

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



**COURSE OUTLINE**

**RESEARCH METHODS IN THE HEALTH SCIENCES**

**NURS/DHYG 370**

**Prepared by: John Conklin PhD**

**SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE  
NURSING  
October 2016**

## 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. **CATALOG DESCRIPTION:** The purpose of this course is to understand and apply research findings to practice.
- I. **Pre-Requisites:** 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:

<b><u>Student Learning Outcomes (SLO)</u></b>	<b><u>Program SLO</u></b>	<b><u>Institutional SLO</u></b>
Examine sources of healthcare research information to support evidence based practice.	Integrate legal and ethical concepts with the leadership role to advance and promote the health and well-being of culturally diverse individuals, families, groups, and communities.	Professional Competence
Relate how research data can be used to recommend changes in care practice.	Participation as nurse leaders on interdisciplinary care teams to influence positive social change and health care policy.	Professional Competence

Student Learning Outcomes (SLO)	Program SLO	Institutional SLO
Use electronic data bases to conduct literature review.	Synthesize knowledge from the liberal arts and nursing to promote the health and well-being of culturally diverse individuals, families, groups, and communities.	Critical Thinking
Collaborate with a health care agency to implement a Quality Improvement project.	Collaborate with health care colleagues to promote holistic health care for individuals, families, groups, and communities.	Communication

**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. (Recommended)

**L. REFERENCES:** None

**M. EQUIPMENT:** None

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

**O. MEASUREMENT CRITERIA/METHODS:** 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