N521 Theory and Research in Nursing
Semesters Offered: Fall
Credits: 5 lecture
Prerequisites: N387R or equivalent and STAT 216 or equivalent

Course Description: Provides an overview of the interrelationships among theory, research and practice. Students explore patterns and processes for acquiring knowledge and the utilization of knowledge in clinical practice.

Course Objectives:

1. Articulate the relationships among theory, research and practice.
2. Relate ways of knowing to current theory development.
3. Discuss the processes and current status of nursing theory development.
4. Demonstrate ability to critique conceptual frameworks, theories and research relevant to nursing.
5. Explain the interrelatedness of the steps in the process of scientific inquiry.
6. Analyze dissemination and utilization issues in nursing research.
7. Analyze research strategies, designs and methods for application to selected nursing problems.
8. Analyze the legal and ethical considerations in nursing research.
9. Discuss the importance of nursing research to practice and the unique problems associated with rural nursing research.

Suggested Theory Content:

A. Ways of knowing:
   Patterns and processes of knowing
   Perspectives of gender and nursing
      Gender variations in ways of knowing (Belemky et al.)
      Way nurses know (Carper, Benner, Meleis)

B. Theory Development
   Concept development
   Statement development
   Theory development
   Theory testing
   Use of other disciplines’ theories in nursing (e.g., general systems theory)

C. Types of theory:
   Descriptive theory
   Explanatory theory
Predictive theory

D. Conceptual and theoretical frameworks:
   History of nursing theory development:
   - Stages of development
   - Contributions of major nursing theories
   - Use of world views and major themes
   Process of theory development:
   - Strategies employing inductive, deductive and retroductive thought process
   - Examples of strategies used by nursing theorists
   - Critiquing nursing theory within nursing metaparadigm (person, environment, health, nursing)

E. Concept analysis
   - Structured step-by-step (e.g., Walker & Avant) approach to concept analysis
   - Alternate approaches to concept analysis

Suggested Research Content:

A. Principles of scientific inquiry
   - Ways of knowing
   - Research as a linear, cyclical, or iterative activity
   - Research-based practice
   - Scientific integrity
   - Community of scholars
   - Collaboration and free exchange of ideas
   - Interdisciplinary collaboration
   - Secondary analyses
   - Ethical considerations (i.e., including human subjects implications)

B. Steps of the research process
   - Problem identification
   - Conceptualization
   - Delineating the problem
   - Conceptual and theoretical foundations
   - Review of literature/state of the science
   - Methodologic approaches
   - Data collection
   - Data management
   - Analysis and interpretations
   - Dissemination
   - Utilization of findings

C. Information systems
   - Existing databases (e.g., census, STTI, CDC, faculty data)
   - Analysis packages (e.g., SPSS, SAS, etc.)
   - Accessing data and other scholars via Internet and regional networks
   - Primary vs. Secondary data sources

D. Qualitative and quantitative methods
   - Definitions and defining characteristics of qualitative research
   - Definitions and defining characteristics of quantitative research
   - Levels of problem exploration relative to the state of the science
   - Hypothesis generation and hypothesis testing
   - Internal consistency among the research aims, conceptual model, design and analysis
Survey of qualitative methods
Survey of quantitative methods

E. Assessment of research measures
   Reliability
   Validity
   Confirmability
   Authenticity
   Credibility

F. Analysis and interpretation of text and numerical data
   Levels of data
   Knowing analyses appropriate to the level of data and research questions
   Analysis of text data
   Interpretation of findings
   Application of findings to the research questions
   Understanding and explaining conflicting research evidence

G. Utilization of research
   Critique processes
   Models for utilization decision-making
   Evaluation and decision-making application of research to practice
   Stimulating research awareness in the clinical arena

H. Dissemination of findings
   Politics of dissemination
   Lay and professional domains
   Ethical issues
   Practical presentation principles: poster, oral, manuscript
   Networking

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