Unless otherwise noted, the content of this course material is licensed under a Creative Commons 3.0 License: http://creativecommons.org/licenses/by/3.0/

Copyright 2008, Huey-Ming Tzeng, Sonia A. Duffy, Lisa Kane Low.

The following information is intended to inform and educate and is not a tool for self-diagnosis or a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional. You should speak to your physician or make an appointment to be seen if you have questions or concerns about this information or your medical condition. You assume all responsibility for use and potential liability associated with any use of the material.

Material contains copyrighted content, used in accordance with U.S. law. Copyright holders of content included in this material should contact open.michigan@umich.edu with any questions, corrections, or clarifications regarding the use of content. The Regents of the University of Michigan do not license the use of third party content posted to this site unless such a license is specifically granted in connection with particular content objects. Users of content are responsible for their compliance with applicable law. Mention of specific products in this recording solely represents the opinion of the speaker and does not represent an endorsement by the University of Michigan.
Compose Research Problems and Purposes

Contributors
Sonia A. Duffy, PhD, RN
Lisa Kane Low, PhD, CNM, FACNM
Huey-Ming Tzeng, PhD, RN
Type of Study Conducted

- Knowledge available on topic
- Expertise of researcher
  - Replication versus Original research
- Resources of researcher
  - Amount of funding
  - Sources of funding
Original Research

- Original Research:
  - Unique or new research idea
  - For advanced researchers
  - For examples:
    - Dissertation
    - Funded research project
    - Program of research in an area
Replication Research

- Replication or repeating a study to confirm original findings

- Encouraged for novice or new researchers:
  - Thesis
  - First clinical research project
Types of Replication

- **Exact replication:**
  - Precise, exact duplication of original research project to confirm findings
  - Includes same design, instruments, sample, and setting as original study

- **Approximate replication:**
  - Repeating the original study under similar conditions, following methods as closely as possible
  - Most common type of replication conducted in nursing
Types of Replication

- **Concurrent replication**
  - Collection of data for original study and replication is done simultaneously
  - Replication is part of the original study design

- **Systematic replication**
  - Constructive replication done under new conditions where replication study does not follow the design or methods of the original study
  - But begins with similar problem and develops a new design to verify the findings
Research Topics

• Major concepts
• Focused on areas of concern
• Key issues for practice, education, administration
• For examples:
  o Chronic pain
  o Acute pain
  o Self-care
  o Coping
  o Health promotion
  o Respiratory pathology
What is a Problem?

- Area of concern
- Gap in the knowledge base for practice
  - Not previously studied
  - Conflicting findings
  - Omission of a group of subjects
- Significant for nursing
What is a Research Problem?

- A situation in need of a solution, improvement, or alteration
  or
- A discrepancy between the way things are and the way they ought to be
Key Phrases for Problem

- Little is known about...
  - Findings of previous studies are conflicting
  - Few studies on a certain topic/issue have been done
Sources of Research Problems

- Nursing practice
- Research priorities
- Researcher and peer interaction
- Literature review
- Theory
Purpose Statement

- Clear, concise statement
- Indicates the goal, aim, focus, or objective of the study
- Includes the study variables, population, and setting
The purpose of a study is to
- describe...
- determine differences between groups...
- examine relationships among...
- determine the effect of...
Examining Study Feasibility

- Time commitment
- Money commitment
- Researchers’ expertise
- Availability of subjects, facility, and equipment
- Ethical considerations
Critiquing Problem and Purpose

1. Are the problem and purpose of the study clearly and concisely expressed?
2. Does the purpose identify the variables, population, and setting of the study?
3. Are the problem and purpose significant to generate nursing knowledge?
4. Was it feasible for the researchers to study the problem and purpose identified?
Conceptual Framework

- An abstract, logical structure of meaning that guides the development of the study
- Enables the researcher to link the findings to the body of nursing knowledge
- Related terms:
  - Concept
  - Relational statement
  - Theory
  - Conceptual model
Terms Related to Framework (1)

- **Concept**
  - A term to which abstract meaning is attached

- **Relational Statement**
  - Declares a relationship of some kind exists between two or more concepts
Terms Related to Framework (2)

- **Theory**
  - Integrated set of defined concepts and relational statements that presents a view of a phenomenon
  - Can be used to describe, explain, predict, or control the phenomenon
  - Statements of the theory, not the theory itself, are tested through research
Terms Related to Framework (3)

- **Conceptual model**
  - A set of highly abstract concepts and statements of relationships that broadly explains the phenomena of interest to a discipline

  - For example:
    - Neuman
    - Orem
    - Rogers
    - Roy
Planning a Research Project

- Please see the handout, entitled “Steps in planning your research projects”