



# UNIVERSITY OF ALBERTA COLLABORATIVE BACCALAUREATE NURSING PROGRAM

Grande Prairie Regional College MacEwan Keyano College Red Deer College University of Alberta

NURSING 3010
Evidence-Based Research
COURSE OUTLINE
2008-2009
Fall
Self-Study

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# Nursing 3010 Course Outline

### **CALENDAR STATEMENT:**

NURS 3010 \*3 (3-0-0)

Nursing Research

OE3 (*fi* 6) (either term, 3-0-0) Introduction to the process of research through a comparative analysis of selected studies exemplifying different theoretical, methodological, and analytical approaches. Emphasis is on the communicability of research, the needs of the research consumer, and the development of skills of critical appraisal. Prerequisite: Statistics elective. Note: (NS 3690), and (NS 3010 and STAT [\*3]) may not both be taken for credit.

**COURSE HOURS:** 1-2 hours/week x 13 weeks over fall term with the instructor and 2 hours of blackboard work independently/week.

### **COURSE DESCRIPTION:**

Introduction to the process of research through critical appraisals of selected quantitative and qualitative studies. Emphasis will be on understanding the research process and in knowing how to critically read, analyze and begin to apply the knowledge gained from research in practice. The focus of this course will be the planning phase of the research process which includes: research problem and purpose, literature review, theoretical/conceptual frameworks, variables, research questions and hypotheses, ethics of research, research designs, and population and samples. The focus of this course is also on the implementing phase (data collection, data analysis, interpretation of findings). Students will also examine trends and issues in developing evidenced-based practice for the profession of nursing.

### **REQUIRED TEXT:**

Loiselle, C. & Profetto-McGrath, J. (2007). *Polit and Beck. Canadian essentials of nursing research.* (2<sup>nd</sup> ed.). Philadelphia: Lippincott.

## **COURSE OBJECTIVES:**

### Fall Term:

- 1. Describe the purpose and importance of research in nursing.
- 2. Describe how theory, practice and research are related.
- 3. Identify a question from nursing practice that can be answered by research.
- 4. Describe the role of nurses in research.
- 5. Apply critiquing criteria for the critical analysis of the following sections of a research report: research problem and purpose, literature review, theoretical/conceptual framework, variables, research questions and hypotheses, research design, ethical components, population, sample, and sampling procedures.
- 6. Compare the major characteristics, strengths and limitations of quantitative and qualitative research.
- 7. Explain the meaning of internal and external validity of research.
- 8. Develop a systematic approach for reading and critical analysis of selected components of published research.
- 9. Describe the four levels of measurement.
- 10. State the purpose of descriptive statistics.
- 11. Critically analyze the descriptive statistics used in published reports.
- 12. Discuss the types, advantages, and limitations of data collection methods used in both quantitative and qualitative nursing research methods.
- 13. Identify the criteria for determining the validity and reliability of measurement tools.
- 14. Discuss the criteria for determining confirmability of findings in a qualitative study.
- 15. Identify appropriate data collection methods for various qualitative and quantitative designs.
- 16. Differentiate data analysis methods for both quantitative and qualitative research.
- 17. Identify the purpose of and appropriateness of commonly used inferential statistics.
- 18. Distinguish between type I and type II errors and their effects on findings.
- 19. Differentiate between the meanings of statistical significance and clinical significance.
- 20. Apply critiquing criteria for an analysis of a complete research report.
- 21. Develop a systematic approach for reading and critical appraisal of multiple published research reports in their entirety.
- 22. Determine the applicability of knowledge gained from research for evidence-based practice.
- 23. Identify the role of a nurse in promoting research activities and using knowledge from research in the practice settings.
- 24. Discuss issues including barriers and facilitating factors influencing the advancement of nursing research and evidence-based practice

#### **LEARNING ACTIVITIES:**

Students will participate in a number of activities to assist in meeting the objectives of the course:

### 1. Attendance

The purpose of the instructional time is to highlight primary concepts of the research process and to develop the student's ability to understand and critique published research through discussion of critiques. Essential concepts related to nursing research will be discussed and your knowledge of statistics will be applied to the research being discussed.

Additionally, students will have the opportunity to discuss critiques of selected articles to assist in understanding the concepts.

## 2. Small Group Work

Students are expected to read each assigned research report and answer the critiquing questions included in the course outline **prior to attending the class**. For example, prior to the class on the planning phase of the research process, students will be expected to critique the research problem /questions, literature review, theoretical framework and hypothesis in the assigned article.

Students are encouraged to work in pairs or small groups to complete their critique (answer the criteria questions) of the aspects of the assigned study for discussion in the weekly class. During class, students will be asked to present their evaluation of the selected aspects of the research report. Critical thinking should be emphasized throughout the process.

## 3. Appraising Findings from Multiple Studies

The importance of appraising findings from multiple studies related to a nursing practice issue for guiding practice will be the focus of this activity.

### **Important Policies**

## **Important Dates:**

Last day to change registrations dropping fall courses is **September 17<sup>th</sup>**, 2008. After this date you will be charged full fees for this course.

### **Nursing Program Policies**

Please refer to the *Grande Prairie Regional College* calendar and the *University of Alberta Collaborative Baccalaureate Nursing Program with Grande Prairie Regional College Student Handbook* 2008-2009 for specific nursing program policies that may pertain to this course.

### **Assignment Policy:**

Research assignments are due at the date and time they are due in the front office and must be verified (stamped with date and time) by Nursing Office Personnel. Extensions on assignments may be granted and must be negotiated with the instructor prior to the due date and with a date specified for late submissions. Extensions will not be granted the day the assignment is due.

A penalty of one letter grade per day will be deducted from the final grade of a late assignment. For example, a paper graded at a C would receive an adjusted grated of C- if handed in one day late.

It is the responsibility of the student to ensure electronically submitted papers and assignments are delivered and retrievable to the instructor (i.e. emailing assignments). If the instructor is unable to open documents or if documents are sent in error via electronically, the assignment will be considered late and the student will have one letter grade deducted from the final grade. It is highly recommended that students ensure their assignments have been retrieved by the tutor prior to the due date and time.

### **Plagiarism and Cheating:**

Please refer to your rights and responsibilities in the Grande Prairie Regional College 2008/2009 Calendar.

We expect honesty from our students. This demands that the contribution of others be acknowledged (GPRC Calendar, 2008/2009). Penalties will be given according to the degree of the plagiarism or cheating. If you are unsure whether an action is plagiarism or not, please consult your tutor. Cheating refers to dishonest conduct such as speaking in an exam, bringing written material not authorized by the tutor, tampering with grades, or consciously aiding another student to cheat).

## **Grading System**

A grade will be assigned for each assignment using grading criteria and then based on the grade descriptors (excellent, good, satisfactory, poor). Rationale will be given as to the assigned grade.

Alpha	4-point equivalence	Descriptor
A+A	4.0 4.0	Excellent
A- B+	3.7 3.3	First Class Standing
B B-	3.0 2.7	Good
C+ C C-	2.3 2.0 1.7	Satisfactory

These are considered passing grades in Nursing courses

D+	1.3	Poor
D	1.0	Minimal Pass
F	0.0	Failure

These are NOT considered passing grades in Nursing courses.

Students **may** receive a grade of D or D+ in an assignment or component of a course, but must have an overall grade of C- to achieve a passing grade in a nursing course.

\*\*Note: Refer to the 2008-2009 GPRC calendar for further details regarding the grading policy and the Progression Criteria in the Bachelor of Science in Nursing program.

# Seminar Topics\* Fall 2008

Dates	Nursing Research	
Week 1	Overview of nursing research; review of Nurses' role in research; methods of inquiry; frameworks for critique of research reports and ethical principles. <b>Chapters 1, 2, 4, 5</b>	
Week 2	The research question, problem, hypothesis, theoretical framework, and literature review.	
	Chapters 6-8	
	The research question, problem, theoretical framework, and literature review.	
Week 3	Chapter 6-8	
Week 4	Quantitative and Qualitative research designs	
	Chapter 9	
Week 5	Qualitative and Qualitative research designs	
Week 5	Chapter 10	
Week 6	Population and Sampling	
	Chapter 12	
Week 7	Review for mid-term exam Midterm Exam	

<sup>\*</sup> The Schedule May be Subject to Change

# Seminar Topics con't\* Fall 2008

Dates	Nursing Research	
Week 8	Data collection – Qualitative	
	Rigor in Qualitative Research Design	
	Data Collection, eg. Interviewer as Instrument	
	Trustworthiness	
	Chapter 13	
	Data Collection - Quantitative	
Week 9	Rigor in Quantitative Research Designs: Reliability and Validity of Instruments; Levels of Measurements	
	Chapter 14	
	Analysis of Data, focus on Quantitative Data	
Week 10	Chapter 15	
	Analysis of Data, focus on Qualitative Data	
Week 11	Chapter 16	
	Critique of Results, Interpretation of Qualitative and Quantitative	
Week 12	findings	
	Chapter 17	
	Research utilization	
Week 13		
	Chapter 18	
Week 14	Final exam	

<sup>\*</sup> The Schedule May be Subject to Change

### **EVALUATION FOR NS 3010**

### **FALL 2008**

## 1. Part I: Critique Two (2) Research Reports Value: 15% of Final Grade

Students will critique two instructor chosen research reports (one qualitative and one quantitative) using the criteria outlined in the text and information from seminars/lectures. Please refer to Chapter 17 in Loiselle & Profetto-McGrath, 2007 for guiding questions to use when critiquing a research article. APA and scholarly writing formats are to be used.

The critique will focus on the following topics:

- 1. The Research Problem
- 2. The Research Question or Hypotheses
- 3. The Literature Review
- 4. The Theoretical Framework if applicable
- 5. The Research Design

Total length of both critiques combined will be a maximum of 1000 words.

### Grading Guide is located at the back of the course outline

**Due Date: To be negotiated** 

### 2. Mid-Term Examination:

Questions will arise from labs, seminars/lectures and the textbook. **Please refer to the Examination Policies located in your Student Handbook.** The Instructor will discuss the composition of the exam closer to the exam date with the students (i.e. how many questions, is it multiple choice, short answer, etc.

Value: 25% of Final Grade

Time: To be negotiated

Place: TBA

#### **EVALUATION FOR NS 3010**

## 3. Critique Two (2) Research Reports Part II: Value: 30% of Final Grade

Students will critique the same two research reports (one qualitative and one quantitative) from the fall semester using the criteria outlined in the text and information from seminars/lectures. Please refer to Chapter 17 in Loiselle and Profetto-McGrath, 2007 for guiding questions to use when critiquing a research article. APA and scholarly writing formats are to be used.

Students will critique the following topics:

- **1.** Population and Sampling (including rigor)
- **2.** Data Collection
- **3.** Evidence Ethical Review of the Study and Protection of Human Rights
- **4.** Data Analysis, Rigor in Data Analysis
- **5.** Reliability and Validity, Trustworthiness of Study
- **6.** Interpretation and Discussion of Findings (include implications for nursing practice)

Total length of both critiques combined will be 1500 words.

### Grading Guide is located at the back of the course outline

Due: to be negotiated

### 4. Final Examination: Value: 30% of Final Grade.

Questions will arise from labs, seminars/lectures and the textbook. **Please refer to the Examination Policies located in your Student Handbook.** The Instructor will discuss the composition of the exam closer to the exam date with the students (i.e. how many questions, is it multiple choice, short answer, etc.

Date: TBA (during exam week)

Time: TBA

### Total 4-Point Equivalent Value is Translated to Final Grade

Grades for each assignment were translated into the 4-point equivalent, then multiplied by the percentage of total mark for each assignment. The value of those percentages are added up to make a total. That total is converted back into the grade scale to receive your final grade. If you have any questions or concerns, please see your tutor. Exams can be viewed by setting up an appointment with your tutor.

## Grading Guide Critiquing a Research Report

### (A) Excellent

Exceptional organization and flow. Answers questions in a brief and succinct way.

Clear and in-depth understanding of the article.

Critique is objective, comprehensive, thoughtful, and balanced in identifying both strengths and weaknesses of the study. Provides clear examples to support answers using direct references or quotes with page numbers. Avoids using generalizations in paper. Justifies criticisms and offers rational for how a limitation will affect the quality of the study, and suggests an alternative approach that could have eliminated the problem. Suggestions are practical.

Exceptional spelling, grammar and use of APA guidelines. Exceptional referencing throughout paper.

### (B) Very Good

Well organized and easy to read. Answers questions in a thorough manner.

Clear understanding of the article.

Critique is objective and thorough in identifying both strengths and weaknesses of the study. Provides examples to support answers using references or quotes with page numbers. Few generalizations are made in the paper. Justifies criticisms and offers rational for how a limitation will affect the quality of the study, with some suggestions on using an alternative approach. Able to give general information as to how the alternative approach would have eliminated the problem. Suggestions are practical.

Excellent use of APA guidelines with minimal mistakes. Minimal spelling or grammatical errors. Paper is well referenced and detailed with minimal errors.

### (C) Satisfactory

Generally well organized with some difficulty in the flow of answering the questions. Answers questions superficially or not concisely.

General understanding of the article with some confusion noted.

Critique is mostly objective with some generalizations made. Missing some information related to the specific components of the critique. Information identifies some strengths and weakness to the study and provides a few examples to support answers from the study. Justification of criticism given but somewhat superficial with rationale as to how the limitation affects the quality of the study. Suggestions of alternatives and how the approach would have eliminated the problem are vague and may not be practical.

Satisfactory use of APA with some corrections needed to format. Occasional spelling and grammatical errors. Able to provide referencing although not all information included.

### (D) Minimal Pass

Poor organization and difficult to read. Questions answered superficially and are not complete.

Lack of understanding of the study evident. Discussion of article is confusing and vague.

Critique is not objective with many generalizations made. Missing key information related to the components of the critique. Identifies minimal strengths and weakness to the study and provides minimal examples to support answers with little or no quotes from the study. No justification of criticism given with little rational as to how limitations will affect the quality of the study. No suggestions of alternatives and how the approach would have eliminated the problem used.

Frequent spelling and grammatical errors with little use of APA format used. Poor or inadequate referencing used.

### (F) Fail

Lack of organization evident. No structure or format to paper. Questions are not answered.

No understanding of the study evident in paper.

Critique is incomplete and missing key information. Little or no understanding evident related to the strengths and weaknesses of the study with no examples to support answers.

Many spelling and grammatical errors with little or no use of APA format.

Paper is plagiarized, lack of referencing.

## **RESOURCES:**

C.A.R.N.A. (1997, June). Nursing research dissemination and utilization: A background paper. Edmonton: Author. http://nt\_web/Archived%20%20Pages/researchdissem.htm.

# **JOURNALS**:

- Canadian Journal of Nursing Research
- Clinical Nursing Research
- Western Journal of Nursing Research
- Evidence-Based Practice