## State University of New York College of Technology Canton, New York



# COURSE OUTLINE RESEARCH METHODS IN THE HEALTH SCIENCES NURS/DHYG 370

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SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE NURSING Spring 2015

#### **NURS/DHYG Research Methods in the Health Sciences**

**A. TITLE:** Research Methods in the Health Sciences

B. COURSE NUMBER: NURS/DHYG 370

C. CREDIT HOURS: 3

D. WRITING INTENSIVE COURSE (OPTIONAL): No

E. COURSE LENGTH: 15 weeks

F. SEMESTER(S) OFFERED: Fall

G. HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY: Three hours per week.

- **H.** <u>CATALOG DESCRIPTION</u>: The purpose of this course is to understand and apply research findings to practice.
- I. <u>Pre-Requisites</u>: Enrolled in RN-BS or BS in Dental Hygiene programs MATH 141 (Statistics) or equivalent coursework
- J. GOALS/LEARNING OUTCOMES: By the end of this course, students will:

| Student<br>Learning<br>Outcomes<br>(SLO)   | Program SLO   | <u>QSEN</u>  | <u>NLN 2010</u>   | Institutional<br>SLO   |
|--|---|--|-------------------|--|
| Examine sources of healthcare research information to support evidence based practice. | Synthesize<br>knowledge from the<br>liberal arts and<br>nursing to promote<br>the health and well-<br>being of culturally<br>diverse individuals,<br>families, groups,<br>and communities.            | Quality<br>Improvement   | Spirit of Inquiry | Professional<br>Competence<br>Intra-Interpersonal<br>Skills                        |
| Relate how research data can be used to recommend changes in care practice.            | Utilize nursing theory/conceptual frameworks, nursing research, and evidence-based practice in addressing the nursing care needs of culturally diverse individuals, families, groups and communities. | Evidence Based Practice  Teamwork and Collaboration  Patient Centered Care | Human Flourishing | Communication Critical Thinking Professional Competence Intra-Interpersonal skills |

| Student                             | Program SLO                             | QSEN                     | NLN 2010          | Institutional                     |
|-------------------------------------|---|--------------------------|-------------------|-----------------------------------|
| Learning                            |   |                          |                   | SLO                               |
| Outcomes (SLO)                      |   |                          |                   |                                   |
| Use electronic data                 | Synthesize                              | Informatics              | Nursing Judgment  | Critical Thinking                 |
| bases to conduct literature review. | knowledge from the liberal arts and     |                          |                   | Professional                      |
| interature review.                  | nursing to promote                      |                          |                   | Competence                        |
|                                     | the health and well-                    |                          |                   | r                                 |
|                                     | being of culturally                     |                          |                   | Intra-Interpersonal               |
|                                     | diverse individuals,                    |                          |                   | Skills                            |
|                                     | families, groups, and communities.      |                          |                   |                                   |
| Collaborate with a                  | Utilize nursing                         | Teamwork and             | Human Flourishing | Communication                     |
| health care agency                  | theory/conceptual                       | Collaboration            |                   | Critical Thinking                 |
| to implement a                      | frameworks,                             | Detient Content          | Professional      | Professional                      |
| Quality<br>Improvement              | nursing research,<br>and evidence-based | Patient Centered<br>Care | Identity          | Competence<br>Intra-Interpersonal |
| project.                            | practice in                             | Curc                     |                   | Skills                            |
|                                     | addressing the                          | Leadership               |                   |                                   |
|                                     | nursing care needs                      | 0 17                     |                   |                                   |
|                                     | of culturally diverse individuals,      | Quality<br>Improvement   |                   |                                   |
|                                     | families, groups and                    | Improvement              |                   |                                   |
|                                     | communities.                            |                          |                   |                                   |
|                                     | Collaborate with                        |                          |                   |                                   |
|                                     | health care                             |                          |                   |                                   |
|                                     | colleagues to promote holistic          |                          |                   |                                   |
|                                     | health care for                         |                          |                   |                                   |
|                                     | individuals,                            |                          |                   |                                   |
|                                     | families, groups,                       |                          |                   |                                   |
|                                     | and communities.                        |                          |                   |                                   |
|                                     | Planning and                            |                          |                   |                                   |
|                                     | implementing                            |                          |                   |                                   |
|                                     | educational                             |                          |                   |                                   |
|                                     | activities that empower                 |                          |                   |                                   |
|                                     | individuals,                            |                          |                   |                                   |
|                                     | families, group, and                    |                          |                   |                                   |
|                                     | communities to                          |                          |                   |                                   |
|                                     | manage their health care at the local,  |                          |                   |                                   |
|                                     | national, and global                    |                          |                   |                                   |
|                                     | level.                                  |                          |                   |                                   |

### **K. REQUIRED TEXT:**

Polit, D. F. & Beck, C. T. (2014). Essentials of Nursing Research: Appraising Evidence for Nursing Practice. Philadelphia, PA: Lippincott Williams and Wilkins.

American Psychological Association. (2009). *Publication Manual of the Psychological Association (6th Ed.)* Washington, DC: APA. ISBN: 10:1-4338-0561-8.

### L. **REFERENCES**: None

# M. **EQUIPMENT**: None

#### N. **GRADING METHOD:** A-F

**O.** <u>MEASUREMENT CRITERIA/METHODS:</u> Discussion Board Activities, Reflections, Qualitative Literature Critique, Quantitative Literature Critique, Quality Improvement Project, Quizzes

#### P. DETAILED COURSE OUTLINE:

- 1. Introduction to Research Fundamentals
- 2. Quantitative Research
  - a. Problems, Questions, and Hypothesis
  - b. Literature Review
  - c. Theoretical and Conceptual Frameworks
  - d. Design: Experimental versus Nonexperimental
  - e. Sampling and Data Collection
  - f. Reliability and Validity
  - g. Measurement and Data Quality
  - h. Statistical Analysis of Data
  - i. Interpretation of Findings
  - 3. Qualitative Research
    - a. Designs
    - b. Sampling and Data Collection
    - c. Analysis of Data
    - d. Trustworthiness and Integrity
  - 4. Critique of research reports
  - 5. Systematic reviews: Meta-Analysis and Metasynthesis
  - 6. Presentation and Discussion of quality Improvement Project