



**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
Sept/Oct/Jan/Feb
Group A**

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Approved: May 2008

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Nursing 3010 Course Outline

NOTE: Foundational research concepts (approximately 8 hours) offered in Years One and Two are important prerequisites to NURS 3010 (*see the Concept Map for Research & Statistics for the foundational research concepts to be included in the First and Second Years*). NURS 3010 is integrated with the NS 3900 and NS 3940 Learning Packages.

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: 3 hours/week research plus one, 3 hour lab.

COURSE DESCRIPTION:**Fall Term:**

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. Also included are descriptive statistics.

Winter Term:

Students will continue to develop their skills to critically read, analyze and begin to use knowledge gained from research in their practice. The focus of this course is 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. Also included in this course are inferential statistics.

REQUIRED TEXT:

Loiselle, C. & Profetto-McGrath, J. (2007). *Polit and Beck. Canadian essentials of nursing research*. (2nd 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.

Winter Term:

1. Discuss the types, advantages, and limitations of data collection methods used in both quantitative and qualitative nursing research methods.
2. Identify the criteria for determining the validity and reliability of measurement tools.
3. Discuss the criteria for determining confirmability of findings in a qualitative study.
4. Identify appropriate data collection methods for various qualitative and quantitative designs.
5. Differentiate data analysis methods for both quantitative and qualitative research.
6. Identify the purpose of and appropriateness of commonly used inferential statistics.
7. Distinguish between type I and type II errors and their effects on findings.
8. Differentiate between the meanings of statistical significance and clinical significance.
9. Apply critiquing criteria for an analysis of a complete research report.
10. Develop a systematic approach for reading and critical appraisal of multiple published research reports in their entirety.
11. Determine the applicability of knowledge gained from research for evidence-based practice.
12. Identify the role of a nurse in promoting research activities and using knowledge from research in the practice settings.

13. 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. **Class Attendance**

The purpose of the class 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. In class, 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 group critiques of selected articles to assist in understanding the concepts.

2. **Small Group Work**

The purpose of this activity is to provide students with an opportunity each week to critique selected aspects of a published research study using the critiquing criteria. Each week the instructor(s) will select a research report related to Nursing 3900 or Nursing 3940. It is anticipated that the research reports students are to critique will be relevant to the scenarios being covered in the learning packages. Students are expected to read each assigned research report and answer the critiquing questions included in the course outline **prior to attending 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. Opportunities for discussion, debate and consensus will be provided in both this course and the nursing tutorial. 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. In addition to the article selected in NS3690 for critique, students are expected to brainstorm research questions in each NS 3900 and NS 3940.

Important Policies

Important Dates:

Information about the last day to change registrations dropping full-year courses has changed and is available on the GPRC website.

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 grade 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.

<i>Alpha 4-point equivalence</i>			<i>Descriptor</i>
A+	4.0		
A	4.0		<i>Excellent</i>
A-	3.7		First Class
B+	3.3		Standing
B	3.0		
B-	2.7		Good
C+	2.3		
C	2.0		
C-	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
September 5th	Introduction to the course
September 10-12 Jennifer Hardy	Overview of nursing research; review of Nurses' role in research; methods of inquiry; frameworks for critique of research reports and ethical principles. Chapters 1, 2, 4, 5
September 17-19 Katherine Wilde	The research question, problem, hypothesis, theoretical framework, and literature review. Chapters 6-8
September 24-26 Katherine Wilde cont...	The research question, problem, theoretical framework, and literature review. Chapter 6-8
Oct 1 – Oct 3 Nursing Organizations	Quantitative and Qualitative research designs Chapter 9
October 8-10 Thomas	Qualitative and Qualitative research designs Chapter 10
October 15-17 Carl and Mae	Population and Sampling Chapter 12
October 22-24	Review for mid-term exam Midterm Exam

*** The Schedule May be Subject to Change**

LAB
FALL 2008
(3.0 hrs)
Dates and Times of Lab TBA

The focus of this lab is:

Nursing Research (3.0): A nursing clinical situation related to one of the scenarios in NS 3900 will be provided. Students will describe the research phenomena, develop a research question, identify a population to study, and develop a quantitative research method to examine the research question.

Seminar Topics*
Winter 2009

Dates	Nursing Research
January 7-9 Carrie and Scott MacKenzie	Data collection – Qualitative Rigor in Qualitative Research Design Data Collection, eg. Interviewer as Instrument Trustworthiness Chapter 13
January 14-16 Carrie and Scott MacKenzie	Data Collection - Quantitative Rigor in Quantitative Research Designs: Reliability and Validity of Instruments; Levels of Measurements Chapter 14
January 21-23 Johnny Worthington	Analysis of Data, focus on Quantitative Data Chapter 15
January 28-30 The Smiths	Analysis of Data, focus on Qualitative Data Chapter 16
February 4-6 The Smiths	Critique of Results, Interpretation of Qualitative and Quantitative findings Chapter 17
February 11/13 Home Care	Research utilization Chapter 18
February 23-27	Review and Final exam

*** The Schedule May be Subject to Change**

LAB
Winter 2009
(3.0 hrs)

Dates and Times of Lab TBA January 2009

Nursing Research Lab: Qualitative Analysis (3.0)

1. Students will review transcripts of a tape recorded interviews, provided by the instructor.
2. Students will perform a content analysis on data in the transcript provided and begin to thematically analyze it.

EVALUATION FOR NS 3010

FALL 2008

1. Part I: Critique of the Research Value: 20% of Final Grade

Students will critique an instructor chosen research report (one qualitative and one quantitative) using the criteria outlined in the text and information from seminars/lectures. Please refer to Chapter 17 in Loisel & 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 the critique will be a maximum of 1000 words.

Grading Guide is located at the back of the course outline

Due Date: October 15th, 1600

2. Mid-Term 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: October 24th, 2008

Time: in class time

Place: D208

EVALUATION FOR NS 3010

Winter 2009

1. Critique of the Research Part II: Value: 20% of Final Grade

Students will critique the same research report (qualitative or 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 the critique will be 1000 words.

Grading Guide is located at the back of the course outline

Due: February 13th, 2009 at 1600

3. 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: February 24th, 2009

Time: During Class

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