electrolyte imbalances, dehydration, fluid volume overload

#### b. Cellular Regulation Concept

- Basic principles of cellular regulation
- Risk factors related to imbalances in cellular regulation
- Prevention strategies
- Assessment and diagnostics
- Nursing process related to imbalances in cellular regulation
- Pharmacological interventions: chemotherapy, biologic response modifiers, radiation
- Exemplars: breast cancer, colon cancer, leukemia (child)

## c. Metabolism Concept

- Principles of metabolism
- Risk factors related to alterations in metabolism
- Prevention strategies related to alterations in metabolism assessment and diagnostics
- Nursing process related to alterations in metabolism
- Pharmacological interventions: insulins and oral hypoglycemic agents
- Exemplars: diabetes type 1 and 2 (across the lifespan), gestational diabetes

### d. Sexuality Concept

- Basic principles of sexuality
- · Risk factors related to alterations in sexuality
- Prevention strategies related to altered sexuality assessment and diagnostics
- Nursing process related to alterations in sexuality
- Pharmacological interventions: contraceptives, hormone replacement, men's health drugs
- Exemplars: family planning, Sexually Transmitted Infections (STI's), erectile dysfunction, menopause

### e. Reproduction Concept

- Basic principles of reproduction
- Risk factors related to alterations in reproduction
- · Prevention strategies related to altered reproduction assessment and diagnostics
- Nursing process related to alterations in reproduction
- Pharmacological interventions: teratogenic agents, folic acid
- Exemplar: antepartum

# f. Thermoregulation Concept

- Principles of thermoregulation
- Risk factors related to alterations in thermoregulation
- Prevention strategies related to altered thermoregulation assessment and diagnostics
- Nursing process related to alterations in thermoregulation
- Pharmacological interventions: antipyretics, fluid and electrolyte replacement
- Exemplars: fever, environmental hypothermia, preterm and newborn hypothermia

### g. Gas Exchange Concept

- Principles of gas exchange
- · Risk factors related to alterations in gas exchange
- Prevention strategies related to altered gas exchange assessment and diagnostics
- Nursing process related to alterations in gas exchange

- Pharmacological interventions: decongestants, expectorants/antitussives, corticosteroids, sympathomimetics, anticholinergics, beta-adrenergic agonists, xanthines, colony stimulating factors
- Exemplars: asthma-child, COPD-adult, anemias

### h. Perfusion Concept

- Principles of perfusion
- Risk factors related to alterations in perfusion
- Prevention strategies related to altered perfusion
- Assessment and diagnostics
- Nursing process related to alterations in perfusion
- Pharmacological interventions: diuretics, alpha and beta blockers, calcium channel blockers, ACE inhibiters, angiotension receptor blockers, vasodilators, magnesium sulfate
- Exemplars: hypertension, peripheral vascular disease, preeclampsia

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