

Example of a Well-Designed Course in Nursing

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Name of Institution: Appalachian State University

1. Specific Context

- **The subject matter: Research**
- **The title of the course: "Introduction to Nursing Research"**
- **Typical class size: 44-48 students**
- **Level of the course: Undergraduate**
- **Mode of delivery: Face to Face**
- **Type of institution: University**

2. General Description of the Course

This course examines the role of research and theory in nursing practice and health care. In addition, it provides an overview and an analysis of research methodologies and the theoretical approaches with a continued look at evidence-based nursing practice. The roles of the professional nurse as a Member of a Profession, Designer, Manager, and Coordinator of Care, and Provider of Care as they relate to the application of nursing research in practice are explored.

3. Big Purpose of the Course

The purpose of this course is to prepare baccalaureate degree nurses on the roles of "research consumer" and "research participant" on a research team. In order to fulfill these roles, the nurses must learn to evaluate research studies for soundness and relevance in order to have an evidence-based practice.

4. Important Situational Factors/Special Pedagogical Challenge

- Specific Context: 44 Senior Nursing Students meeting twice a week on Tuesday and Thursday afternoons for total of 3 hours a week in a live classroom.

- **General Context:** Fall semester of senior year while taking their clinical rotations in OB/GYN concurrently. The students will complete their clinical rotations in the mornings before taking research in the afternoons.
- **Expectations of External Groups:** Our society expects for our health care professionals to be the best trained in the world and provide top class medical care. Our society places strict licensure and regulatory guidelines to ensure that our healthcare professionals complete rigorous training and adhere to the highest standards of conduct. Accrediting and licensing organizations set requirements for ongoing continuing education with the expectation that health care providers stay current on scientific research and implement evidenced based practice into the care of their patients. This course provides the foundation for evaluating the scientific integrity of the research and determining the appropriateness of the evidenced based research findings into patient care.
- **Nature of the Subject:** The subject is primarily a cognitive process. The subject matter is convergent and stable but with information explosion on data accumulation. New clinical research information is being posted daily in many multimedia avenues at an incredible rate. Because of the volume of information available, it is even more important to be able to efficiently sort the most relevant and scientifically sound studies.

The students will be presented with a framework for evaluating the scientific rigor of information presented in articles. The students will practice utilizing the evaluation framework and discuss the level of scientific rigor of the articles examined during a class activity. At the end of class, examples of non-scientific data utilization and the harmful effects on patient care scenarios will be discussed. A final short discussion on ethical practice will be added before the class is dismissed.
- **Student Characteristics:** This is a mandatory course for all nursing students. The class is composed of full time nursing students with an average age in the 20s. The students have had minimal exposure to research. This course is the students' first and only research course in the undergraduate nursing program. Most of the students are traditional students who pursue two years of college prior to being accepted into the nursing program. Most of the students do not have a medical background and have very limited experience working in clinical settings. The students tend to focus most on completing their nursing school training and passing their state licensure boards. Most students seem intimidated

by the research process and the language used within the scientific method. By repeating the research terms and process through class discussion and class exercises, the students will become more familiar with research process and terminology. The application exercises target specific skills for each learning objective. The students receive written feedback and verbal feedback regarding their performance on the in-class application exercises. The importance of mastering skills in critiquing and applying nursing research is repeatedly emphasized and their progress in developing skills at critiquing research is praised. At the beginning of each class a short motivational video will be played about medical treatment innovations that have resulted from evidence based research. Hopefully, the short videos will help tie the importance of using evidence based research to provide world class medical care.

- **Teacher Characteristics:** I see teaching nursing students as my calling. I have 27 years in diverse nursing roles to include clinical, administrative, education, research and leadership positions. My operational experience includes outpatient family practice residency clinics, inpatient mental health, outpatient mental health as a nurse practitioner, substance abuse treatment, development of a health and wellness center, and director of nursing for three clinics. I have also completed the AF instructor course and taught within the military setting. My leadership style is that of a servant leader. I came to ASU to help the students become successful as competent learners and nurses. I feel honored to have this opportunity to serve the students and help develop them into competent nurses.
- **Special Pedagogical Challenge:** Very few students get excited about an opportunity to take a research course. The students just want to get through the course. It is very difficult for the students to understand the connection between taking a research course and developing into a proficient nurse. The students tend to be very task focused rather than understanding that the largest part of nursing is critical thinking.
 - o **How I plan to deal with this challenge:**
 1. The students will be conducting their nurse clinical rotations during the same semester. It is important that the nursing students have a wide choice of evidenced based research topics. The students will be encouraged to pick an evidence based research topic that will be relevant to their clinical rotation.

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2. In addition, I will share information from the evidence based research topics with the clinical instructors following staff meetings to facilitate incorporation of research into the clinical practice.

5. 3-Column Table

Learning Goals:
Activities:

Assessment Activities:

Learning

<p>1. Foundational Knowledge:</p> <ul style="list-style-type: none"> Understanding of the steps of the research process: Identify problem, define key terms, select theoretical framework, review the relevant literature, choose a research design, collect data, complete data analysis, consolidate a synthesis of findings, derive conclusion, and dissemination the results Defines concepts of validity, reliability, control, and qualitative and quantitative research designs. 	<ul style="list-style-type: none"> Students will complete Application Exercises #1-#10 Students will learn the terms and basic skills a Research Proposal Complete Midterm and Final Written Exams 	<ul style="list-style-type: none"> Weekly on-line quizzes prior to class each week on homework assignments Lecture with audio-visual material to re-inforce important foundational concepts from homework/readings on Tuesdays Application exercises on weekly content completed in small group format each Thursday
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<p>2. Application:</p> <ul style="list-style-type: none"> • Practical thinking: demonstrates individual problem solving and decision making capabilities • Critical thinking: Able to critique research studies to determine if they meet the criteria for scientific integrity • Managing a complex project as a team: able to consolidate different viewpoints into one research product 	<ul style="list-style-type: none"> • Students will write chapters 1, 2, & 3 of a Research Proposal • Students will critique strong, medium and poor quality research articles based on checklist criteria as part of application exercises. • Students will complete a Systematic Review paper on 16 scholarly research studies related to an identified clinical problem. 	<ul style="list-style-type: none"> • Homework assignments reviewing examples of high and low quality research proposals based on criteria identified in rubric • Written feedback on application exercises and drafts of each chapter of research proposal • Classroom debate regarding quality of studies; students must defend their stance on quality based on checklist criteria; students will also discuss possible implication of applying poorly designed studies to a nursing practice • Group work outside of class time to complete project based on rubric • Application exercise in class on evaluating sampling method, sample size, and analysis in research articles • Individual and group appointment times to discuss thought process and progress toward completion of systematic review
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<p>3. Integration:</p> <ul style="list-style-type: none"> • Able to collect and analyze information from various perspectives related to identified clinical problems. • Connects evidence based information to nursing practice. 	<ul style="list-style-type: none"> • Students will describe at least three benefits of conducting interdisciplinary research studies • Students will be able to discuss at least one application of evidence based research in their clinical rotation experience 	<ul style="list-style-type: none"> • Guest speaker from Department of Social Work to discuss interdisciplinary research studies and opportunities to be involved in interdisciplinary projects • Student Ignite Speeches on personal example of utilizing evidence based research in practice
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<p>4. Human Dimension:</p> <p>A. Learning about ONE-SELF:</p> <ul style="list-style-type: none"> Describe personal characteristics that enhance and create barriers to the nurse/patient interpersonal relationship. 	<ul style="list-style-type: none"> Students complete a fun survey that measures their personality traits. Students learn about the role of the qualitative researcher and researcher behaviors/ characteristics that impact data collection Students learn about Stetler Model of Research Utilization as it relates to organizational change. 	<ul style="list-style-type: none"> Lecture on personality traits/survey results Small group discussions on opposite personality traits and group dynamics Students participate in a card game activity during class time (each group of 4 students is given written instructions to play the card game; the winners and losers from each game rotate tables; no student is allowed to talk; unknown to each student, the rules are slightly different at each table) Class discussion on card game experience; students discuss thoughts and interaction patterns; students evaluate whether their actions/thoughts enhanced or hindered interpersonal relationships; the card game experience is related to different departments within an organization; the Stetler Model of Research utilization as it relates to
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<p>5. Caring:</p> <ul style="list-style-type: none"> • Cares about providing the best practices for patient care. 	<ul style="list-style-type: none"> • Students watch motivational video with patient testimony about the impact of medical care on their quality of life. • Students receive feedback from their peers on their class and poster presentations. • Students receive feedback from clinical instructors 	<ul style="list-style-type: none"> • Inspirational Videos focused on why research is important (examples: US military recovery after limbs destroyed during War; Syphilis Study; Child dies due to poor medical treatment; Impact of using tradition versus evidence based practice; Hope for the future in cancer research; patient testimonials) • Student in class presentations on their findings from systematic review research
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<p>6. How to Continue Learning:</p> <ul style="list-style-type: none"> • Critiques information to determine scientific integrity and applicability to nursing practice. 	<ul style="list-style-type: none"> • Students will complete written research critique forms evaluating Sigma Theta Tau poster presentations. • Students wrote down their goals during the first day of class and then review the progress on those goals during class. 	<ul style="list-style-type: none"> • Students practice critique forms during oral presentation in class • Student Poster Presentations at Sigma Theta Tau Conference • Students provided list of upcoming conferences and encouraged to submit their posters for presentation opportunities • Utilized the World Café Method to evaluate personal goals and overall objectives for the course
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The students have responded very favorable to the addition of videos describing the impact of research on the quality of life for patients. I received several very positive comments on learning new information about the advances in prosthetics and the resulting quality of life improvements for individuals' who have lost a limb. It is exciting to see the "ah ha" recognition on the faces of the students as they connect the value of research to real life patient outcomes. The nursing school is only 5 years old. No research class in this school of nursing has ever received a rating above "4" and many of the ratings have been the lowest in the nursing school. Historically the students have complained that this course was not relevant. This research class rating was 4.19, the highest ever received in the School of Nursing at ASU.

6. Weekly Schedule

Week: TUESDAYS: 1:00-2:15 PM THURSDAYS: 1:00-2:15 PM

	Lecture/Discussion: Overview Research in Nursing	Small Group Application Exercise #1
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	Lecture/Discussion: Legal and Ethical Issues	Practice Test on Content from Lecture Small Group Application Exercise #2
	Lecture/Discussion: Research Problems, Questions and Hypothesis	Practice Test on Content from Lecture Small Group Application Exercise #3
	Lecture/Discussion: Review of the Literature and Theoretical Frameworks; (Chapter 1: Introduction Paper Due)	Practice Test on content from Lecture Small Group Application Exercise #4
	Lecture/Discussion: Qualitative/Quantitative Design	Small Group Application Exercise #5
	Short Lecture on Populations and Samples; Application Exercise #6; (Chapter 2: Literature Review Paper Due)	Review for Midterm
	Midterm Exam	Guest speaker
	Lecture/Discussion: Measurement and Data Quality	Small Group Application Exercise #7
	Lecture/Discussion: Data Collection Methods	Small Group Application Exercise #8
	Lecture/Discussion: Descriptive Statistics; (Chapter 3, Methodology Paper Due)	Small Group Application Exercise #9
	Lecture/Discussion: Inferential Statistics	Small Group Application Exercise #10
	Lecture/Discussion: Stetler Model of Research Utilization; (Group Systematic Review Paper Due)	Thanksgiving: No Class
	Lecture/Discussion: Presentation and Discussion of Findings, Communication, and Critique	Practice Poster Critiques; Finalize Poster in Class
	Sigma Theta Tau Conference	Poster Gallery Presentation/ Critique
	Review for Final	Final Exam

7. Evidence of Impact (optional)

My teaching strategy is to cover multiple avenues of learning for each research topic. The application exercises include “gray area” samples of research articles that do not fit clearly into the concepts discussed in the previous class. This “gray area” generates group discussion and debate from various viewpoints. The content of the class is also applied by writing a draft research proposal (Chapters 1, 2 & 3) as an out of class assignment. I have noticed that the formulation of the research question, hypothesis, and proposed course design are of high quality and reflect an important level of critical thinking.

Overall, the average student rating of the course was 4.19 [on a scale of 1[low]-5/high]. There were positive comments from the class on utilization of application activities and increased confidence level. There were negative comments on terms used in slide presentation, and some recommendations that terms be explained more clearly and that more focus on statistics content. New application exercises will be developed to provide more practice using statistics.

8. Most Exciting Aspect of the Re-Designed Course for Me (optional)

The most exciting part of this experience for me has been witnessing the critical thinking development of the students. I have been able to listen to their small group discussions and observe their growth of self-confidence during debates. We received rave reviews about the quality of the research posters that our students presented at the Sigma Theta Tau conference. Faculty and hospital staff commented on how well the students presented and defended the content on their posters.

9. My Contact Information

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