

ARKANSAS TECH UNIVERSITY

DEPARTMENT OF NURSING

NURSING RESEARCH

NUR 4303



Spring 2020

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## DEPARTMENT OF NURSING

**Course:** NUR 4303  
**Course Title:** NURSING RESEARCH  
**Credit Hours:** THREE (3) HOURS  
**Contact Hours:** THREE (3) HOURS  
**Placement:** SENIOR YEAR

### Instructors:

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### Course Description:

An introductory research course, which focuses on the validity and applicability of research findings for the improvement of nursing practice. Emphasis is on scientific inquiry and the role of the nurse as an intelligent consumer of research. Decision-making and critical thinking skills are a major component of the course. The language of research, types of research designs, data collection, and descriptive statistics are studied. Ethics relating to the role of the researcher and the rights of human subjects is stressed. Each student will critically analyze selected research studies relating to clinical practice. The course will culminate in a both a group poster and written paper.

**Catalog Description:** Prerequisites: Admission to upper division nursing, senior standing or consent of instructor. This introductory research course focuses on the validity and applicability of research findings for the improvement of nursing practice. Emphasis is on scientific inquiry and the role of the nurse as an intelligent consumer of research.

### Instructional Resources

#### Required Textbooks:

Schmidt, N. & Brown, J. (2019). *Evidence-Based Practice for Nurses: Appraisal and Application of Research*. (4th ed.). Burlington, MA: Jones & Bartlett Learning.

ISBN-13: 978-1284122909  
ISBN-10: 1284122905

Required Articles: TBA

**Additional Resources: As needed.**

I. Nursing Indexes (examples)

Cumulative Index of Nursing  
Literature International Nursing Index  
Nursing Research Index (End of year issue of Nursing Research)  
The Nursing Studies Index

II. Journals: (examples)

*American Journal of Nursing*  
*Applied Nursing Research*  
*Journal of Nursing Education*  
*Journal of Nursing Scholarship*  
*Medical Care*  
*Nursing Forum*  
*Nursing Outlook*  
*Nursing Science Quarterly*  
*Nursing Research*  
*Perspective in Psychiatric Care*

III. Publication Catalogs: (examples)

American Nurses' Association National League for Nursing  
U.S. Department of Health and Human Services

IV. Regional Research: (examples)

SNRS  
SREB  
WICHE

V. Other: (examples)

Databases:  
CINAHL  
PubMed  
Ovid Essential Nursing Collection  
WorldCat  
Medline (Computer Literature)

VII. Online support for APA documentation: (example)

OWL Purdue online writing lab.  
Youtube

## **Justification/Rationale for the Course**

By the completion of this course the student will progress toward program goals/outcomes 1, 2, 3, and 4.

This upper division professional nursing course provides opportunities for the student to apply knowledge and skills from the general education component and from nursing courses to the care of individuals, families and communities.

### **Teacher Role:**

Demonstrator, Evaluator, Facilitator, Resource Person, Role Model, Communicator, and Supporter.

### **Student Role:**

Learner, Teacher, Advocate, Care Giver, Communicator, and Researcher.

### **Course Objectives:**

Upon successful completion of this course, the student will be able to:

1. Describe the development of research in nursing.
2. Analyze the role of the baccalaureate nurse as an informed consumer of research.
3. Identify the moral, legal, and ethical factors affecting nursing research.
4. Critically analyze selected research studies for applicability to nursing practice.
5. Evaluate the effects of research on the nursing profession and its future development.
6. Describe quantitative and qualitative research methods.
7. Apply critical thinking in the evaluation of selected research.

### **Disability Statement:**

It is the policy of Arkansas Tech University to accommodate students with disabilities, pursuant to Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Amendments Act of 2008. If you anticipate a barrier while enrolled in this course that is in relation to a disability, please contact your instructor privately to discuss your needs and concerns. You are not required to disclose the specific nature of your disability but you should be able to discuss the impact the disability has upon your academic experience. Additionally, you should contact Disability Services in Doc Bryan Students Services, Suite 171, (479) 968- 0302/TTY (479) 964-3290, to begin the accommodation process.

### **Attendance Policy**

As professionals, you must be responsible for your own learning experiences. You are responsible to make the most of all educational opportunities. This is a mark of professionalism. Attendance in class reflects your dedication and the value you place on your chosen profession. We, the faculty, expect you to attend ALL CLASSES AND PRACTICUM EXPERIENCES. If a consistent pattern of absences from class develops (more than three absences), the situation will be dealt with by the faculty and/or level/team member, and the student may be dropped from the course. Each level may have a statement

that limits the number of absences from theory and practicum classes. The student should note this for each syllabus. The requirements noted in each syllabus shall take precedence over this handbook. The student is responsible for notifying the instructor and clinical agency prior to any absence from a clinical experience. Failure to notify the instructor and clinical agency prior to an absence will not only be reflected in the student's grade, but will also result in a clinical incident and could result in failure of the course.

The Arkansas Tech University catalog provides content concerning class attendance. ATU is required to document attendance.

### **Tardy Policy**

Regular and timely attendance in theory classes and practicum is considered essential if students are to receive maximum benefit from the nursing courses. The Nursing Department has implemented a policy, which we believe will discourage unnecessary tardiness and absences, but will not punish those conscientious students who must be absent from time to time for unavoidable reasons.

At the discretion of the instructor, a student who is tardy or absent may be allowed to complete a quiz or receive a handout if the student has been courteous enough to call the nursing department or call/e-mail the instructor before class to inform of the possibility of tardiness or absentness. This is solely at the discretion of the instructor.

Students are responsible for obtaining any missed information after class. Disrupting the learning of other students to ask questions or copy notes of the missed class time while class is in progress is inconsiderate.

### **Cell Phone Policy**

There is a NO cell phone policy for all upper division testing/test review. This includes paper/pencil testing, test review, cooperative testing, and computer testing. If you are discovered with having a cell phone on your person, this will be considered a violation of the Academic Honesty Policy. If we discover that you have your cell phone with you during a unit exam/cooperative testing or unit exam review you will receive a 0 for the test grade.

### **Evaluation:**

1. Grading Scale
  - A = 90-100
  - B = 80-89
  - C = 75-79
  - D = 68-74
  - F = 67 and Below
2. A grade of "C" or above must be achieved in every nursing course in order to progress in the Nursing Program. Any grade below 75% will not be rounded up.
3. A grade in "I" may be recorded for a student whose work is incomplete due to circumstances beyond the student's control. The student must take responsibility for

removal of the incomplete grade according to the Arkansas Tech University's catalog requirements.

4. Examinations will be taken at designated times. If a student cannot take the examination at the regularly scheduled time, he/she is responsible for contacting the instructor prior to the examination as soon as possible. Makeup examinations will be essay or objective in nature at the discretion of the instructor.

5. Course Grade

The grade will be based upon four examinations, pop quizzes, a written research article critique presented to the class, and a research poster.

Quizzes/Activities.....	10%
4 Exams.....	40%
Article Critique.....	25%
Poster .....	25%

Refer to the guidelines for development of the Article Critique and the Research Proposal.

Please do not miss class. Quizzes are posted ahead of time. They will be over the vocabulary listed for each chapter apa exam. They will not be reopened for students. Please do not miss an exam in this class unless it is absolutely necessary for reasons of illness or emergency. Missed exams require you and Dr. Jobe to meet at a special time to do a makeup exam. Busy Level 3 schedules make this very challenging.

If you absolutely must miss an exam, you must contact Dr. Jobe via email ASAP to let her know that you will miss the exam. Any exam that is missed without notification will receive a "Zero" grade.

Missed exams must be made up, at the **very minimum**, by the first day back to class. But if this does not work out with Dr. Jobe's schedule, you must meet with her on a day and time designated by Dr. Jobe to meet her schedule. This will not be scheduled during your other class times, but it may very well be scheduled on a day and time that is inconvenient for your other activities. So please do not miss exams except when necessary.

### Peer Evaluations:

The Poster project and Critique paper are group grades. Therefore, these require a peer evaluation form to be submitted FROM each student and FOR each student. The peer evaluation will count as 15% of the student's grade on each of these projects.

Students working in a group are expected to devote a fair and equal amount of time to each project/paper. When a student chooses to expect others to carry an unfair amount of the load, it is distressing to the group as a whole. It is recommended to use the discussion board in groups to collaborate and work on assignments. In order to keep all students accountable to their fair share of the workload, the following grading policy is in place for group grades:

- If a student receives an **average peer grade of less than 70%**, then the **peer evaluation grade will count as up to 50%** of the total project/paper grade. (the amount will be decided based on the support of lack of participation)
- If an average peer grade is 70% or less, the students should be able to provide *adequate support/documentation* to Dr. Jobe for the low grade. If students see that there is a problem with a peer, it is those students' responsibility to come to Dr. Jobe and discuss the issue immediately. A low peer grade should never be a surprise to Dr. Jobe or the student receiving the low grade!
- Dr. Jobe reserves the right to ask a group to come for a meeting to determine the participation from each member in the group project.

## CONDUCT OF THE COURSE

**Assessment Methods:** Unit Exams, Poster Presentation, Critique Paper

**Teacher Role:** Facilitator, Evaluator, and Resource Person.

**Student Role:** Learner, Researcher, and Communicator.

### **Teaching-Learning Strategies:**

Lecture, discussion, on-line modules, student presentations, student critiques of selected research studies, and computer literature search technique.

## POLICIES

### **Class Attendance:**

1. Regular class attendance is considered essential if students are to receive maximum benefits from the course. The student's responsibility is to meet all classes as scheduled and on time. Control of class attendance is vested in the instructor.

If a consistent pattern of absences from class develops, the faculty and/or the level/team member will deal with the situation. Refer to the section on class absences in the Arkansas Tech University Catalog for further information.

2. Students are responsible for material presented in class, readings, and other assignments.
3. Planned learning activities outside the classrooms are an integral part of the course. These activities will be announced at least three (3) weeks in advance and all students are expected to participate.

### **Dress and Behavior:**

1. The student is expected to dress appropriately while attending classes.
2. Tobacco products are not permitted in any classroom.

### **Academic Honesty**

Students are expected to be honest and truthful in both classroom and practicum experiences. They are expected to adhere to the Code of Ethics and uphold current standards of care. Students are referred to the Arkansas Tech University Student Handbook for more specific regulations regarding academic honesty.

Students are expected to:

- a. Perform their assigned tasks in the practicum experiences. Students should have the permission of the clinical instructor before using assistance from the staff.
- b. Notify the instructor immediately of any clinical error made so that steps can be taken to prevent harm to the patient.
- c. Present written work that is theirs alone.
- d. Correctly document any materials from a textbook, pamphlet, journal, etc., that is used for an assignment.
- e. Be honest and truthful when writing clinical logs and giving verbal or written reports regarding patient care or the student's clinical experiences or assignments.
- f. Only use authorized devices or materials for an examination and not copy from other students' papers.
- g. Document material correctly. Plagiarism is defined as stealing and presenting as one's own ideas or words of another, or not documenting material correctly. Student papers may be evaluated by turnitin.com which can detect plagiarism.

For the first occurrence of academic dishonesty, the student will receive an F. If there is a second occurrence, the student will be dismissed from the program. Students are referred to the ATU catalog and handbook for policies regarding plagiarism.

# TOPICAL OUTLINE

## NUR 4303 NURSING RESEARCH

- Unit 1**      **Overview of Nursing Research and EBP**  
Ch. 1 What is Evidence-Based Practice?  
Ch 2 Using Evidence through Collaboration to promote Excellence in Nursing Practice  
Ch 17 Developing Oneself as an Innovator
- Unit 2**      **Overview of Research Process**  
Ch 3 Identifying Research Questions  
Ch 4 Finding Sources of Evidence  
Ch 5 Linking Theory, Research, and Practice
- Unit 3**      **Setting up Research**  
Ch 6 Key Principles of Quantitative Designs  
Ch 7 Quantitative Designs: Using Numbers to Provide Evidence  
Ch 9 Qualitative Designs: Using Words to Provide Evidence  
Ch 11 Using Samples to Provide Evidence
- Unit 4**      **Collection and Evaluation**  
Ch 10 Collecting Evidence  
Ch 12 Other Sources of Evidence  
Ch 13 What do the Quantitative Data Mean?  
Ch 14 What to the Qualitative Data Mean?  
Ch 15 Weighing the Evidence?
- Unit 5**      **Using Research**  
Ch 16 Transitioning Evidence to Practice  
Ch 18 Evaluating Outcomes of Innovations  
Ch 19 Sharing the Insights with Others

## NUR 4303 NURSING RESEARCH

### UNIT 1 – Overview of Nursing Research and EBP

#### *OBJECTIVES*

Upon completion of this focus, the student should be able to:

1. Define Evidence Based Practice and explain its' influence to nursing practice
2. Describe the role of the B.S.N. in nursing research.
3. Outline the history of nursing research.
4. Differentiate between quantitative research and qualitative research
5. Discuss the major characteristics, purposes and uses of research.
6. Discuss limitations of adopting EBP.
7. Describe the content of a research report.
8. Identify and describe the major sections in a research journal
9. Identify characteristics of research journal articles.
10. Differentiate between evidence-based practice (EBP) and research utilization
11. Discuss examples from history of the unethical research studies.
12. Describe the three primary ethical principles outlined in the Belmont Report.
13. Describe the procedures for obtaining an informed consent.
14. Identify 4 characteristics of innovator
15. Discuss the specific measures the nurse can take to protect the rights of human subjects.

Ada #4 from Unit 5

#### *LEARNING ACTIVITIES*

##### **Required reading:**

Schmidt & Brown Chapters 1, 2, 17

##### **Out of Class activities:**

Vocabulary quiz due day before 1<sup>st</sup> exam

##### **Class activities:**

Lecture, Discussion

# NUR 4303 NURSING RESEARCH

## UNIT 1 – Overview of Nursing Research and EBP

### *Chapter 1 Vocabulary*

1. Evidence-based Practice (EBP)
2. Research Utilization
3. Theory
4. Evidence hierarchies
5. Qualitative Research
6. Quantitative Research
7. Nuremberg Code
8. Deductive Reasoning
9. Inductive reasoning
10. Theoretical framework

### *Chapter 2 Vocabulary*

1. Belmont Report
2. Beneficence
3. Exempt
4. Human rights
5. Informed consent
6. Justice
7. Minimal risk
8. Respect for persons
9. Institutional review boards
10. Declaration of Helsinki

### *Chapter 17 Vocabulary*

1. Career development
2. Critical thinking
3. Flexibility to change
4. Innovator
5. Ladder program
6. Lifelong learning
7. Preceptors
8. Professionalism
9. Self-awareness
10. Socialization

# NUR 4303 NURSING RESEARCH

## UNIT 2 – Overview of Research Process

<i>OBJECTIVES</i>
Upon completion of this focus, the student should be able to: <ol style="list-style-type: none"><li>1. Identify a nursing research topic of interest and develop a problem statement.</li><li>2. Define the terms in the problem statement.</li><li>3. Identify the function and forms for statements of purpose and research questions for quantitative and qualitative studies</li><li>4. Define the term "hypothesis".</li><li>5. Understand controlling for confounding variables</li><li>6. Define independent and dependent variables.</li><li>7. Develop operational definitions of all ambiguous terms.</li><li>8. Describe purposes, scope, and sources of a literature review.</li><li>9. Understand the process of screening, abstracting, critiquing, and organizing research evidence</li><li>10. Describe how wildcard and Boolean operators can aid a literature search</li><li>11. Identify the components and frame a well-worded clinical question (PIO or PICO)</li><li>12. Identify several purposes of theories.</li><li>13. Identify the four central concepts in nursing.</li></ol>
<i>LEARNING ACTIVITIES</i>
<p><b><u>Required reading:</u></b></p> <p>Schmidt &amp; Brown Chapters 3, 4, 5</p> <p><b><u>Out of Class activities:</u></b></p> <p>Vocabulary quiz due day before 1<sup>st</sup> exam.</p> <p><b><u>Class activities:</u></b></p> <p>Lecture, Discussion</p>

# NUR 4303 NURSING RESEARCH

## UNIT 2 – Overview of Research Process

<i>Chapter 3 Vocabulary</i>
<ol style="list-style-type: none"><li>1. Confounding variables</li><li>2. Dependent variable</li><li>3. Directional hypothesis</li><li>4. Hypotheses</li><li>5. Independent variable</li><li>6. Nondirectional hypothesis</li><li>7. Null hypothesis</li><li>8. Problem statement</li><li>9. Purpose statement</li><li>10. Research hypothesis</li></ol>
<i>Chapter 4 Vocabulary</i>
<ol style="list-style-type: none"><li>1. Boolean operators</li><li>2. Grey literature</li><li>3. Keyword</li><li>4. Peer review</li><li>5. Plagiarism</li><li>6. Primary sources</li><li>7. Scholarly literature</li><li>8. Secondary sources</li><li>9. Systematic reviews</li><li>10. Wildcards</li></ol>
<i>Chapter 5 Vocabulary</i>
<ol style="list-style-type: none"><li>1. Concepts</li><li>2. Conceptual definitions</li><li>3. Construct</li><li>4. Empirical indicators</li><li>5. Metaparadigm</li><li>6. Model</li><li>7. Operational definitions</li><li>8. Proposition</li><li>9. Theoretical framework</li><li>10. Theory</li></ol>

# NUR 4303 - NURSING RESEARCH

## UNIT 3 – Setting Up Research

### *OBJECTIVES*

Upon completion of this focus, the student should be able to:

1. Define key concepts as listed on next page.
2. Explain internal and external validity, and explain how to protect against them
3. Differentiate between time dimensions of data collection.
4. Describe/identify experimental, quasi-experimental, non-experimental, cross-sectional and longitudinal designs
5. Describe the qualitative research traditions
6. Describe the characteristics of qualitative research designs
7. Describe trustworthiness in qualitative research data
8. Discuss strategies for enhancing quality in qualitative research
9. Review nonprobability and probability samples
10. Describe several types of sampling designs

### *LEARNING ACTIVITIES*

#### **Required reading:**

Schmidt & Brown Chapters 6, 7, 9, 11

#### **Out of Class activities:**

Vocabulary quiz day before 2<sup>nd</sup> exam  
1<sup>st</sup> APA Quiz due per class calendar dates.

#### **Class activities:**

Lecture, Discussion

# NUR 4303 - NURSING RESEARCH

## UNIT 3 – Setting Up Research

<i>Chapter 6 Vocabulary</i>	<i>Chapter 7 Vocabulary</i>
<ol style="list-style-type: none"><li>1. Causality</li><li>2. Construct validity</li><li>3. External validity</li><li>4. Hawthorne effect</li><li>5. Instrumentation</li><li>6. Internal validity</li><li>7. Randomization</li><li>8. Selection bias</li><li>9. Study validity</li><li>10. Type II error</li></ol>	<ol style="list-style-type: none"><li>1. Comparative designs</li><li>2. Correlational designs</li><li>3. Crossover designs</li><li>4. Descriptive designs</li><li>5. Experimental designs</li><li>6. Exploratory designs</li><li>7. Nonexperimental designs</li><li>8. Preexperimental</li><li>9. Quasi-experimental designs</li><li>10. Survey designs</li></ol>
<i>Chapter 9 Vocabulary</i>	<i>Chapter 11 Vocabulary</i>
<ol style="list-style-type: none"><li>1. Audit trail</li><li>2. Confirmability</li><li>3. Credibility</li><li>4. Ethnography</li><li>5. Etic</li><li>6. Grounded theory</li><li>7. Lived experience</li><li>8. Member checks</li><li>9. Phenomenology</li><li>10. Emic</li></ol>	<ol style="list-style-type: none"><li>1. Attrition rate</li><li>2. Convenience sampling</li><li>3. Effect size</li><li>4. Heterogeneous</li><li>5. Homogeneity</li><li>6. Informed consent</li><li>7. Population</li><li>8. Sample</li><li>9. Sampling plan</li><li>10. Theoretical sampling</li></ol>

# NUR 4303 - NURSING RESEARCH

## UNIT 4 – Collection and Evaluation

### OBJECTIVES

Upon completion of this focus, the student should be able to:

1. Define statistics
2. Identify differences between descriptive and inferential statistics
3. Define and explain Type I and II errors
4. Interpret data reported in statistical tables
5. Appraise data analysis sections of an article.
6. Describe frequency distribution and interpret various descriptive stats
7. Identify sources of measurement error
8. Discuss the major statistical methods for evaluating, classifying, recording and interpreting data
9. Describe trustworthiness in qualitative research data
10. Describe activities qualitative researchers perform to manage and organize their data
11. Discuss strategies for enhancing quality in qualitative research
12. Describe evidence hierarchy
13. Explain how a research may be implemented into practice
14. List the 5 S's
15. List the other sources of knowledge
16. Discuss types of data collection in quantitative designs
17. Describe reliability and validity of tools used in quantitative research and their different aspects
18. Describe and compare characteristics and levels of measurement.

### LEARNING ACTIVITIES

#### **Required reading:**

Schmidt & Brown Chapters 10, 12, 13, 14, 15

#### **Out of Class activities:**

Vocabulary quiz due class day before 3<sup>rd</sup> exam

Coding assignment in class and homework

2<sup>nd</sup> APA Quiz due per calendar date

#### **Class activities:**

Lecture, Discussion

# NUR 4303 - NURSING RESEARCH

## UNIT 4 – Collection and Evaluation

Chapter 10 Vocabulary	Chapter 12 Vocabulary
<ol style="list-style-type: none"> <li>1. Cronbach's alpha</li> <li>2. Interrater reliability</li> <li>3. Levels of measurement</li> <li>4. Nominal</li> <li>5. Ordinal</li> <li>6. Ratio</li> <li>7. Reliability</li> <li>8. Validity</li> <li>9. Test-retest reliability</li> <li>10. Psychometrics</li> </ol>	<ol style="list-style-type: none"> <li>1. Case Studies</li> <li>2. Concept analyses</li> <li>3. Integrative review</li> <li>4. Meta-analysis</li> <li>5. Meta-synthesis</li> <li>6. Practice guidelines</li> <li>7. Summaries</li> <li>8. Synopses</li> <li>9. Systematic review</li> <li>10. Traditional literature review</li> </ol>
Chapter 13 Vocabulary	Chapter 14 Vocabulary
<ol style="list-style-type: none"> <li>1. Confidence intervals</li> <li>2. Descriptive statistics</li> <li>3. Independent test</li> <li>4. Inferential statistics</li> <li>5. Multivariate analysis</li> <li>6. Normal distribution</li> <li>7. Standard deviation</li> <li>8. Statistically significant</li> <li>9. Type I Error</li> <li>10. Type II Error</li> </ol>	<ol style="list-style-type: none"> <li>1. Coding</li> <li>2. Confirmability</li> <li>3. Credibility</li> <li>4. Dependability</li> <li>5. Data reduction</li> <li>6. Qualitative data analysis</li> <li>7. Representativeness</li> <li>8. Transferability</li> <li>9. Triangulation</li> <li>10. Trustworthiness</li> </ol>
Chapter 15 Vocabulary	
<ol style="list-style-type: none"> <li>1. Case control studies</li> <li>2. Clinical practice guidelines</li> <li>3. Cohort studies</li> <li>4. Descriptive studies</li> <li>5. Evidence hierarchies</li> <li>6. Levels of evidence</li> <li>7. Meta-analysis</li> <li>8. Pilot</li> <li>9. Randomized controlled trials</li> <li>10. Systematic review</li> </ol>	

## NUR 4303 - NURSING RESEARCH

### UNIT 5 – Using Research

#### *OBJECTIVES*

Upon completion of this focus, the student should be able to:

1. Identify EBP models
2. Give examples of barriers to application of EBP
3. List Kotter's eight phases of changes
4. List 3 behaviors to maintaining professional integrity in your career.
5. Describe how outcomes are used to evaluate EBP
6. List barriers nurses encounter when testing EBP protocols
7. List ways research can be disseminated
8. Explain the purpose of disseminating findings
9. List parts of a manuscript

#### *LEARNING ACTIVITIES*

##### **Required reading:**

Schmidt & Brown Chapters 16, 18, 19

##### **Out of Class activities:**

Vocabulary quiz due class day before 4<sup>th</sup> exam

##### **Class activities:**

Lecture, Discussion

# **NUR 4303 - NURSING RESEARCH**

## **UNIT 5 – Using Research**

Chapter 18 Vocabulary
<ol style="list-style-type: none"><li>1. Nursing Outcomes</li><li>2. Care-related outcomes</li><li>3. Team membership</li><li>4. Mandated reporting</li><li>5. Continuous quality improvement</li></ol>
Chapter 19 Vocabulary
<ol style="list-style-type: none"><li>1. Authorship</li><li>2. Dissemination</li><li>3. Papers</li><li>4. Posters</li><li>5. Presentations</li></ol>

## Poster Presentation Directions

Groups will consist of no more than four students and a group grade will be given for the poster. The poster is developed around an area of the students' interest in the clinical area of nursing. The poster will serve as a method of integrating material learned in the course.

***\*\*\*Your poster should be a summary of the research on a particular topic that you choose, one that is of interest to nursing. This means that you will summarize the findings of 5-6 research articles on one research question. For example, if you want to answer the question, "What are the most effective nonpharmacologic pain management techniques in children?," then you will find 5-6 studies that answer this question. Articles should provide a balanced view of the subject. You will present the answer to this question in poster format. Remember that your audience for a professional research poster would be fellow nursing professionals.***

The poster will include:

- i. Abstract (a brief one paragraph overview)
- ii. Problem Statement/Question (what question are you trying to answer?)
- iii. Significance to Nursing (how/why is this significant to nursing?)
- iv. Purpose (the purpose of the poster)
- v. Definition of Variables, if this applies (what key variables/concepts are utilized?)
- vi. Methods (how did you find the studies utilized for the poster presentation?)
- vii. Findings (what did the studies find...i.e., what is the answer to your research question?)
- viii. Implications for nursing (how will nurses use this information?)
- ix. References (must cite references in **APA format**)

The due date for the poster and poster presentation is designated on the NUR 4303 course calendar. This due date is a final draft uploaded into blackboard. **DO NOT** take your poster for printing until I give you the **ALL CLEAR!** Students not meeting the date for submitting their poster will receive 5 points off on grade for each day the poster is late. The poster presentation is an oral presentation. I will show you how to present a poster at a professional conference on the day that you bring your poster to class.

The poster **PRESENTATION** is a 5 minute oral presentation to the class. Each member of the group should present a portion of the required information. In this 5 minute time period, you should cover the basics of the critique:

- (1) the research question or hypothesis,
- (2) the sample and how it was selected,
- (3) the methods for answering the research question,
- (4) the findings, and
- (5) the implications for nursing.

This will be a professional poster you will present at Research Day in the Spring semester of your senior year. There is a small cost to printing the poster. Currently Posey Printing in Russellville is printing for \$30. It will take approximately one-week turn-around time to get your poster back. Refer to the syllabus page entitled "Criteria for Poster" for grading guidelines. Use this as you develop your poster. Don't forget 15% is from the peer evaluation!

### CRITERIA FOR POSTER

Presenter (s) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Poster Title: \_\_\_\_\_  
 \_\_\_\_\_

CATEGORY	4	3	2	1
<b>Title</b>	Title can be read from 6 ft. away and is quite creative.	Title can be read from 6 ft. away and describes content well.	Title can be read from 4 ft. away and describes the content well.	The title is too small and/or does not describe the content of the poster well.
<b>Visual Appeal</b>	The poster is exceptionally attractive in terms of design, layout, spacing, and neatness.	The poster is attractive in terms of design, layout, spacing, and neatness.	The poster is acceptably attractive though it may be a bit messy, or slightly overcrowded.	The poster is distractingly messy or very poorly designed. It is not attractive.
<b>Labels</b>	All items of importance are clearly labeled and readable from at least 3 ft. away.	Almost all items of importance are clearly labeled and readable from at least 3 ft. away.	Several items of importance are clearly labeled and readable from at least 3 ft. away	Labels are too small to view OR no important items were labeled.
<b>Grammar</b>	There are no grammatical or citation errors on the poster.	There is 1 grammatical or citation errors on the poster.	There are 2 grammatical or citation errors on the poster.	There are more than 2 grammatical or citation errors on the poster.
<b>Abstract</b>	The abstract provides a background and succinctly summarizes the poster contents.	The abstract provides a background or succinctly summarizes the poster contents.	The abstract is a restating of the findings without summary.	The abstract does not provide either background or summary of the contents.
<b>Purpose</b>	The purpose is cleared stated and labeled.	The purpose is present but not identified.	The purpose is neither present nor labeled.	N/A
<b>Nursing Significance/Implications</b>	Nursing Significance explains reason nurses need this information. Implications explain what nurses do with findings.	Nursing Significance and Implications are there, but Implication lists significance and Significance lists implications	Either Significance or Implications is correctly present.	No Significance or Implications listed
<b>Method</b> <i>(Variables, Search Terms, and Search Tools)</i>	The method present with all 3 aspects.	The method present with two aspects.	The method present with 1 aspects..	Method not present
<b>Results</b> <i>(Ease of understanding, logically organized, and not redundant)</i>	The results presented include all 3 aspects	The results presented include 2 aspects.	The results presented include 1 aspect.	The results presented included none aspects
<b>References/APA</b> <i>(Scored by the biggest error)</i>	There are at least 5 peer reviewed journal articles used, published within the last 5 years, and correctly APA cited.	There are 4 peer reviewed journal articles used, or 1 article published older than the last 5 years, or 1 APA citation error.	There are 3 peer reviewed journal articles used, or 2 articles was published older than the last 5 years, or 2 APA citation error.	There are 2 peer reviewed journal articles used, or 3 articles was published older than the last 5 years, or 3 APA citation error.

## RESEARCH ARTICLE CRITIQUE GUIDELINES

Each group will select (or be provided with) a **quantitative nursing** research article, with guidance from Dr. Jobe, and will write a critique of the article in the form of formal paper. Dr. Jobe must approve the article. The critique will serve as a method of integrating material learned in the course. Because this is a summative project, it is considered the "final exam" project for the course.

The written critique will be submitted to the instructor on the date specified on the course calendar. The paper is to be typewritten and should not exceed 7-12 pages in length.

The grade for the critique will be based upon the quality of the written paper. See the page in this syllabus entitled "Criteria for Evaluation of Research Critique".

Students not meeting the due date for submitting the written critique will receive an adjusted grade. Grades on late papers will be lowered one letter grade for each consecutive day the assignment is late.

***The Critique is turned in as 3 sections. Each section is turned in as the final revision of the paper. This method helps break up the amount of work over the whole semester.***

Failure to submit a peer evaluation on the due date of the paper or project will result in a lowered grade for the student failing to submit the peer evaluation. No exceptions.

This is a formal paper. You will have it completed in APA format. ***This means you will have a Title page. There must also be an introduction and conclusion paragraph (this is not on the grading rubric, but points will be counted off per APA if not included). Please remember all information that is not your idea should be cited as either a quote or paraphrase.***

## Guide to an Overall Critique of a Quantitative Research Report

ASPECT OF THE REPORT	CRITIQUING QUESTIONS	DETAILED CRITIQUING GUIDELINES
<b>Introduction</b> Statement of the problem	<ol style="list-style-type: none"> <li>1. Does the introduction demonstrate the need for the study?</li> <li>2. What is the problem statement? Was the problem stated plainly, and was it easy to identify?</li> <li>3. Is the problem significant for nursing? How?</li> <li>4. Is the population of interest clearly described?</li> <li>5. Was there a good match between the research problem and the methods used—that is, was a quantitative approach appropriate?</li> </ol>	Box 3-1, p. 76 Box 15-1, p.406
Literature review	<ol style="list-style-type: none"> <li>1. Is the review of literature relevant to the problem?</li> <li>2. Is the literature review up-to-date and include major studies on the topic?</li> <li>3. Does the review rely on appropriate materials (research reports, primary/secondary/etc. sources)?</li> <li>4. Does the review summarize individual articles or critically appraise/compare the studies? Did it identify any holes/gaps in the literature? Is it organized well?</li> <li>5. Do you think the literature review provide a solid base for the new study?</li> </ol>	Box 15-1, p.406
Conceptual/theoretical framework	<ol style="list-style-type: none"> <li>1. Are key concepts adequately defined conceptually?</li> <li>2. Are the terms and variables clearly defined? Are the defined conceptually or operationally?</li> <li>3. Is there a conceptual/theoretical framework, rationale, and/or map, and (if so) is it appropriate? If not, do you think the absence of one justified?</li> </ol>	Box 15-1, p.406
Hypotheses or research questions	<ol style="list-style-type: none"> <li>1. Did the study formally present a statement of purpose, research questions, and/or hypotheses? Was this information</li> </ol>	Box 3-3, p. 78 Box 15-1, p.406

	<p>communicated clearly and concisely, and was it placed in a logical and useful location? What was it?</p> <ol style="list-style-type: none"> <li>2. If there were no formal hypotheses, was their absence was appropriate/justified?</li> <li>3. Were purpose, questions and hypotheses appropriately worded, with clear specification of key variables and the study population? If hypotheses, was it directional or null?</li> <li>4. Are the questions/hypotheses consistent with the literature review and the conceptual framework?</li> </ol>	
<p><b>Method</b> Research design</p>	<ol style="list-style-type: none"> <li>1. Was the overall design experimental, quasi-experimental, or nonexperimental? What specific design was used? Do you think this was the most rigorous possible design used?</li> <li>2. If there was an intervention, were the intervention and control conditions adequately described? Was blinding used, and if so, who was blinded? If not, is there a good reason for failure to use blinding?</li> <li>3. Were comparisons made? What type of comparisons were made?</li> <li>4. If the study was nonexperimental, why did the researchers not intervene? What type of nonexperimental/observational study was it?</li> <li>5. Was the number of data collection points appropriate? Longitudinal or cross-sectional?</li> <li>6. What techniques were used to maximize researcher's control over confounding variables? What are the threats to study's internal validity?</li> <li>7. What can be said about the study's external validity?</li> </ol>	<p>Box 6-1, p. 151 15-1, p.406</p>
<p>Protection of participants' rights</p>	<ol style="list-style-type: none"> <li>1. Was the study approved and monitored by an IRB, Research Ethics Board, or other ethics review committee?</li> <li>2. Were study participants subjected to any physical harm, discomfort, or psychological distress? Were steps taken to</li> </ol>	<p>Box 15-1, p.406</p>

	<p>address these if the existed? Was there any coercions or undue influence? Was any deception used?</p> <ol style="list-style-type: none"> <li>3. Were the benefits to participants and/or society adequate justified to outweigh potential risks/discomfort or costs?</li> <li>4. Was informed consent obtained? Was it adequate? If not, was the justification valid?</li> <li>5. Were any vulnerable groups involved? If so, what special precautions instituted because of their vulnerable status?</li> </ol>	
Sampling Plan	<ol style="list-style-type: none"> <li>1. Was the population identified and described? Were eligibility criteria specified?</li> <li>2. Was the sample described in sufficient detail?</li> <li>3. Was the best possible sampling design used to enhance the sample's representativeness? Were sample biases minimized?</li> <li>4. Was the sample size adequate? Was a power analysis used to estimate sample size needs?</li> </ol>	Box 15-1, p.406
Data collection	<ol style="list-style-type: none"> <li>1. Given the research question and characteristics of participants, did the researcher use the best method of capturing study phenomena (i.e., questionnaires, observation, bio-physiologic measures)?</li> <li>2. Did the researchers make good data collection decisions with regard to structure, quantification, and objectivity?</li> <li>3. If self-report methods are used, did the researchers make good decisions about the specific methods used to solicit information (E.G., in-person interviews, mailed questionnaires, and so on)?</li> <li>4. For structures self-report, was there an appropriate mix of questions and composite scales?</li> <li>5. Were efforts made to enhance data quality in collecting the self-report data (e.g., were efforts made to reduce or to evaluate response biases? Was the reading level of the</li> </ol>	Box 15-1, p.406

	instruments appropriate for self-administered questionnaires?)?	
Instruments or Measurements	<ol style="list-style-type: none"> <li>1. Is an instrument used to collect data? Are the specific instruments adequately described and were they good choices, given the study purpose and study population?</li> <li>2. Does the report offer evidence of the reliability and validity of the measures? Does this evidence come from the research sample itself, or based on other studies?</li> <li>3. If reliability was reported, is the reliability sufficiently high?</li> <li>4. If validity information is reported, which validity approach was used? Was this method appropriate? Does the validity of the instrument appear to be adequate?</li> <li>5. If neither is provided, what conclusion can you research about the quality of the data in the study?</li> <li>6. If diagnostic/screening tool was used, is information provided about its sensitivity and specificity, and were these qualities adequate?</li> </ol>	Box 15-1, p.406
Analysis	<ol style="list-style-type: none"> <li>1. Did the descriptive statistics in the report describe the variables and background characteristics of the sample? Were they reported the best way possible (percentage but mean would have been more useful?)</li> <li>2. What statistics were used to analyze the data that were collected? What statistics were used to determine differences between the groups? Were the results significant?</li> <li>3. Were analyses undertaken to address each research question or test each hypothesis? Did the reported statistics provide enough information about the study results?</li> <li>4. Were appropriate statistical methods used, given the level of measurement of the variables, number of groups being compared, and assumptions of the tests?</li> </ol>	Box 13-2, p. 372 Box 15-1, p.406

	<ol style="list-style-type: none"> <li>5. How do you know that Type I and Type II errors avoided or minimized?</li> <li>6. Was there an appropriate amount of statistical information? Were findings clearly and logically organized? Were tables or figures used judiciously to summarize large amounts of statistical information? Are the tables clearly presented, with good titles and carefully labeled column headings? Is there information presented in the text and tables redundant?</li> </ol>	
<p>Interpretation of the findings</p>	<ol style="list-style-type: none"> <li>1. Were all the important results discussed?</li> <li>2. Did the researchers discuss any study limitations and their possible effects on the credibility of the findings?</li> <li>3. Do the tables and graphs agree with the text?</li> <li>4. Were results interpreted in light of findings from other studies?</li> <li>5. Did the researchers draw any unwarranted conclusions about the generalizability of the results?</li> <li>6. Did the researchers discuss the implications of the study for clinical practice or further research— and are those implications reasonable and complete?</li> </ol>	<p>Box 15-1, p.406</p>

Page numbers refer to the location of the box in *Essentials of Nursing Research, 9e*.

## CRITERIA FOR EVALUATION OF RESEARCH CRITIQUE

Student: \_\_\_\_\_

Criterion		Max Score	Individual Score
Section One	Critique of Problem Statement and Purpose	10	
	Critique of Literature Review	10	
	Critique of Conceptual/Theoretical Framework	5	
	Critique of Questions, Aims, or Hypothesis	5	
Section Two	Critique of Research Design	10	
	Critique of Legal-Ethical Issues	5	
	Critique of Sampling Plan	5	
	Critique of Data Collection	5	
Section Three	Critique of Instruments/Measurements	5	
	Critique of Analysis	5	
	Critique of Interpretation of findings	10	
Organization, APA, Grammar, Spelling, Etc.		10	
Total		85 pts	a)
Group Participation Average Score *0.15			
Group Participation Average Score *0.15			
Group Participation Average Score *0.15			

STUDENT EVALUATOR: \_\_\_\_\_ POSTER PROJECT TITLE: \_\_\_\_\_

**Confidential Peer Poster Evaluation of Group Participation**

Date \_\_\_\_\_

Directions: Evaluate individual group members on the 4 point Likert scale. Strive for some distribution of scores to reflect strengths and weaknesses of individuals.

- 4 Strongly Agree/ Always
- 3 Slightly Agree/Mostly
- 2 Slightly Disagree/Occasionally
- 1 Strongly Disagree/ Never

NAMES:			
1. Attended and was well prepared at all group meetings.			
2. Accomplished group assignments on time.			
3. Actively participated in problem solving.			
4. Seemed genuinely concerned with group goals and project.			
5. Provided leadership to the remainder of the group.			
6. Carried a fair share of the group's workload.			
7. Contributed ideas in organizing and implementing group project.			
8. Actively participated in preparing to present project(s) to class.			
9. Overall intellectual contribution to group.			
10. Overall work contribution to group.			
<b>MEMBER TOTAL:</b>			

STUDENT EVALUATOR: \_\_\_\_\_ CRITIQUE TITLE: \_\_\_\_\_

**Confidential Peer Critique Evaluation of Group Participation**

Date \_\_\_\_\_

Directions: Evaluate individual group members on each of the 4 point Likert scale. Strive for some distribution of scores to reflect strengths and weaknesses of individuals.

- 4 Strongly Agree/ Always
- 3 Slightly Agree/Mostly
- 2 Slightly Disagree/Occasionally
- 1 Strongly Disagree/ Never

NAMES:			
1.	Attended and was well prepared at all group meetings.		
2.	Accomplished group assignments on time.		
3.	Actively participated in problem solving and group work.		
4.	Seemed genuinely concerned with group goals and project.		
5.	Took responsibility to agreed upon part of project		
6.	Contributed ideas in organizing and implementing group project.		
7.	Actively participated in preparing to present project(s) to class.		
8.	Overall intellectual contribution to group.		
9.	Overall work contribution to group.		
<b>MEMBER TOTAL:</b>			