INTERAMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
SCIENCE AND TECHNOLOGY FACULTY
SCHOOL OF NURSING CARMEN TORRES DE TIBURCIO

SYLLABUS

I. COURSE TITLE : INTRODUCTION TO THE NURSING RESEARCH PROCESS
Course Number : NURS 3130
Credits : Two (2)

II. DESCRIPTION

Analysis of the research process. Discussion of articles on research applying the process of research critique. Assessment of the contribution of research to the professional practice. Corequisites: NURS 3110, 3120.

III. TERMINAL AND SPECIFIC OBJECTIVES

1. Analysis of the nursing research process related to the development of the professional practice of nursing.
   1.1 Describe evidence that can serve as the basis for nursing practice.
   1.2 Differentiate the terminology in and the components of research reports.
   1.3 Interpret the conclusions of research reports for their potential meaning for evidence-based (EBN) practice.
2. Interpret articles through the process of research critique.
   2.1 Analyze the relationship between the descriptive results of research reports and the selected conclusion of the reports.
   2.2 Interpret inferential statistical results in relationship to their meaning for the conclusions of the study.
   2.3 Relate the sampling methods and study sample to results, conclusions and clinical meaningfulness of the study.
   2.4 Evaluate the sampling process, considering legal and ethical principles and potential problems inherent in that process.
3. Relate the process of research to the sections of published reports and to the nursing process.
   3.1 Relate the background and the research problem to the research methods, results, and conclusions.
   3.2 Relate the data collection methods of a study to the meaning of its results and conclusions.
3.3 Interpret the strengths and weaknesses of research designs in relation to sampling, data collection methods, and the meaning of the results and conclusions.

IV. CONTENT

A. The role of research in nursing
   1. History of nursing research
   2. Linking theory, education, and practice with research
   3. Evidence-based practice: pros and cons
   4. Quality improvement: framed within the research process
   5. Where are we going? roles of nurses in research
   6. Finding answers through research
   7. Key terms

B. Evidence-based nursing: using research in practice
   1. Questions for patient care
   2. Developing an effective clinical question
   3. Published abstract: what would you conclude?
   4. Systematic reviews in evidence-based nursing
   5. Key terms

C. The research process: components and language of research reports
   1. The language of research
   2. Components of published research reports
   3. Research reports and the research process
   4. Summary of the research process contrasted to the research report
   5. Published report-what did you conclude?

D. Discussions and conclusions
   1. The end of a research report-discussions and conclusions
   2. Discussions
   3. Conclusions
   4. Common errors in research reports
   5. Critically reading discussion and conclusions sections of reports
   6. Published reposts-what would you conclude?
   7. Key terms

E. Descriptive results
   1. Differentiating description from inference
   2. Understanding the language of results sections
   3. Connecting results that describe to conclusions
   4. Common errors in the reports of descriptive results
   5. Critically reading results sections of research reports
   6. Published report-what would you conclude?
   7. Key terms

F. Inferential results
   1. The purpose of inferential statistics
2. Probability and nonparametric statistics
3. Bivariate and multivariate tests
4. Hypothesis testing
5. In-class study data
6. Connecting inferential statistical results to conclusions
7. Common errors in results section
8. Critically reading the results section of a report revisited
9. Published reports what would you conclude?
10. Key terms

G. Samples
1. Samples versus population
2. Sampling in qualitative research
3. Sampling in quantitative research
4. Differences in qualitative and quantitative sampling
5. Problems with the sampling process
6. Problems with sampling outcomes
7. Common errors in reports of samples
8. Connecting sampling to the study results and conclusions
9. Critically reading the sample section of the research reports
10. Published reports would you change your practice?
11. Key terms

H. Sampling errors and ethics: what can go wrong?
1. Which nursing actions are research and require special ethical consideration?
2. Informed consent
3. Critically reading reports of sampling and recognizing common errors
4. Published reports what do they say about consent and the sampling process?
5. Key terms

I. Data collection methods
1. Revisiting study variables
2. Methods for constructing the meaning of variables in qualitative research
3. Errors in data collection in qualitative research
4. Methods to measure variables in quantitative research
5. Errors in data collection in quantitative research
6. Common errors in written reports of data collection methods
7. Critically reading methods sections of research reports
8. Connecting data collection methods to sampling, results, and discussion/conclusion
9. Published reports would you use these studies in clinical practice?
10. Key terms

J. Research designs: planning the study
1. Research designs: why are they important?
2. Qualitative research designs
3. Quantitative research designs
4. How can one get the wrong design for the right question?
5. Common errors in published reports—did the design affect the conclusion?
6. Critically reading the description of the study design in a research report
7. Key terms

K. Background and research problem
1. Sources of problems for research
2. Background section of research reports
3. Literature review sections of research reports
4. Linking the literature review to the study design
5. Published reports—has the case been made for the research study?
6. Common errors in reports of the background and literature review
7. Critically reading background and literature review sections of a research report
8. Key terms

L. The research process
1. The research process
2. Research process contrasted to the research report
3. Factors that affect the research process
4. Generating knowledge can be fun
5. Published reports—what can you conclude now?
6. Key Terms

V. ACTIVITIES

A. Consultation with librarian
B. Research critique
C. Group discussion
D. Oral presentation
E. Independent study
F. Reading assignments
G. Internet search
H. ERI Total testing

VI. SUGGESTED EVALUATION

A. Oral presentation
B. Attendance
C. Assignments
D. Examination
VI. REQUIRED TEXTBOOK


VIII. BIBLIOGRAPHY


IX. WEB SITES

A. Preprocessed databases
   - Clinical Evidence www.clinicalevidence.com
   - Cochrane Library www.cochrane.org
   - Evidence-Based Mental Health http://ebmh.bmjournals.com/
   - Evidenced-Based Nursing www.evidencebasednursing.com
   - PubMed Clinical Queries www.pubmed.gov

B. Unprocessed databases
   - CINAHL www.cinahl.com
   - MEDLINE www.pubmed.gov

C. Clinical practice guidelines
   - National Guidelines Clearinghouse www.guideline.gov
   - RNAO Best Practice Guidelines www.rnao.org

D. Other evidence-based resources
   - Center for evidence-based Nursing (York,UK) www.york.ac.uk/healthsciences/centres/evidence/cebn.htm
   - EBM Toolkit www.med.ualberta.ca/ebm/ebm.htm
   - Joanna Briggs Institute www.joannabriggs.edu.au
   - SchARR Netting the Evidence www.shef.ac.uk/scharr/ir/netting

11/2007 Prof. Alice Santiago