

Nursing 446 Research and Evidence-Based Practice

Course Syllabus

Heidi Wincentzen
CPS 334B
715-348-4828

Course Description

This course introduces the importance of research to improve clinical practice, strategies to evaluate the quality of research and evidence, and increase integration of research into practice.

Student Learning Outcomes

Upon completion of this course, you should be able to:

1. Articulate the relationships between theory, research, and nursing practice
2. Understand selected quantitative and qualitative approaches to research
3. Utilize literature searches to obtain best evidence for practice
4. Critique individual research studies considering research approaches and rights of human subjects
5. Discuss approaches for fostering adoption of an evidence-based practice change in a health-care setting

Course Materials (required and recommended texts, articles, readings with full citations)

Required Text:

LoBiondo-Wood, G., & Haber, J. (2014). *Nursing research: Methods, critical appraisal for evidence-based practice* (8th ed.). St. Louis MO: Mosby. ISBN 978-0-323-10086-1

Recommended Text:

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

APA Guide

A brief summary of the APA publication format is available online from the Online Writing Lab at Purdue University:

http://owl.english.purdue.edu/handouts/research/r_apa.html

Supplemental Readings may be added in course area in D2L

Unit 1: Introduction and Searching Strategies.

Krieger, M. M., Richter, R. R., & Austin, T. M. (2008). An exploratory analysis of PubMed's free full-text limit on citation retrieval for clinical questions. *Journal of the Medical Library Association*, 96(4), 351-355.

Sharts-Hopko, N. C. (2010). To engage in evidence-based practice, you must first find the evidence. *Journal of the Association of Nurses in AIDS Care*, 21, 463-466.

Unit 2: What is research, why do we do it, how do we appraise it, and what is evidence-

based practice? Perspectives on the link between theory, research, and practice.

Helmstadter, C. (2008). Authority and leadership: The evolution of nursing management in 19th century teaching hospitals. *Journal of Nursing Management*, 16(1), 4-13.

Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2009). Igniting a spirit of inquiry: An essential foundation for evidence-based practice. *AJN*, 109, 49-52.

Unit 4: Qualitative research and sampling.

Nickasch, B., & Marnocha, S. K.. (2009). Healthcare experiences of the homeless. *Journal of the American Academy of Nurse Practitioners*, 21(1), 39-46.

Ebneshahidi, A., & Mohseni, M. (2008). The effect of patient-selected music on early postoperative pain, anxiety, and hemodynamic profile in cesarean section surgery. *The Journal of Alternative and Complementary Medicine*, 14(7), 827-831

Nemcek, M. A., & James, G. D. (2007). Relationships among the nurse work environment, self-nurturance and life satisfaction. *Journal of Advanced Nursing*, 59(3), 240-247.

Unit 6: Ethical issues in research, including cultural sensitivity and inclusion of vulnerable populations in research, introduction to measurement reliability and validity, and quantitative data analysis

Aroian, K. J., & Vander Wal, J. S. (2007). Measuring elders' symptoms with daily diaries and retrospective reports. *Western Journal of Nursing Research*, 29(3), 322-337.

Bannigan K., & Watson, R. (2009). Reliability and validity in a nutshell. *Journal of Clinical Nursing*, 18(23), 3237-3243. DOI: 10.1111/j.1365-2702.2009.02939.x

Unit 7: Evidence-based practice information and project development and presentation.

Anderson, W. G., McNamara, M. C., & Arnold, R. M. (2009). Systematic reviews and meta-analyses. *Journal of Palliative Medicine*, 12, 937-946.

Boivin, A., Green, J., van der Meulen, J., Legare, F., & Nolte, E. (2009). Why consider patients' preferences? A discourse analysis of clinical practice guideline developers. *Medical Care*, 47(8),

Fineout-Overholt, E., Melnyk, B. M., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice, step by step: Critical appraisal of the evidence: Part III. *American Journal of Nursing*, 110(11), 43-51.

Fineout-Overholt, E., Williamson, K. M., Gallagher-Ford, L., Melnyk, B. M., & Stillwell, S. B. (2011). Evidence-based practice, step by step: Following the evidence: Planning for sustainable change. *American Journal of Nursing*, 111(1), 54-60.

Gallagher-Ford, L., Fineout-Overholt, E., Melnyk, B. M., & Stillwell, S. B. (2011). Evidence-based practice, step by step: Implementing an evidence-based practice change. *American Journal of Nursing*, 111(3), 54-60.

Kelechi. T.J., & Johnson, J.J. (2012). Guideline for the management of wounds in patients with lower-extremity venous disease: An executive summary. *Journal of Wound Ostomy Continence Nursing*, 39(6), 598-606. doi: 10.1097/WON.0b013e31827179e9

Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice: Step by step: The seven steps of evidence-based practice. *American Journal of Nursing*, 110(1), 51-53.

Stillwell, S. B., Fineout-Overholt, E., Melnyk, B. M., & Williamson, K. M. (2010). Evidence-based practice, step by step: Asking the clinical question: A key step in

Activity	Points
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evidence-based practice. *American Journal of Nursing*, 110(3), 58-61.

Other Recommended Readings

Melnyk, B. M., & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing and healthcare*. 2nd edition. Philadelphia: Lippincott Williams & Wilkins.

Munhall, P.L. (2012). *Nursing research: A qualitative perspective*. 5th edition. Sudbury, MA: Jones & Bartlett Learning.

The National Guideline Clearinghouse: <http://www.guideline.gov/>

The AGREE collaboration. Here is an instrument for appraising clinical practice guidelines: <http://www.agreecollaboration.org/instrument/>

From the Registered Nurses Association of Ontario (Canada): Toolkit – Implementation of Clinical Practice Guidelines: <http://rnao.ca/bpg/resources/toolkit-implementation-clinical-practice-guidelines>

Grading Policy

Your course grade will be based on the quality of your work for the two written assignments, EBP report, discussion participation, peer evaluation, and four quizzes.

3 Quizzes	30%(10 points each)
Critique of qualitative research	15%
Critique of quantitative research	15%
Participation in discussions	10%
EBP Presentation	25%
Peer Review	5%

Grading Scale

Grade	Percent
A	94-100
A-	92-93
B+	90-91
B	85-89
B-	82-84
C+	80-81
C	75-79
C-	73-74
D+	71-72
D	65-70
D-	63-64
F	<63

A grade of C or higher is required to pass all undergraduate courses and to progress in the program. Grades in undergraduate courses are not rounded up. If you have questions, please contact me.

Group Assignments

There are two group assignments that will enhance your ability to critique qualitative and quantitative research articles, and a third group assignment, the Evidence-Based Practice (EBP) project, that will help you learn about evidence-based practice. When you submit your group work, be sure to include the names of all active group members on the assignment; but include only those who actually participated in completing the assignment.

Critique of a Qualitative Research Study

Choose one research article from the following:

1. Phenomenological Study

Casida, J.M., & Marcuccilli, L., Peters, R.M., & Wright, S. (2011). Lifestyle adjustments of adults with long-term implantable left ventricular assist devices: a phenomenologic

inquiry. *Heart & Lung*, 40(6), 511-20.

Krumwiede ,K.A.. & Krumwiede, N. (2012). The lived experience of men diagnosed with prostate cancer. *Oncology Nursing Forum.*, 39(5), E443-50. doi: 10.1188/12.ONF.E443-E450.

2. Grounded Theory

Catallo, C., Jack, S.M., Ciliska, D., & Macmillan, H.L. (2012). Minimizing the risk of intrusion: A grounded theory of intimate partner violence disclosure in emergency departments. *Journal of Advanced Nursing*. doi: 10.1111/j.1365-2648.2012.06128.x.

Sørensen, D., Frederiksen, K., Groefte, T., & Lomborg, K. (2012). Nurse–patient collaboration: A grounded theory study of patients with chronic obstructive pulmonary disease on non-invasive ventilation. *International Journal of Nursing Studies*. [http://dx.doi.org/ 10.1016/j.ijnurstu.2012.08.013](http://dx.doi.org/10.1016/j.ijnurstu.2012.08.013)

3. Ethnography

Oudshoorn, A., Ward-Griffin, C., Forchuk, C., Berman, H., & Poland, B. (2012). Client-provider relationships in a community health clinic for people who are experiencing homelessness. *Nursing Inquiry*. doi: 10.1111/nin.12007

Slatore, C.G., Hansen, L., Ganzini, L., Press, N., Osborne, M.L., Chesnutt, M.S., & Mularski, R.A. (2012). Communication by nurses in the Intensive Care Unit: Qualitative analysis of domains of patient-centered care. *American Journal of Critical Care*, 21(6), 410-418.

When writing this paper, use the “Critiquing Criteria: Qualitative Research” on page 136 of Lo-Biondo and Haber (2014) and . Follow the list of questions given there for this assignment. Your group should prepare a narrative summary of your answer to these questions: simple *yes* or *no* answers are not acceptable. This assignment should read like a paper: it should be typed using APA format, and it should be limited to 5 pages (double-spaced), not including the references page(s).

Critique of a Quantitative Research Study

Choose one research article from the following:

Experimental Design Study

Thomas, M.L., Elliott, J.E., Rao, S.M., Fahey, K.F., Paul, S.M., & Miaskowski, C. (2012). A randomized, clinical trial of education or motivational-interviewing-based coaching compared to usual care to improve cancer pain management. *Oncology Nursing Forum*, 39(1), 39-49.

Vinsnes, A.G., Helbostad, J.L., Nyrønning, S., Harkless, G.E., Granbo, R., & Seim, A. (2012). Effect of physical training on urinary incontinence: a randomized parallel group trial in nursing homes. *Clinical Interventions in Aging*, 7:45-50.

Quasi-experimental Design Study

Gulpers, M.J., Bleijlevens, M.H., Capezuti, E., van Rossum, E., Ambergen, T., & Hamers, J.P. (2012). Preventing belt restraint use in newly admitted residents in nursing homes: A quasi-experimental study. *International Journal of Nursing Studies*.
<http://dx.doi.org/10.1016/j.ijnurstu.2012.07.013>

Otte, J.L., Carpenter, J.S., Zhong, X., & Johnstone, P.A.(2011).Feasibility study of acupuncture for reducing sleep disturbances and hot flashes in postmenopausal **breast** cancer survivors. *Clinical Nurse Specialist*, 25(5), 228-36.

Nonexperimental Design Study

Henderson ,W.A., Martino, A.C., Kitamura, N., Kim, K.H., & Erlen, J.A. (2012). Symptom status predicts patient outcomes in persons with HIV and comorbid liver disease. *AIDS Research and Treatment*. doi: 10.1155/2012/169645

Lauria, L, Lamberti, A, & Grandolfo, M. (2012). Smoking behaviour before, during, and after pregnancy: the effect of breastfeeding. *The Scientific World Journal*. doi:10.1100/2012/154910.

Groups

The 3 assignments are all group assignments.

When writing this paper, be sure to refer to the “Critical Appraisal Questions to Guide Evaluations” on pages 348-350 in LoBiondo-Wood and Haber. Follow the list of questions given there for this assignment. Your group should prepare a narrative summary of your answer to these questions: simple *yes* or *no* answers are not acceptable. This assignment should read like a paper: it should be typed using APA format, and it should be limited to 5 pages (double-spaced), not including the references page(s).

Evidence-Based Practice Assignment

The purpose of this assignment is to help you learn about evidence-based practice (and to have some fun while doing this) by applying what you learn in assigned readings and through independent literature searches to a **hypothetical situation**.

You (as a group) will pretend that you are nurses on an evidence-based practice committee in a hypothetical healthcare organization (i.e., not a real setting). As nurses on this committee you will need to identify a nursing assessment or intervention that is well-supported by evidence (e.g., by clinical practice guidelines and research studies) and decide how to promote the adoption and evaluation of this clinical practice in your hypothetical health care institution. In your report of this work you will describe and discuss (1) how you found the evidence supporting the nursing assessment or intervention, (2) how you concluded the evidence was sufficiently strong to support the

nursing practice, (3) how you would promote adoption of this clinical practice by nurses in your hypothetical healthcare setting, and (4) how you would recommend that the organization evaluate adoption of the practice change.

(*Note:* The clinical practice you recommend should be an autonomous (or relatively autonomous) nursing action (e.g., an assessment or an intervention). This does **not** include delegated interventions such as administering a medication or a provider's decision such as giving a medicine versus counseling. It could include collaborating with physicians to seek a physician order such as removal of a urinary catheter.)

What is the committee expected to do?

The EBP Committee is expected to:

1. **Conduct two meetings** and submit minutes of each meeting. While conference calls or online chats might be possible, most groups conduct their meetings in the group's private discussion forum (i.e., they post and discuss things related to the project and completing the report).
2. **Complete an EBP project report. The criteria for the report** will be discussed in class.

Guidelines for Critique of a Qualitative Research Report

LoBiondo-Wood and Haber (2014). Nursing Research: Methods and Critical Appraisal or Evidenced-Based Practice, pp. 135-136, "Identifying the Phenomenon."

Use the following to structure the study:

1. Is the phenomenon focused on human experience within a natural setting?
2. Is the phenomenon relevant to nursing and/or health?

Research Question

3. Does the question specify a distinct process to be studied?
4. Does the question identify the context (participant group/place) of the process that will be studied?
5. Does the choice of a specific qualitative method fit with the research question?

Researcher's Perspective

6. Are the biases of the researcher reported?
7. Do the researchers provide a structure of ideas that support their beliefs?

Sample Selection

8. Is it clear that the selected sample is living the phenomenon of interest?

Data Gathering

9. Are the data sources and methods for gathering data specified?

10. Is there evidence that participant consent is an integral part of the data-gathering process?

Data Analysis

11. Can the dimensions of data analysis be identified and logically followed?

12. Does the researcher paint a clear picture of the participant's reality?

13. Is there evidence that the researcher's interpretation captured the participant's meaning?

14. Have other professionals confirmed the researcher's interpretation?

Describing the findings

15. Are the examples provided to guide the reader from the raw data to the researcher's synthesis?

16. Does the researcher link the findings to existing theory or literature, or is a new theory generated?

Guidelines for Critique of a Quantitative Research Report

Beth L. Rodgers, Ph.D., RN, FAAN

University of Wisconsin-Milwaukee, College of Nursing

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A critique should be balanced, including mention of strengths and weaknesses, and it should be constructive, providing suggestions for how the study might be improved.

1. Source

Is the report from a peer-reviewed publication?

Is the research current and from a current source?

2. Research Problem

Is the problem identified clearly?

Is it significant - does the researcher provide a good argument for significance?

Is it relevant to nursing/health care?

3. Literature Review

- ☒ Is it convincing that the author reviewed a sufficient amount of literature?
- ☒ Is it balanced, presenting literature that supports and that differs from the researcher's position?
- ☒ Is the review written critically (giving strengths and weaknesses of previous work)?
- ☒ Is the review comprised only of primary sources?
- ☒ Are references current, or a combination of current and classic?

4. Theoretical Framework

- ☒ Is a theoretical framework specified?
- ☒ Does the framework "fit" the problem? Include all relevant variables?
- ☒ Are concepts (variables) defined clearly from a theoretical standpoint?
- ☒ If no framework is provided, should there be one? Is it difficult to understand the relationships among variables in the study without a framework to tie the pieces together?
- ☒ Are results interpreted in reference to the theoretical framework?

Note: Qualitative research, descriptive studies, and physiologic studies typically will not have a theoretical framework.

5. Variables

- ☒ Are the variables in the study appropriate to the problem?
- ☒ Are the variables relevant to nursing practice?
- ☒ Are the means to measure the variables appropriate?

6. Hypotheses

- ☒ Are hypotheses stated? If not, does the researcher provide sufficient information to determine what the hypotheses were?
- ☒ If stated, are the hypotheses clear? Specific? Testable?

Note: Qualitative research and many types of descriptive studies do not involve hypotheses. In a qualitative study the researcher may suggest hypotheses as a result of the research.

7. Design (overall)

- ☐ Is the design specified correctly? What design was used?
- ☐ Is the design appropriate to answer the research question?
- ☐ Did the researcher attempt to control for threats to internal and external validity?
- ☐ For evidence-based practice purposes, what is the level of evidence (note the level system used)?

8. Sample

- ☐ Is the sample size adequate?
- ☐ Is the sample likely to be similar to members of the appropriate population overall?
- ☐ Are the criteria for including and/or excluding people or items from the sample clear and appropriate?

9. Data Collection

- ☐ Are the instruments or other means for data collection described sufficiently?
- ☐ Are reliability and validity of instruments addressed? Are these adequate?
- ☐ Are data collection methods described clearly?
- ☐ Are the data collection methods appropriate? Could the researcher have affected the results of the study in some way related to the collection of data?

10. Ethical Considerations

- ☐ Does the researcher indicate that approval was obtained from appropriate review boards?
- ☐ Were the rights of human subjects protected (confidentiality, freedom from coercion)?
- ☐ Is there any possibility that the subjects might have felt pressured to participate or their responses influenced in some other way?

11. Data Analysis

- ☐ Is the process used to analyze data clear?
- ☐ Were the processes for data analysis appropriate to answer the research question?
- ☐ Do the results provide an answer to the research question?
- ☐ If tables are provided, are these clear and understandable?

Note: For qualitative studies, some additional items for critique include:

- ☐ Does the researcher provide sufficient examples of the data (for example, passages or quotations from interviews) to support the identified results?

☐ Does the researcher describe processes that were used to avoid biasing or influencing the data obtained and the analysis procedures used (e.g., peer review, logs, memos, "member check")?

12. Discussion and Interpretation of Findings

- ☐ Does the discussion "fit" with the data? Is it logical based on the data and results presented?
- ☐ Does the researcher discuss the findings in regard to previous research?
- ☐ Does the researcher discuss the findings in regard to the theoretical framework?
- ☐ Does the researcher identify limitations of the study? How do these affect the quality of the study?
- ☐ Does the researcher discuss implications for practice? Are these appropriate?

13. Application to Nursing Practice

- ☐ How similar are the conditions of the study (setting, sample, interventions, etc.) to other practice settings? To your practice setting?
- ☐ How feasible would it be to make a change in practice based on this research?
- ☐ Are benefits likely to offset costs and risks of a change in practice for the patient, family, nurse, and organization?

Quizzes

How many: There are three required quizzes that will be available on D2L for a period of 6 days.

When: Unless specific arrangements are made with the professor, the quizzes may be taken only during the scheduled quiz window (see course calendar). Note: To avoid any confusion between noon and midnight, quiz availability stops at 11:59 PM on the last of the scheduled quiz days.

What and how: Each required quiz may be taken only once. You may refer to your textbook, course-related content in D2L, and your notes while taking the quiz. Please note the following:

- ☐ Quizzes are timed.
- ☐ Even though they are "open-book" quizzes, you do need to study. You will not have time to look everything up. The quiz questions involve application because that is what you must do in real life as you use this information to interpret research and practice guidelines accurately in order to support your practice.
- ☐ You are honor-bound not to discuss or share quiz questions or answers with anyone other than the professor or another instructor.

Content covered: In addition to the content from the current lesson, content from earlier lessons is used/built upon.

Quiz format: All quizzes include only multiple-choice questions. The quizzes are formatted so that there are a limited number of questions per page.

Will the quiz be graded immediately?

For Quizzes 1-3 you will see a grade as soon as you finish the quiz.

Will I get the answers to the questions? To provide security over the pool of quiz questions you will not get the correct answers to the quizzes immediately.

Statement of Student Time Commitment

For each course credit, students are expected to spend a minimum 3 hours/week on coursework.

Therefore, for a three-credit course, at least 9 hours/week is expected. This is a general guideline which may vary depending on the assignments &/or quizzes.

Expectations

You are encouraged to bring your technology device into the classroom for class activities only, ie: note taking, viewing lecture content. In order to promote an inclusive and optimal learning environment for everyone, unrelated web browsing, texting, or social media is not tolerated. If you need to text or take a phone call, please make sure that your device is on silent and leave the room. If you decide not to abide by this request and are disruptive, you will be asked to leave for the remainder of the class.

Late Assignment Submission

Late submission of assignments is discouraged and will result in 10% deduction/day including weekends and holidays.

APA Style

Complete APA format is required for all formal papers submitted through the dropbox. APA format specifies format for title page, running head with pagination, abstract, levels of headings, in-text citations, and reference list. Discussions do not require APA format unless you are using information from a reference source (your textbook, other books, journal articles, etc.), in which case you must properly use APA format for in-text citations and references. All documents must be submitted in Word (.doc or .docx).

Academic Integrity Policy

Students who engage in academic misconduct are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. Academic misconduct includes but is not limited to cheating, plagiarism, collusion, and submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such act.

U of Wisconsin System Code (UWS Ch. 14-14.03 (2) provides specific examples of academic misconduct and reads in part: "Examples of academic misconduct include, but are not limited to: cheating on an exam; collaborating with others in work presented,

contrary to the stated rules of the course; submitting a paper or assignment as one's work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the source of those ideas ... knowingly and intentionally assisting another student in any of the above ..." The code is available at

http://docs.legis.wisconsin.gov/code/admin_code/uws/14.pdf.

U of Wisconsin campuses have specific procedures to investigate and deal with academic misconduct.

Plagiarism

Because of paper mills selling reports, Web pages, and full-text online databases instances of plagiarism are increasing on campuses. Using someone's words without quoting the person is plagiarism. Using someone's ideas, even though the person's words are different from your words, without citing the source is plagiarism. Use in-text citations to cite your sources. For example, if you use the ideas cited in an article, place the author and publication year (e.g. Smith, 2010) at the end of the sentence. UW-System has subscribed to software that helps detect instances of plagiarism. Plagiarism will result in a failing grade. Reports of plagiarism are also made to University administration.

Netiquette

Online courses require a different set of communication skills than many of us may be used to in our daily lives. Many of you have taken an online course before and are familiar with netiquette.

It is important in this course, as in life, that we communicate respectfully with each other and are familiar with netiquette. It will be expected that everyone in this course follow netiquette guidelines when communicating with each other. See [Core Rules of Netiquette](http://www.albion.com/netiquette/corerules.html) (<http://www.albion.com/netiquette/corerules.html>).

Confidentiality

When communicating information online or face to face based on personal or work-related experiences, keep in mind rules and policies of Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act of 1996 (HIPAA). It is expected that students will judiciously protect the privacy of patients, peers, family, or agency/institution by not disclosing confidential information outside of the course. To maintain anonymity methods such as alias or initials should be used. For more information on these laws, please refer to the following websites:

FERPA - <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html>

HIPAA - <http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html>

Student Bereavement Policy

Students who experience the death of a loved one should contact the faculty to arrange an excused absence.

Disability Policy

Any student seeking accommodations under the Americans with Disabilities Act (ADA) should contact the Disability Services office on your home campus within the first week of the semester so that appropriate accommodations may be arranged.