



UNIVERSITY OF ALBERTA COLLABORATIVE BACCALAUREATE NURSING PROGRAM

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

NURSING 3010 Evidence-Based Research COURSE OUTLINE 2009-2010

> Sept/Oct/Jan/Feb Group A

Nov/Dec/Mar/Apr Group B

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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* 2009-2010 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 2009/2010 Calendar.

We expect honesty from our students. This demands that the contribution of others be acknowledged (GPRC Calendar, 2009/2010). 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 2009-2010 GPRC calendar for further details regarding the grading policy and the Progression Criteria in the Bachelor of Science in Nursing program.

LAB FALL 2009 Group A and Group B (3.0 hours total) Dates and Times of Lab TBA

The focus of this lab is:

Nursing Research: 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.

LAB Winter 2010 Group A and Group B (3.0 hours total) Dates and Times of Lab TBA

Nursing Research Lab: Qualitative Analysis

- 1. Students will review transcripts of an interview.
- 2. Students will perform a content analysis on data within the transcript and begin to thematically analyze it.

EVALUATION FOR NS 3010 FALL 2009

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

Students will critique an instructor chosen research report (either qualitative or quantitative) using the criteria outlined in the specified text boxes and information from seminars and lectures. APA writing format is to be used.

The critique will focus on the following topics:

- 1. The Research Problem (p. 127, Box 6.1)
- 2. The Research Question or Hypotheses (p. 127, Box 6.1)
- 3. The Literature Review, (p. 147, Box 7.1)
- 4. The Theoretical Framework if applicable (p. 165, Box 8.1)

Total length of the critique will be a maximum of 1000 words.

Please refer to the Grading Guide which is located at the back of the course outline for further details.

Due Date: Group A: October 9, 2009 at 1300

Group B: November 27, 2009 at 1300

2. Mid-Term Examination: Value: 30% of Final Grade

Examination questions will include information from labs, seminars, lectures and the textbook. Please refer to the Examination Policies located in your Student Handbook.

Group A: Group B:

Date: October 23th, 2009 Date: TBA (during exam week)

Time: During class time Time: TBA

Place: D208 Place: Designated classroom or gym

Value: 20% of Final Grade

EVALUATION FOR NS 3010

Winter 2010

1. Critique of the Research Part II

Students will critique the <u>same</u> research report (qualitative or quantitative) from the fall semester using the criteria outlined in the specific text boxes and information from seminars/lectures. APA writing format is to be used.

Students will critique the following topics:

- 1. Population and Sampling
 - i. (p. 271, either Box 12.1 for quantitative or Box 12.2 for qualitative)
- 2. Data Collection
 - i. (p. 309, Box 13.6)
- 3. Evidence Ethical Review of the Study and Protection of Human Rights
 - i. (p. 103, Box 5.2)
- 4. Data Analysis
 - i. (Quantitative, p. 380, Box 15.2; Qualitative, p. 411, Box 16.2)
- 5. Reliability and Validity, Trustworthiness of Study
 - i. (p. 331, Quantitative, Box 14.1; Qualitative, Box 14.2)
- 6. Interpretation and Discussion of Findings (include implications for nursing practice)
 - i. (p. 435, Box 17.1)
- 7. Overall evaluation of the study (recommendations for future use)

Total length of the critique will be a maximum of 1000 words.

Please refer to the Grading Guide which is located within the course outline for further details.

Due Date: Group A: February 5, 2010 at 1300

Group B: April 1, 2010 at 1300

3. Final Examination:

Questions will arise from labs, seminars/lectures and the textbook. **Please refer to the Examination Policies located in your Student Handbook.**

Group A: Group B:

Date: February 19, 2010 Date: TBA (during exam week)

Time: During class time Time: TBA

Place: F207 Place: Designated classroom or gym

Value: 30% of Final Grade.

Total 4-Point Equivalent Value is Translated to Final Grade

Grades for each assignment were translated into the 4-point equivalent, and then multiplied by the percentage of total mark for each assignment. The values 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.

| Evaluation: | Date and Time | Percentage of Total Mark |
|-----------------------|--|--------------------------------|
| | Fall 2009 | |
| Critique Part I | Group A: October 9 Group B: November 27 | 20% |
| Research Midterm Exam | Group A: October 23 Group B: TBA (during exam week) | 30% |
| | Winter 2010 | |
| Critique Part II | Group A: February 5 Group B: April 1 | 20% |
| Research Final Exam | Group A: February 19 Group B: TBA (during exam week) | 30% |
| Total | | 100% |

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 answers are objective, comprehensive, thoughtful, and balanced in identifying both strengths and weaknesses of the study. Provides clear examples to support answers. Avoids using generalizations.
- Exceptional spelling, grammar and use of APA guidelines. Content is clearly presented. 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 answers are objective and thorough in identifying both strengths and weaknesses of the study. Provides examples to support answers. Few generalizations are made.
- APA format requires minimal revision. Content is mainly clear, with few spelling and 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 answers are 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.
- APA format requires some revision. Provided referencing although not all information included. Content is moderately clear, with several spelling and grammatical errors.

(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 answers are 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.
- APA format requires considerable revision with poor or inadequate referencing used. Content is slightly clear. Frequent spelling and grammatical errors.

(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 answers are 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.
- Content is unclear. 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