

Research Methods in Nursing – NUR2-612
 Knowledge Synthesis Paper: Fall 2015 Evaluation Grid

Date: December ____ 2015

Student(s): _____

Instructors: Argerie Tsimicalis RN PhD, Lisa Merry, RN, PhD

GROUP COMPETENCIES IN THE STUDY PROCESS (10 marks)

Criterion	Grading	Grade
Ability to use feedback (from peer review, advisors, instructors & TAs) (2.5 marks)	<ul style="list-style-type: none"> ▪ Group very effectively used all feedback (e.g. from advisor, peer and/or faculty) to improve quality of proposal (2.5) ▪ Group effectively used most feedback from (e.g. from advisor, peer and/or faculty) to improve quality (2) ▪ Group able to use only some feedback from (e.g. from advisor, peer and/or faculty) (1.5) ▪ Had difficulty using feedback to improve protocol/ or did not follow through on feedback (1) ▪ Unable to use any feedback to improve/ or disregarded feedback (0.5) 	
Knowledge of literature & methods (2.5 marks)	<ul style="list-style-type: none"> ▪ Group read extensively and demonstrated an excellent grasp of wide range of the literature on the study topic, related topics and methods (2.5) ▪ Group read broadly and demonstrated a very good grasp of wide range of the literature on the study topic, related topics and methods (2) ▪ Group read a variety of literature and demonstrated good understanding of this (1.5) ▪ Student read the key literature and demonstrated a basic understanding of this literature (1) ▪ Little understanding of the literature and study methods (0.5 or less) 	
SUB -TOTAL		/5

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GROUP (OR INDIVIDUAL) REVIEW PAPER (35 marks)

Criterion	Grading	Grade
<p>Background & review of the literature, purpose (2.5 marks)</p>	<ul style="list-style-type: none"> ▪ Highly relevant literature is concisely, clearly and effectively summarized. Gaps in current knowledge and/ or limitations of previous research are relevant, clearly identified and provide a very convincing rationale for the proposed knowledge synthesis study. Study purpose is very clearly stated after the literature review & flows logically from the review (2.5) ▪ For the most part relevant literature is concisely, clearly and effectively summarized. Gaps in current knowledge and/ or limitations of previous research are identified and provide a fairly clear and convincing rationale for the proposed knowledge synthesis study. Study purpose is clearly stated after the literature review & flows logically from the review (2) ▪ Some literature is summarized and provides a rationale for the study. Literature review may not be critical /or gaps in knowledge or limitations may or may not be identified. Purpose is fairly clear (minor editing) & there is a good fit with the literature (1.5) ▪ A solid rationale for the proposed study is not well developed. Or review does not focus or elaborate on the most relevant literature. Purpose is not so clearly stated. Or may not flow logically from lit review (1) ▪ Limited literature included in review. Or poor sequencing of ideas fails to develop rationale for the study. Purpose is vague, unclear. Or purpose seems like a surprise or is incongruent with ideas developed in the literature review (0.5 or less) 	
<p>Design and fit with research questions (1.5 marks)</p>	<ul style="list-style-type: none"> ▪ Excellent fit between methods & research question/stated purpose/aim of the knowledge synthesis study. Specific questions are all simply & clearly stated, phrased & ordered in a way that does not bias responses, & ordered in an appropriate and logical fashion. Appropriate reliability and validity (rigor) issues are thoroughly addressed. Citations used to explain terms (1.5) ▪ Excellent fit between method & question/ purpose / aim. One or two specific questions need <u>minor</u> revision. Reliability and validity (rigor) issues are appropriately & well addressed (1) ▪ Very good fit between question & purpose / aim. OR a few specific questions need minor revision. Reliability and validity (rigor) issues are appropriately & well addressed (0.5) ▪ Reasonable fit between question & purpose. OR Several specific questions need several revisions. OR reliability and validity (rigor) issues are addressed at a basic level or some omitted (0) ▪ Poor fit between of study methods and question. OR insufficient description of methods. OR Interview or survey questions need major revision. OR Reliability and validity (rigor) not addressed. (0) 	

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Criterion	Grading	Grade
Literature search procedures (5 marks)	<ul style="list-style-type: none"> ▪ Literature search procedures are clearly described and appropriate (Specific details re: identifying studies “n”, inclusion, exclusion criteria & process for selecting full text articles are included). Literature search fits very well with the study purpose. Database sources and resources (e.g. use of librarian, EndNote, interlibrary loan) used to search for study are identified and adequate. Rationale for final included studies is explained and appropriate. Quality assessment (if appropriate), data extraction and collection procedures are very clearly and explicitly described and are appropriate. All details for data collection procedures are provided so that reader clearly understands what was done, by whom, and when (5) ▪ Literature search procedures are clearly described and appropriate. A few minor details may require clarification. Literature search plan fits very well with the study purpose. Rationale for final included studies is explained and appropriate. Quality assessment (if appropriate), data extraction, and data collection procedures are clearly and explicitly described. Almost all details for quality assessment and data collection procedures are provided so that reader clearly understands what will be done by whom, and when (4) ▪ Some important details re: literature search procedures are missing. Adequate description of procedures but some of the key specifics are missing so that some aspects of the methods and procedures remain unclear to the reader. (3) ▪ Very little detail provided concerning literature search procedures. Unable to clearly determine how search was conducted. Insufficient details concerning the above are provided. Unable to determine what was done and how. (2 or less) 	
Quality Appraisal (if appropriate), Data Extraction and Analysis (4 marks)	<ul style="list-style-type: none"> ▪ Quality appraisal (if appropriate), data extraction processes and analysis are extensive, clear and specific for all aspects of data analysis. Plan fits very well with study question. (4) ▪ Plan well described but not as extensive. OR Some minor aspects of quality appraisal (if appropriate), data extraction and/or data analysis are missing or poorly described (3) ▪ Some important aspects of analysis are missing or poorly described. OR Fit not good (2) ▪ Several important aspects of analysis are missing or poorly described and/or the analysis does not fit with the study question. (1 or less) 	
Results (8 marks)	<ul style="list-style-type: none"> ▪ Results clearly presented and address the study questions. Qualitative: Themes or categories well defined with clear examples that fit well. Quantitative: Figures and tables are used effectively to summarize findings if needed. Use of figures or tables (e.g. to display inclusion/exclusion criteria, search results) (7-8) ▪ For the most part results clearly presented and address the study questions. Qualitative: One or two themes or categories may be less well defined or have examples that are not as clear. Quantitative: In most cases tables are used effectively to summarize findings, some minor revisions needed. (6-7) ▪ Presentation less clear, or study questions not addressed. 	

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	<p>Qualitative: Examples may not fit well with theme or category. Quantitative: Some figures and/or tables confusing, require major revision. (5-6)</p> <ul style="list-style-type: none"> ▪ Confusing presentation of study results. Qualitative: Examples do not fit with theme or category. Quantitative: Poor use of or missing figures or tables. (4 or less) 	
Criterion	Grading	Grade
<p>Discussion and Use of Literature (5 marks)</p>	<ul style="list-style-type: none"> ▪ In-depth, thoughtful discussion of most salient findings. Discussion points follow logically from the study findings. Ideas demonstrate creativity and clarity of thinking. Recommendations for education, research, policy, and/or practice are supported by the reported data. Specific directives for new research/knowledge dissemination/implementation appropriate (does not go too far beyond findings). Many, relevant references cited in discussion from a wide variety of journals. Very effectively used to support discussion points. (5) ▪ Adequate discussion of salient findings. Implications for practice may not always follow from findings or may sometimes go too far beyond findings. Some interesting ideas for future research described. Very good number of relevant references and adequate range of journals. Literature used effectively to support points. (4) ▪ Discussion may not include the most salient findings and may go beyond findings. Some of the implications for practice may not follow from results. Directions for future research very general. Obvious references are cited. Literature could have been used more extensively/effectively to support points. (3) ▪ Simplistic and /or superficial discussion of findings. Most ideas do not follow logically from findings. Few references cited or mostly textbooks. Or citations do not support discussion points. (2 or less) ▪ Implications for practice may not follow from findings or go too far beyond findings. Discussion section is a repeat of the results – not a discussion of the meaning and implications of the results. Directions for future research may not follow findings or is lacking (1 or less) 	
<p>Quality of writing & page limit (excluding title page, references & appendices) (8 marks)</p> <p>Reviews that exceed the page limit and/or word count lose 1 mark per page.</p>	<ul style="list-style-type: none"> ▪ Very effective and clear expression of ideas. Ideas flow logically. Paragraphs short and well defined. No typos, grammatical or spelling errors. (8) ▪ Very easy to read and follow. Ideas flow smoothly & logically. Occasional typos, grammatical or spelling errors. (6-7) ▪ Easy to read. Sentences mostly clear and ideas flow logically. Some editing needed. (5-6) ▪ Not so clearly written. Logical flow is lacking, AND/OR ideas not as clearly expressed. Long paragraphs or rambling sentences. Careful editing needed. (4-5) ▪ Confusing to read. Ideas not clear. No logical flow of ideas. Many grammatical, spelling errors and typos. Needs editorial assistance. (4 or less or less) 	
<p>Quality of formatting according to journal guidelines (1 marks)</p>	<ul style="list-style-type: none"> ▪ Paper and references all correctly formatted. Including: level of headings, page numbering, line spacing, in text citations. Includes abstract and letter to editor (1) ▪ A few minor formatting errors (0.75) ▪ Several formatting errors need to be addressed (0.5) ▪ Not formatted according to guidelines (0.5 or less) 	

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SUB-TOTAL		/40
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TOTAL GROUP GRADE	/40
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Name of Instructor and/or Teaching Assistant:

Signature Instructor and/or Teaching Assistant:

Date: _____.

Grades	Grade Points	Numerical Scale of Marks	Grade/40
A	4.0	85-100%	>34
A-	3.7	80-84%	32 – 34.9
B+	3.3	75-79%	30 – 32.9
B	3.0	70-74%	28 – 29.9
B-	2.7	65-69%	26 – 27.9
Fail	0.0	<64%	<25.9

NUR2-612 Research Methods in Nursing I Learning Contract & Role Matrix

Purpose

This Learning Contract and Role Matrix document is a joint process and negotiated agreement between students, project advisors, and the course instructor. It provides guidelines to monitor and direct students' learning and advisors' supervision in order to align each team member's performance with the course objectives. This document also provides structure and opportunity for students, advisors, and the course instructor to discuss expectations, individual strengths and weaknesses in an effort to maximize collaboration and productivity at each step of the knowledge synthesis process.

Each team is expected to review this document with their advisors before commencing the project and to retain a signed copy for their records. A **signed initial copy** of this form must be submitted on myCourses by **October 5, 2015** for approval. This document may be updated as the semester progresses and roles change. Any updates must be uploaded to myCourses. **The final copy must be submitted along with the final project manuscript for evaluation.**

Roles and Responsibilities of the Student

Each student has a primary responsibility for the direction and progress of the team's project and for the delivery of a manuscript of an appropriate standard by the end of this course. Each student is expected to adopt a professional approach to the course completion and the research project, including:

- Demonstrating good timekeeping
- Observing deadlines and planning next steps accordingly
- Reading and responding to communications from advisors and other team members, including providing a 24-hour notice in case of a meeting cancellation
- Taking responsibility for their own skills and professional development through non-mandatory skill development workshops offered by the University, or other personal strategies.
- Attending all classes with a solid understanding of required readings or relevant inquiries pertaining to the course topic
- Providing the advisors with appropriate materials (meeting plan, minutes, schedule, supporting documents) by a mutually acceptable date in sufficient time before meetings for the advisors to read and comment on
- Reflecting on and responding to feedback and guidance provided by peers, project members, advisors, instructors, and teaching assistants throughout the project
- Confirming with the advisors if they agree to proceed toward the publication process after the course has ended, possibly during the summer, unless otherwise negotiated. **Each student will be allowed to reflect on this decision for up to three months after the end of the course. Each student is expected to contact their respective advisors by March 15th 2016 to indicate their decision towards publication of the manuscript.**
- Ensuring that all members of the team and the instructor are made aware should he/she have any concerns about the course, team project, and other assignments

NUR2-612 Research Methods in Nursing I Learning Contract & Role Matrix

Roles and Responsibilities of the Advisors

The advisors must ensure that the students understand and are in accord with the objectives and expectations of the knowledge synthesis project. In particular, it must be emphasized that the project is the students' own work, albeit derived from their advisor's program of research, and that, within the course of this semester, the students are responsible for planning and managing their project and developing their own ideas. Additionally, the advisors are expected to:

- Establish at the end of this course whether they would like to continue with the publication process of the produced manuscript.
- Facilitate the systematic review/knowledge synthesis process by means of sharing their research expertise.
- Guide the knowledge synthesis by identifying subject-matter resources and useful tools.
- Reflect on personal expectations of the student and of their own that influence the success of this project.

Roles and Responsibilities of Course Instructors

It is the course instructors' main responsibility to establish and maintain a civil, productive, inclusive, and stimulating learning environment for students. Furthermore, the course instructors are expected to:

- Efficiently and effectively deliver the course content as outlined in the course syllabus in order to ensure that each student successfully attains the course objectives.
- Ensure that the course syllabus is generally consistent with the content of the course, and that class activities and assignments are directed toward the fulfillment of the course objectives.
- Ensure that student performance is evaluated in relationship to the class objectives.
- Facilitate each student's learning trajectory by providing instructional material and support related to systematic research inquiry in nursing.
- Provide or identify academic and logistical support throughout the semester.
- Maintain an open line of communication, via email, myCourses, or by personal correspondence and respond to student and advisor inquiry within 48 working hours.

**NUR2-612 Research Methods in Nursing I
Learning Contract & Role Matrix**

Role Matrix

Date of Submission	
Project Number and Topic	
Project Title	
Team Members	
Advisors	

SR Stage	Activity	Deadline (if applicable)	Team Member (mark initials for each activity)					Notes
Research Question Formulation	Formulate							
	Refine							
	Other (Specify)							
Database Search	Identify Databases to be Searched							
	Conduct Searches							
	Db:							
	Db:							
	Db:							
	Db:							
	Db:							
	Sort Abstracts/Titles							
	Retrieve Full-Text Articles							
	Review Full-Text for Relevance							
	Manage Endnote Database							
	Other (Specify)							

**NUR2-612 Research Methods in Nursing I
Learning Contract & Role Matrix**

SR Stage	Activity	Deadline (if applicable)	Team Member				Notes
Quality Appraisal	Identify Appraisal Tool						
	Conduct Appraisal						
	Other (Specify)						
Data Extraction	Identify Data to be Extracted						
	Create Data Extraction Tool (Tables)						
	Extract Data						
	Finalize Tables						
	Other (Specify)						
Data Synthesis	Analyze Data						
	Interpret						
	Write-Up Results						
	Other (Specify)						
Discussion	Compare Findings with Literature						
	Generate Implications						
	Write-Up Discussion						
	Other (Specify)						
Research Project Management	Schedule Team Meetings						
	Schedule Meetings with Advisors						Indicate Dates of Meeting
	Schedule Meetings with Librarian						
	Communications (Specify in Notes: e.g., Minutes, Assignment Submissions, Queries to Instructor/TAs)						
	Determine and Manage Data Storage and Sharing						
	Discuss Authorship (ICMJE)						
	Select Manuscript & Journal Format						
	Identifying Conferences + Abstract Submissions						
	Write Draft Letter to Editor						

**NUR2-612 Research Methods in Nursing I
Learning Contract & Role Matrix**

Conduct Write-Up Strategy (Outline of Manuscript)							
Other (Specify):							

Learning Contract

By reviewing and signing this contract the parties involved acknowledge their personal responsibility in fulfilling their respective role and responsibilities outlined and initialed above. Any changes to these items must be done in collaboration with those involved. The final version with all subsequent changes must be submitted with the final assignment.

Advisors:

Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Students:

Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Name (Print)	Signature	Date
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Course:	Research Project in Nursing (3 credits) NUR2-596 (or NUR1-396) Offered Fall, Winter and Summer
Instructor:	Argerie Tsimicalis RN PhD Assistant Professor, Ingram School of Nursing, Faculty of Medicine Nurse Scientist, Shriners Hospital for Children®-Canada
Dates/Time:	Variable (as designated by Supervisor)
Contact:	Office: 680 Sherbrooke West, Suite 1835 Email: argerie.tsimicalis@mcgill.ca
Office Hours:	By appointment
Prerequisites:	<p>Student entering the course should be excited about their proposed research topic. Although a CGPA of at least 3.5 in at least one term of the undergraduate or graduate studies may be an indication of potential success, there are a number of other desirable characteristics that are not showcased on one's transcript. Other characteristics your potential supervisor may be seeking are your ability to be resourceful, work independently and interdependently within a team environment, and able to receive and work through peer review feedback. There are a number of ups and downs in research. Students must develop the skills to persevere, stay motivated, and remain committed to the project. Students need to approach their project in an ethical manner, demonstrate good judgment and common sense, and the ability to problem solve.</p> <p>Open to all undergraduate and graduate students including students from outside nursing.</p>

Course Description:

This course was co-designed with undergraduate nursing students and intended for the curious student in search of opportunities to gain further 'hands-on' research experience. This course will provide students the opportunity to work through the main elements of a research project. Examples of proposed projects may include: (i) the participation in an ongoing clinical research project; (ii) the conduct of a concept analysis, theoretical review or a knowledge synthesis (e.g. a systematic, integrative, scoping or meta-synthesis review) study; (iii) the creation, implementation or evaluation of evidence-based practice guidelines, pedagogical approaches, or curriculums; or (iv) the development or implementation of a knowledge translation project. It is hoped the students' understanding of the research process and scholarly inquiry will increase. The end goal will be producing a draft abstract and manuscript suitable for a peer-reviewed conference and journal submission.

This course is designed to introduce undergraduate and graduate students to research conducted by Faculty and Associate Members of the Ingram School of Nursing, Faculty of Medicine. This course

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contains a significant research component that requires substantial supervision on the part of the faculty member and commitment on the part of the student. The course workload involves at least 9 hours of research activities per week for a 13-week period (equivalent to one semester). The Supervisor will evaluate the student based on a written final report, overall research performance, and use of a knowledge translation strategy (e.g. oral or poster presentation, use of social media or arts-based strategies to disseminate knowledge)

At the undergraduate level, this course will solidify the theoretical and methodological teachings of NUR1422 (undergraduate research course). At the graduate level, this course will complement NUR2 515 (Applied Statistics for Nursing) and may help students prepare for NUR2 612 (Research Methods in Nursing) and NUR2 630, 631, and 632 (Clinical Project 1, 2, and 3). This course is designed to help students understand how to use the scientific method to study selected problems of health, health care and health care delivery of particular relevance to nursing. Finally, the 2017 BScN U3 cohort (n = 75) overwhelmingly agreed that this course would be a positive addition to the academic life of nursing students (90%), and if offered would enroll as an elective (73%); thus, students foresaw the value of integrating their clinical and research knowledge.

Enrollment

This course is open to undergraduate and graduate students from nursing, other faculties, and other universities and available in the fall, winter or summer term. Enrollment may be limited by the availability of supervisors who must be Faculty or Associate Members in the Ingram School of Nursing. Students will be advised to start the application process well before the start of the term and to plan for an alternative course in the case that no suitable project is available.

All potential supervisors are encouraged to submit a brief description of projects in advance, in order to compile a list of potential projects for interested students. The description should be brief (less than 250 words), and include a title, research site and contact information. These projects will be posted on the Ingram School of Nursing website each term.

Students may visit the Ingram School of Nursing webpage for research themes and approach potential supervisors directly for availability. For additional information regarding the type of work done by potential supervisors, you may search for representative publications on PubMed or CINAHL, for example. If you would like to work with a specific researcher, please email them directly to ask if they would be interested in supervising you for NUR2-596. We would encourage you to include this course description in your email, as they may be unaware of the course. It might also help to remind them there is no salary commitment on their part, since it is a credit course.

Once you find a willing supervisor, you can agree on a project topic/title together and both of you sign the application form (available at the end of this syllabus). The form must be completed by the student and project Supervisor and approved by the Undergraduate or Graduate Director or his/her delegate (course instructor). The application approval process may involve evaluation of the student (e.g. CGPA, prerequisites, restrictions), the suitability of the project (e.g. feasibility, ethics approval obtained) and the match of the student with the potential supervisor.

Feel free to contact us for further information.

Learning Outcomes

At the end of this course, you should be able to:

1. Critically appraise the steps in the research process: literature review, problem formulation, study design, ethical considerations, data collection, measurement, analysis and interpretation, and knowledge translation
2. Review, appraise, and synthesize an existing body of scientific knowledge relevant to nursing and generate implications for research, practice, and policy
3. Actively participate as a member of a research team and contribute to a research project led by your Supervisor, at any stage of development
4. Communicate scientific knowledge using different methods of knowledge translation (e.g. oral, manuscript, poster, social media or arts-based)
5. Appreciate, participate in, and/or respond to the peer review process

Instructional Methodology

The course is intended to permit the process of learning through experience. Supervisors and students will take an active role in teaching and learning from each other. Experiential learning will permit a maximum interchange of ideas. Over the 13-week period, students will work alongside the Supervisor and members of his/her team on a research project. It is anticipated students will have numerous occasions to discuss their research project and progress, and be expected to identify barriers, suggest solutions, and explore alternatives approaches related to their project.

Course Modifications

Given the nature of this course we, as the instructor, students, and supervisors, may feel we need to alter aspects of the course. We will revisit the expectations of the class as we go along and may find it agreeable to speed up or slow down portions of the process. Any alterations to the course will be an open and transparent discussion among the instructor, students, and supervisors. Further, in the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change. If you have thoughts or concerns about our trajectory during the semester, please let the course instructor know

Concept Maps

Figure 1. Flow steps of a research study

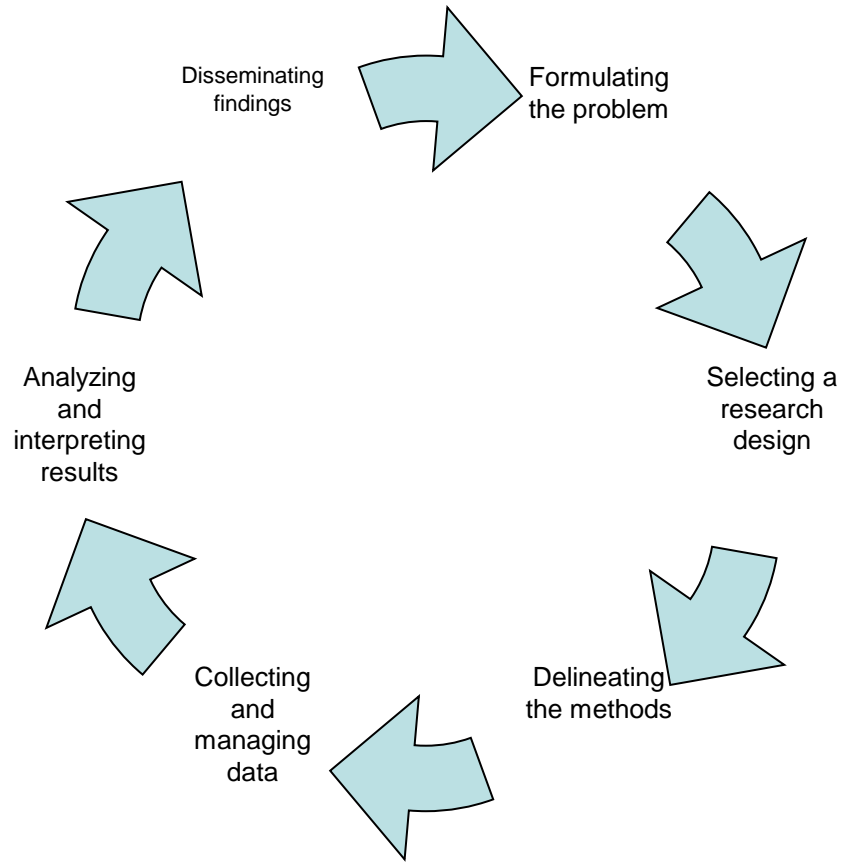


Figure 2. Flow steps of a systematic review

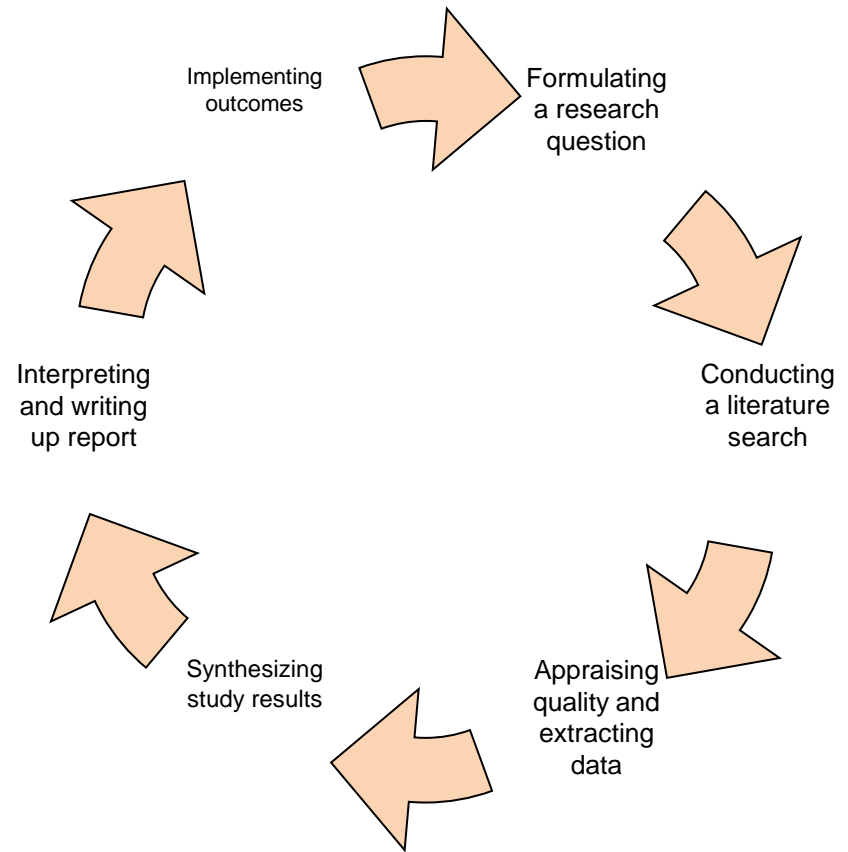


Figure 3. Flow steps of practice guideline development

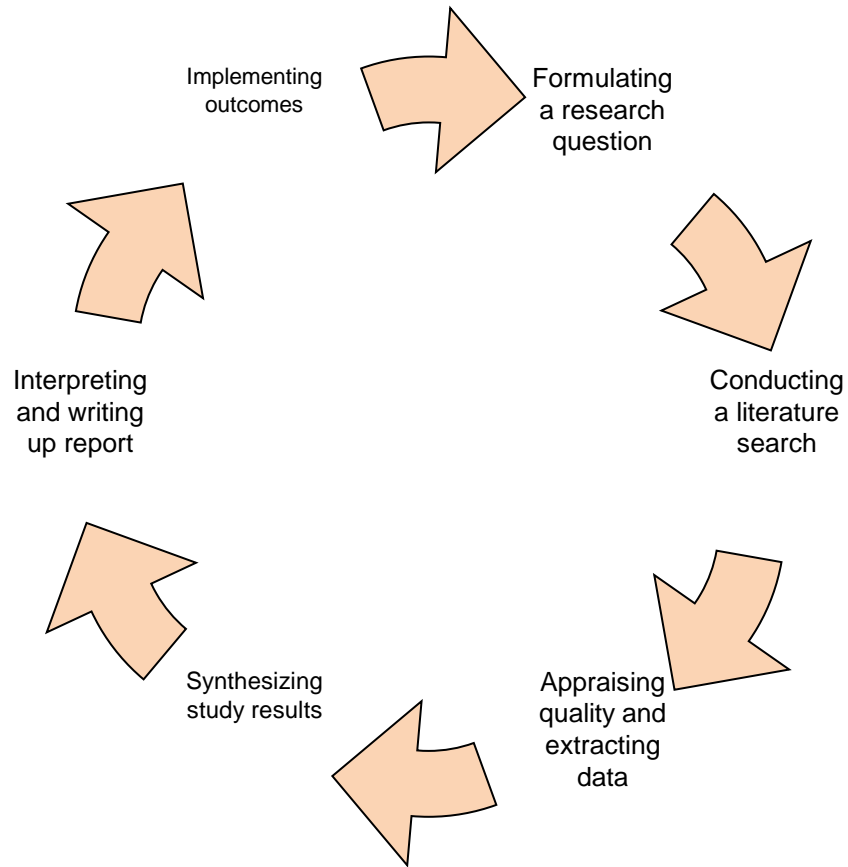
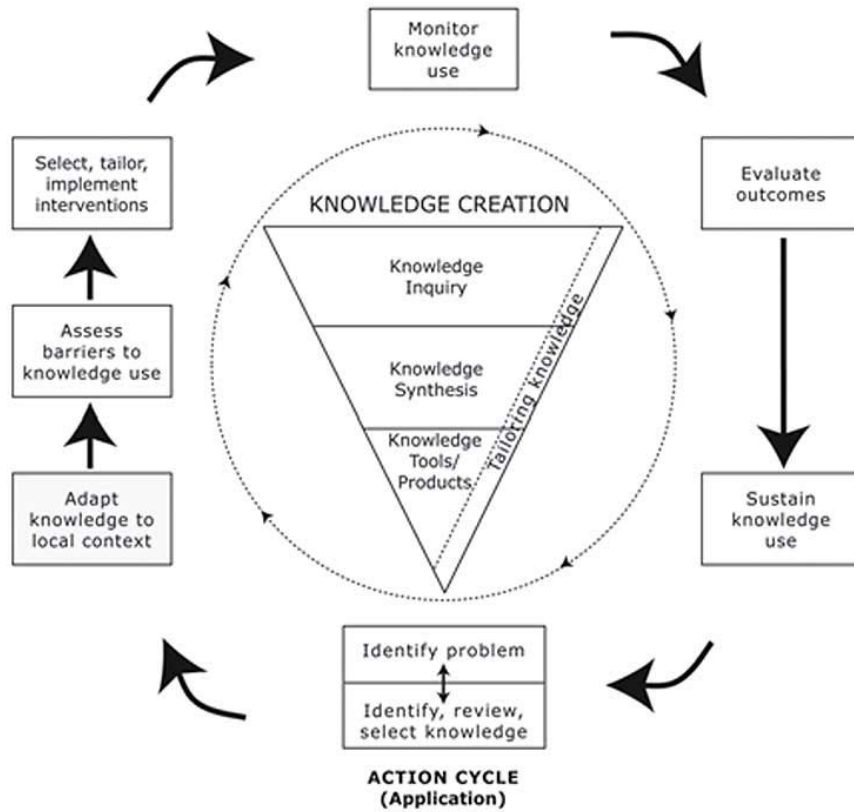


Figure 4. Flow steps of knowledge translation (Knowledge to Action)



Course Materials

Recommended textbook

Given the hands-on nature of this class, there is no required textbook. But here is a suggested reading that reviews the qualitative, quantitative, and mixed methods research processes in nursing:

1. Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins.

This textbook is used in undergraduate and graduate nursing courses. Previous students have reported the textbook is useful throughout the Master's program (e.g. for NUR2-612, 630, 631 and 632). Students are also known to 'hold-on' to their textbook after graduation. This textbook is also available to you online. Do not forget to scratch off the code, login etc., so you avoid carrying your textbook to school. The required textbook is also on three-hour library reserve at the Health Sciences Library.

Another research textbook may be suitable. Please inquire with your supervisor.

Recommended software

1. EndNote citation management software (Thomson Reuters).

The software organizes references (visual, multilingual, PDF) for research and scholarly writing. There is no cost for this software as long as you are a full-time McGill student. For more information, refer to the [McGill IT website](#), scroll down to Software.

Other Resources

Depending on your proposed research topic and/or experience, the following resources may be useful:

1. <http://www.teachepi.org/courses/sr&ma.htm>
2. http://wikisites.mcgill.ca/systematicreview/index.php/Main_Page
3. <http://www.cihr-irsc.gc.ca/e/36331.html#1> (Synthesis Resources)
4. <http://rrisiq.com/en/videos/1/0:0> (Videos on how to conduct a meta-synthesis and a systematic review and meta-analysis using the Cochrane Method)
5. Access to NUR2-612 Course Syllabus and Materials [2014 cohort], which provides a step-by-step to conducting a knowledge synthesis. Contact Argerie Tsimicalis RN PhD, Course instructor

Student Expectations, Assignments and Evaluation

Students are expected to:

1. Have access to the electronic resources of the McGill Health Science library;
2. Read the course materials provided by your supervisor;

3. Complete preparatory readings and exercises before the topics are discussed;
4. Select and access primary research articles through the McGill libraries for discussions and projects; and
5. Attend and actively participate in research meetings led supervisor. Students who actively participate in class are more likely to score higher on their exams than their non-participating counterparts ([Smith-Strom & Nortvedt, 2008](#)).
6. Be engaged in various supervised research activities

Evaluations will be conducted as follows:

This course contains at least 9 hours of research activities per week for a 13-week period conducted in the laboratory of a supervisor affiliated with the Ingram School of Nursing. The Supervisor will evaluate the student based on a draft report outline (10%), final report (45%), overall research activities performance (30%) and knowledge translation strategy (10%).

1. **Draft report outline (10%):** An outline leading to the final report is worth 10% of the overall grade, and will be submitted by mid-semester.
2. **Final report (45%):** Final report is worth 50% of the overall grade and should be modeled after a journal submission requirement. Please inquire with your supervisor for suggested journals. Otherwise, the final report should be a minimum of 10 numbered pages with 2.5 cm margins (12pt Time New Roman font) written in the form of a scientific paper. The report will include the following sections: Title page, Abstract/summary (300 words maximum), Introduction, Purpose, Methods, Results, Discussion and Conclusion, Reference Lists and Appendices (if necessary). Tables and Figures are not included in the 10 page minimum limit. The supervisor will evaluate the report for overall organization, clarity of presentation, presentation of research question, data analysis, clarity of tables and figures, discussion of research findings and proposed future research directions.
3. **Performance (30%):** The overall research activities performance is worth 40% of the overall grade. The supervisor will evaluate the overall performance of the student using metrics that reflect an understanding the project, motivation and enthusiasm, commitment, curiosity, industry to work, technical ability and problem solving, organization and precision, judgment and common sense, and interpersonal communication and interactions.
4. **Knowledge Translation Strategies (Pick one of the following options or suggest an alternative)**
 - a. **Oral presentation (10%):** The supervisor will evaluate a 20 minute oral presentation, worth 10% of the overall grade, made by the student. The oral presentation will represent a summary of the research project and its structure will be determined with guidance from the supervisor. The oral presentation could be made in in the context of regular research meetings held by the supervisor or the department.
 - b. **Oral presentation of a Poster presentation (10%):** The supervisor will evaluate a poster presentation, worth 10% of the overall grade, made by the student. The poster presentation will represent a summary of the research project and its structure will be determined with guidance from the supervisor. The poster presentation should be presented in the context of regular research meetings held by the supervisor or the department.
 - c. **Social Media:** The supervisor will evaluate a social media presentation (e.g. use of YouTube™, Twitter, Instagram), worth 10% of the overall grade, made by the student.

The social media presentation will represent a summary of the research project and its structure will be determined with guidance from the supervisor. The social media presentation should be presented in the context of regular research meetings held by the supervisor or the department, and disseminated accordingly.

- d. **Arts-based:** The supervisor will evaluate an arts-based presentation (e.g. use of visual, performance art), worth 10% of the overall grade, made by the student. The arts-based presentation will represent a summary of the research project and its structure will be determined with guidance from the supervisor. The arts-based presentation should be presented in the context of regular research meetings held by the supervisor or the department, and disseminated accordingly.
- e. **Alternative:** Please submit an alternative format for discussion and approval.

The proposed evaluation may be further tailored to the project and student. If so, discussion with the Student, Supervisor and Instructor must occur within the first 4 weeks of enrolment with an approved method of evaluation.

Grade submission: A copy of the research report along with the supervisors' assessment will be sent to Dr. Argerie Tsimicalis (course instructor) before the end of term for submission of grades.

Sixty-five percent is considered a pass. Any failure will be referred to the Student Standings and Promotions committee for permission to write a supplemental examination.

McGill Policy Statements and Helpful Resources

1. Right to submit in English or French written work that is to be graded

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

2. University Regulations and Resources (Graduate and Postdoctoral Studies)

http://www.mcgill.ca/study/2014-2015/university_regulations_and_resources/graduate

3. Failure Policy

http://www.mcgill.ca/study/2014-2015/university_regulations_and_resources/graduate/gps_gi_regulations_failure_policy

3. Academic Integrity Statement

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).

4. McGill Writing Centre

<http://www.mcgill.ca/mwc/home-page>

NUR1-5XX Course Approval Application Form (2 pages)
Research Project in Nursing (3, 6 or 9 credits)
Fall, Winter, and Summer Terms (3 to 9 credits)

Recommended deadline to submit form:

- [Insert Date] for Fall Term
- [Insert Date] for Winter Term
- [Insert Date] for Summer Term

Extensions can be granted

Student Name: (Last) _____ (First) _____

Student Number: _____

McGill E-mail Address: _____

Project Title: _____

Name of Supervisor: _____ **Supervisor's e-mail:** _____

Brief outline of project (250 words):

Does this project involve?

Human subjects [please check]: Yes [] No []

If yes, Human Ethics Approval Obtained [] Expiry Date: _____

* A 3-credit course should represent an average of 9 hours of work per week for the duration of each semester. Students and supervisors should discuss work expectations and scheduling accordingly. It is to be understood that any work done as part of **NUR2-596** cannot be submitted or used for credit for any other course.

Student Signature: _____ **Date:** _____

Supervisor Signature: _____ **Date:** _____

Send the filled and signed forms to the instructor by email (argerie.tsimicalis@mcgill.ca).

Write the name of your group members in the numbered boxes. Assign yourself a value for each listed attribute. Do the same for each of your group members.

Values: 1 Seldom 2 Sometimes 3 Usually 4 Always

Criteria	Yourself	1.	2.	3.	4.	5.	6.
Co-operation							
Worked cooperatively with other members of the group and was willing to help with any task.							
Respect							
Listened to others' ideas, considered their points of view and offered constructive suggestions.							
Effort							
Contributed as much as could to group discussions and to the work required.							
Responsibility							
Worked responsibly and to the best of your/his/her ability on contributions to the task.							
Task Commitment							
Was able to focus on what the group needed to do throughout the process of the task and kept working even when something was challenging.							
Problem Solving							
Used good problem solving strategies throughout the process of completing the task.							
Additional Criteria							

Course Outline: Research Methods in Nursing I

This course outline is intended to provide you with an overall plan for the Fall 2015 Research Methods in Nursing I course and to enable you to function efficiently and effectively throughout the semester. **You will find the following sections in this document:**

- General Information
- Abridged Course Schedule
- McGill Policy Statements
- Learning Outcomes
- Course Content
- Instructional Methods
- Course Materials
- Assignments and Evaluation Plan

General Information

Course Information	Research Methods in Nursing I (3 credits) NUR2-612 Section 001 Session: Fall 2015
Course Instructors & Contact Information	Dr. Argerie Tsimicalis, RN, PhD Assistant Professor, Ingram School of Nursing, McGill University Nurse Scientist, Shriners Hospital for Children – Canada Office: Wilson Hall, Room 401b Telephone: (514) 387-8142 Email: argerie.tsimicalis@mcgill.ca Lisa Merry, RN, PhD Faculty Lecturer, Ingram School of Nursing, McGill University Telephone: (514) 816-3269 Email: lisa.merry@mail.mcgill.ca
Office Hours	Mondays 11:25PM to 4:00PM (Dr. Tsimicalis) Mondays 12:00 – 14:00, and upon request (Dr. Merry)
Dates & Location	Birks Building, Room 111 September 4, 2015 - December 7, 2015 Friday September 4, 2015, 8:35AM to 11:25PM followed by Mondays 8:35AM to 11:25PM Holidays (No class): September 7 & October 12
Teaching Assistants & Contact Information	Frances Bruno (frances.bruno@mail.mcgill.ca) Alisha Michalovic (alisha.michalovic@mail.mcgill.ca)
Communication	Important announcements and reminders will be posted on myCourses.

Course Description

Knowledge synthesis is an essential component of nursing practice. Understanding the nature of evidence and its contribution to knowledge development in nursing is critical to becoming advanced practice nurses. The Research Methods in Nursing I course provides a comprehensive overview of the methods of scholarly inquiry in nursing, with particular focus on knowledge syntheses of the literature (e.g. integrative reviews, systematic reviews, meta-analyses, meta-syntheses, etc.). These reviews are an

essential component of guideline and policy development and set the platform for future research in the nursing arena.

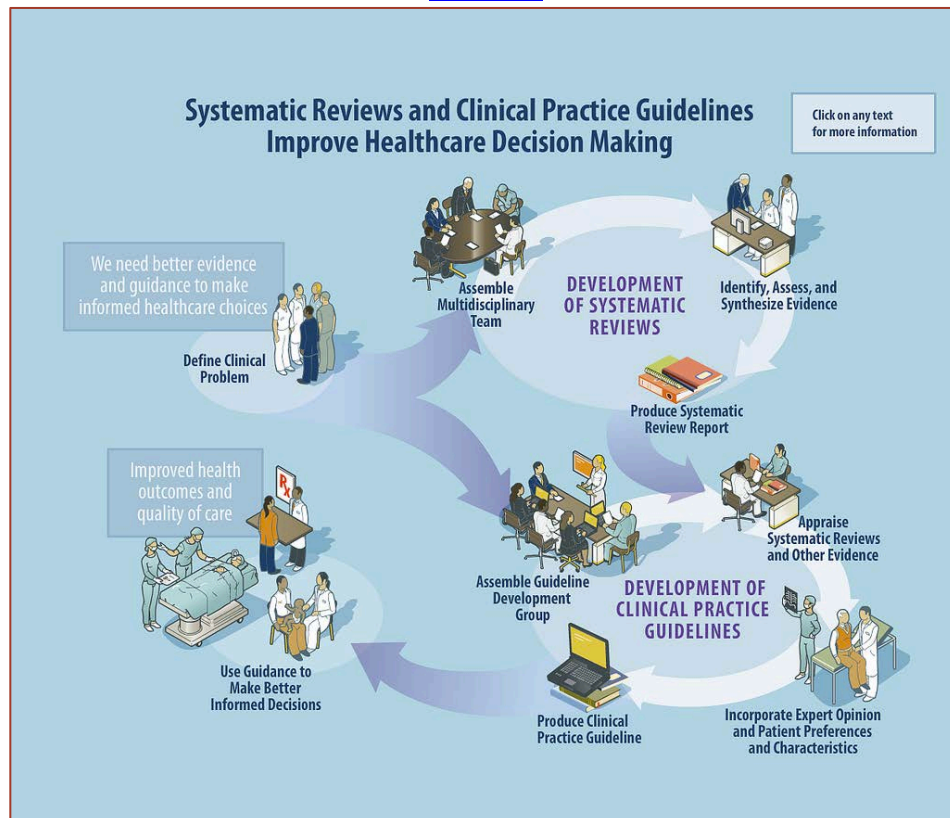
This course describes and explains the steps of the systematic review (knowledge synthesis) process and pays particular attention to the critique and evaluation of research studies for knowledge synthesis and application to nursing practice, research, education, and policy.

The end goal will be producing a preliminary draft of a knowledge synthesis (abstract and manuscript) suitable for a peer-reviewed conference and journal submission. Your review project will represent an original piece of scholarship that builds on theoretical knowledge and professional skills acquired from this course and will provide the opportunity to pursue this topic for publication.

This course is complementary to NUR2 515 (Applied Statistics for Nursing) and is designed to help prepare students for NUR2 630, 631, and 632 (Clinical Project 1, 2, and 3).

Concept Maps

Systematic Reviews and Clinical Practice Guidelines Development Process - [Institute of Medicine](#)



Institute of Medicine. (n.d.). Systematic Review and Clinical Practice Guidelines. Retrieved August 27, 2015, from <http://resources.iom.edu/widgets/systematic-review/infographic.html>

Concept Maps

Overview of the Research Process

Research Phase	Primary Research Study	Knowledge Synthesis
Conceptual Phase	Formulate the research problem(s), review the literature, and determine the research objective(s)	Formulate the research question(s), scope the literature, determine the research objective(s)
Design and Planning Phase	Select a research design, develop study procedures, determine the sampling and data collection plan	Select a method of synthesis, develop review procedures, define eligibility criteria for studies to be included, identify (all) potentially eligible studies, apply eligibility criteria
Empirical Phase	Collect data and prepare data for analysis	Assemble the most complete data set feasible, including Data Extraction and Quality Appraisal of included studies
Analytic Phase	Analyze data and interpret results	Analyze data set using narrative syntheses and/or statistical/sensitivity analyses
Dissemination Phase	Communicate results to appropriate audience	Produce a structured report of the research

Adapted from Whittmore & Melkus (2008), Chalmers (2003); Pope, Mays, & Popay (2007)

Learning Outcomes

The overall purpose of this course is to provide you with the essential research and professional skills to identify researchable nursing-related problems, to be informed and critical readers of the nursing research literature, and to appropriately utilize and synthesize research-generated knowledge so that your practice is guided by evidence.

By the end of this course, you should be able to:

1. Critically appraise the chief elements in the research process: literature review, problem formulation, study design, ethical considerations, data collection, measurement, analysis and interpretation;
2. Understand the common elements inherent in systematic review/knowledge synthesis methodologies: Research question formulation, conducting a literature search, quality appraisal and data extraction, knowledge synthesis, interpretation, and dissemination/implementation;
3. Search and appraise an existing body of scientific knowledge in relation to appropriateness of approach, design, rigor, and usefulness for nursing practice, research, education, and policy;
4. Synthesize and interpret research evidence to develop justifiable conclusions and identify gaps in nursing literature;
5. Apply dissemination/implementation strategies for using this evidence to address specific nursing practice goals and issues;
6. Communicate scientific knowledge using different methods of knowledge translation (e.g., oral, manuscript and poster);
7. Actively participate in the peer review process in nursing research;
8. Develop graduate-level research skills and learn to work as an independent and interdependent member of a research team.

Instructional Methods

The development of Research Methods in Nursing I is in and of itself a product of a systematic research process. The design of this course was inspired by the vision of providing transformative and experiential learning opportunities for graduate nursing students in order to produce highly competent advanced practice nurses of today and tomorrow's health care.

The preparation of this course was motivated by the following question: *"What optimal teaching strategies are used for teaching graduate level research methods to a large class of nursing students from diverse backgrounds?"* The selection and integration of the nursing evidence is influenced by personal expertise, students' problems and their preference for innovative teaching methods, and available resources such as time and space.

The course is intended to permit maximum interchange of ideas through the integration of the following instructional strategies:

- **Direct Instruction:** Lectures and Discussions led by the instructors, guest speakers, and teaching assistants will provide foundational knowledge related to scientific inquiry.
- **Interactive Instruction:** Computer lab tutorials will actively teach students how to use research tools such as online databases and citation managers (Endnote) for conducting reviews. In-class activities are designed to stimulate students to integrate previously learned concepts into pragmatic application, which allows immediate integration of theory to practice.
- **Peer Learning:** Feedback on presentations will be provided by fellow classmates, and vice versa; this is an example of the peer review process, an essential element of research in nursing. Workshops focusing on the planning and management of your project will be provided by a fellow graduate student, allowing an equitable sharing of knowledge and experiences.
- **Knowledge Synthesis Project:** The undertaking of this project is an example of an experiential learning strategy, which will allow meaningful skill acquisition that you can carry with you throughout your nursing career. The skills and techniques developed from this project may be transferrable to your subsequent courses (e.g., NUR2 630, 631, 632). The product of this project may provide a stepping-stone to entering the world of nursing research by allowing you to work with and learn from researchers and experts in the field.

Course Quality Assurance

Quality assurance and continuous improvement of graduate nursing education are fundamental to the production of a strong, sustainable nursing workforce. As part of the required courses for the obtention of a Master's Degree in Nursing at McGill University, NUR2-612 Research Methods in Nursing I is designed and continuously evaluated to ensure that this course efficiently and effectively equips students with the knowledge and tools to undertake systematic evidence-based inquiry and practice. This quality

assurance project will solicit your voluntary input before, during, and after the course by means of surveys and end-of-term evaluations to help guide the improvement of this course for future students, colleagues, and members of the nursing community.

McGill Policies & Helpful Resources

Academic Integrity

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(see www.mcgill.ca/students/srr/honest for more information).

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Right to submit in English or French written work that is to be graded

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Copyright

Instructor generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student

Conduct and Disciplinary Procedures

The course instructors aim to provide an optimally inclusive learning environment for each student. However, if you experience barriers to learning in this course, do not hesitate to discuss them with the course instructors and the Office for Students with Disabilities

University Regulations and Resources (Graduate and Postdoctoral Studies)

http://www.mcgill.ca/study/2015-2016/university_regulations_and_resources

Failure Policy

http://www.mcgill.ca/study/2015-2016/sites/mcgill.ca.study.2015-2016/files/university_regulations_resources_graduate_2015-2016.pdf

McGill Writing Centre

<http://www.mcgill.ca/mwc/home-page>

Course Materials

Required Textbook/Readings

- Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins.
- Links to electronic articles for required pre-class readings are accessible through this document.

Recommended Textbook on Reserve at the Health Sciences Library)

- [Boland, A., Cherry, M.G., & Dickson, R. Doing a Systematic Review: A Student's Guide. 2014.](#) (There are 2 copies on Reserve at the Life Sciences Library)

Recommended software

- EndNote citation management software (Thomson Reuters). The software organizes references (visual, multilingual, PDF) for research and scholarly writing. There is no cost for this software for full-time McGill students. For more information, refer to the [McGill IT website](#).
- Data Storage: Office 365 (McGill), Google Drive, Dropbox, USB

Other Course Materials

Other course materials will be available myCourses in the 'Project Tools' and 'Session Modules'. Administrative and other information will be available on myCourses as the course progresses.

Other Resources

- <http://www.teachepi.org/courses/sr&ma.htm>
- http://wikisites.mcgill.ca/systematicreview/index.php/Main_Page
- <http://www.cihr-irsc.gc.ca/e/36331.html#1> (Synthesis Resources)
- <http://rrisiq.com/en/videos/1/0:0> (Videos on how to conduct a meta-synthesis, systematic review, and meta-analysis using the Cochrane Method)
- [International Committee of Medical Journal Editors](#) - The Role of Authors and Contributors

Student Expectations, Assignments and Evaluation Plan

To successfully complete this course, you are expected to:

1. Discuss, negotiate, sign, and update Learning Contract.
2. Complete preparatory exercises prior to class;
3. Do the required readings and familiarize yourself with the course materials for each topic;
4. Select and access primary research articles through the McGill libraries for in-class discussions and projects; and
5. Attend and actively participate in class and group work. *Students who actively participate in class are more likely to score higher on their exams than their non-participating counterparts (Smith-Strom & Nortvedt, 2008).*
6. Actively contribute to your knowledge synthesis project.
7. Indicate to your advisor whether you will continue to contribute to the knowledge synthesis paper upon completion of the course (by April 1st 2016).

Assignments	Deadline	Weight (%)
Best 2 of 3 Individual Quizzes Best 1 of 3 Group Quizzes		20 10
Quiz 1	Sept 28	
Quiz 2	Oct 26	
Quiz 3	Nov 9	
Group Presentation 1	Oct 5	-
Learning Contract (Initial)	Oct 5	2
Peer-Self Assessment (Initial)	Oct 5	1
Peer Review: Presentation 1 Feedback	Oct 8	2
Group Presentation 2	Nov 9/Nov 16	-
Peer Review: Presentation 2 Feedback	Nov 12/Nov 19	2
Knowledge Synthesis E-Poster	Dec 7	-
Group Presentation 3: Final E-Poster	Dec 7	10
Peer Review: Final Presentation Feedback + Peer Review: E-Poster Feedback =In-Class Peer Evaluation	Dec 7	2 + 2 (4 points total)
Knowledge Synthesis Manuscript	December 20 23h59	40
Abstract Submission	December 20 23h59	5
Peer-Self Assessment (Final)	December 20 23h59	1
Learning Contract (Final)	December 20 23h59	3

The passing grade for this course is 65%. Any failure will be referred to the Student Standings and Promotions committee for permission to write a supplemental examination.

Abridged Course Schedule

#	Date	Course Topic	Assignments/Milestones
1	Friday Sept 4	A. Tsimicalis & L. Merry Introductions and Course Overview Introduction to Research Methods and Evidence-Based Nursing Practice Selection of Research Teams & Knowledge Synthesis Topics	
	Sept 7	HOLIDAY, NO CLASS	
2	Monday Sept 14	A. Tsimicalis & L. Merry Synthesizing Knowledge in Nursing: Step by Step Guide for Conducting a Systematic Review NUR2-612 Knowledge Synthesis Project: Instructions & Guidelines F. Bruno Planning and Executing a Knowledge Synthesis Project: A Graduate Student's Perspective G. Gore Searching for Evidence: How to Conduct a Literature Search	Projects commence
3	Sept 21	M. Purden Formulating the Problem and a Clear Focused Research Question Identifying Theoretical Frameworks and/or Key Concepts to Guide the Review Process F. Bruno Organizing & Managing a Knowledge Synthesis Project: A short tutorial	
4	Sept 28	Pop Quiz 1 A. Lambrou Organizing your Citations: How to Use EndNote	Pop Quiz 1 Deadline to switch teams/topics
5	Oct 5	Presentation I	Presentation I (Submit presentation file on Oct. 4 by 17h) Learning Contract (submit on myCourses by 17h) Peer Review (submit Feedback on 2-3 Group Presentations on MyCourses by October 8)
	Oct 12	Thanksgiving, NO CLASS	
6	Oct 19	A. Tsimicalis Quality Assessment of Quantitative Research Studies	

		L. Merry Reporting Case Control Study	
7	Oct 26	Pop Quiz 2 E. Laforest & C. Clausen Quality Assessment of Qualitative Research Studies Reporting a qualitative study: a PhD Student's Perspective	Pop Quiz 2
8	Nov 2	L. Merry: Data Extraction Data Synthesis	
9	Nov 9	M. Purden Overview of NUR2-630 Pop Quiz 3 Group Presentations 2	Pop Quiz 3 Group Presentations 2 (submit presentation file on Nov 8 by 17h) Peer Review (submit feedback on 2-3 Group Presentations on MyCourses by Nov 12)
10	Nov 16	Group Presentations 2	Group Presentations 2 (submit presentation file on Nov 15 by 17h) Peer Review (submit feedback on 2-3 Group Presentations on MyCourses by Nov 19)
11	Nov 23	S. Castiglione Dissemination/Implementation Moving into Action: I know what I want to change, now what? An Overview of implementing practice changes K. Williams Implementing Research into Practice: Knowledge Dissemination Strategy by a Graduate Student L. Merry Interpretation and Write-up: Concluding the Knowledge Synthesis Project	
12	Nov 30	612 Students Writing for Publication: Insights from Graduate Students	
13	Dec 7	Final E-Poster Presentations Course Evaluation & Feedback	Final oral presentations in E-poster format Peer Review (Feedback on 2 e-posters to be submitted by Dec 10)
14	December 20 at	Final Assignment Due: Knowledge Synthesis Manuscript, Learning Contract & Role Matrix (Final)	

Course Content

Session 1 - Friday, September 4

A. Tsimicalis

Introductions and Course Overview

Selection of Research Teams & Knowledge Synthesis Topics

Introduction to Research Methods and Evidence-Based Nursing Practice

Carper 1978 suggested that nursing knowledge could be classified into empirics (the science of nursing), aesthetics (the art of nursing), ethics (the moral component), and personal knowledge. Where do you retrieve your nursing knowledge?

➤ ***Required Readings***

1. Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins. *Chapter 1: Introduction to Nursing Research in an Evidence-Based Practice Environment*
2. Scott, K., & McSherry (2008). [Evidence-based nursing: clarifying the concepts for nurses in practice](#). *Journal of Clinical Nursing*, 18, 1085-1095.
3. Kloda, L. A., & Bartlett, J. C. (2014). [A characterization of clinical questions asked by rehabilitation therapists](#). *Journal of the Medical Library Association : JMLA*, 102(2), 69–77.

Recommended Readings:

- Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins. *Chapter 2: Evidence-Based Nursing: Translating Research Evidence in Practice*

Session 2 - Monday, September 14

A. Tsimicalis

Synthesizing Knowledge in Nursing: Step-by-Step Guide for Conducting a Systematic Review

Recent evidence-based practice initiatives have increased the need for and the production of all types of reviews of the literature (e.g. integrative reviews, systematic reviews, meta-analyses, and qualitative reviews). The following papers will serve as a 'backbone' for your review and will be referred to over the course of the semester.

NUR2-612 Knowledge Synthesis Project: Instructions & Guidelines

➤ ***Required Readings***

1. Pai, M, McCulloch, M, Gorman, J.D., Pai, N., Enanoria, W., Kennedy, G., Tharyan, P., Colford J.M. Jr. (2004). [Systematic reviews and meta-analyses: an illustrated, step-by-step guide](#). *The National Medical Journal of India*, 17(2), 86-95.
2. Whittemore, R., Chao, A., Jang, M., Minges, K. E., & Park, C. (2014). [Methods for knowledge synthesis: an overview](#). *Heart & Lung: The Journal of Acute and Critical Care*, 43(5), 453-461.
3. Grimshaw, J. [A Knowledge Synthesis Chapter](#). Canadian Institutes of Health Research.

Recommended Readings

1. [Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement](#). Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. *PLoS Med.* 2009 Jul 21;6(7):e1000097
2. Whittemore, R., Knaf, K. (2005). [The integrative review: updated methodology](#). *Journal of Advanced Nursing*, 52(5), 546-553.

F. Bruno

Reporting a Knowledge Synthesis Project: Fall 2014 Example
Planning and Executing a Knowledge Synthesis Project: A Graduate Student's Perspective

A. Lambrou

Searching for Evidence: How to Conduct a Literature Search

*Pravikoff and colleagues (2005) found the majority of nurses were unable to conduct successful literature searches with either MEDLINE or CINAHL databases. They also reported nurses do not understand or value research, have received little or no training using bibliographic databases, and possess little knowledge of evidence-based nursing. Where do you stand?
Make sure to book an appointment with your librarian to assist with your literature search.*

In-Class Activity

Determine how you may enhance your literature search strategy. Reflect on your lessons learned. Consider the 'flow of tasks in a literature review' (Polit & Beck, 2012; Figure 5.1, page 96). Share with the class. Share with your group. Create a plan.

Recommended Readings

1. Ciliska, D.K., Pinelli, J., DiCenso, A., Cullum, N (2001). [Resources to Enhance Evidence-based Nursing Practice](#). AACN Clinical Issues: Advanced Practice in Acute & Critical Care, 12(4), 520-528
2. McKibbon, K. A., & Marks, S. (1998). [Searching for the best evidence. Part 1: where to look](#). *Evidence-Based Nursing 1*, 68-70.
3. McKibbon, K. A., & Marks, S. (1998). [Searching for the best evidence. Part 2: searching CINAHL and Medline](#). *Evidence-Based Nursing, 1*, 105-107.
4. Spasser, M.A. (2005). [Evidence-based nursing resources](#). *Medical Reference Service Quarterly*, 24 (2), 71-85.
5. Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins. Chapter 5: Literature Reviews: Finding and Critiquing Evidence

Session 3 - September 21

M. Purden

Formulating the Problem and a Clear Focused Research Question

The identification of your research problem is an essential element for validating the need for undertaking any research project. Additionally, the development and refinement of your research question ensures that your methods are sound and will allow you to synthesize new knowledge in a clear and answerable manner. From the list of generated topics, what is your research question? You may want to use the acronym PICO to formulate a clear, focused question.

Identifying Theoretical Frameworks and/or Key Concepts to Guide the Review Process.

Theoretical frameworks and associated concepts are elements that may enhance a knowledge synthesis endeavor by adopting an approach to help interpret data and explain results. These frameworks also help to ensure that the results of your own research project are grounded by a systematic approach, thereby ensuring rigor.

➤ Required Readings

1. Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins.
 - a. Chapter 3: Key Concepts and Steps in Qualitative and Quantitative Research
 - b. Chapter 4: Research Problems, Research Questions, and Hypotheses
 - c. Chapter 6: Theoretical Frameworks

In-class Activity

In your selected groups, you will begin working on and discussing your literature search findings. Use the selected readings to discuss what exists in your chosen topic area. Consider some of the theoretical/conceptual frameworks that have been used to guide these studies.

Guidelines for discussion include:

1. What are the major concepts of interest?
2. What theoretical approaches have been used to study the concepts?
3. Do these theoretical approaches fit with the study purpose?
4. What kind of a matrix table can you create to extract your data related to theoretical frameworks and concepts for appraisal and synthesis?
5. Draft a matrix table to share with the class. Perhaps, you can convert items in Box 6.3 (Polit & Beck, 2012, page 145) into a table for data extraction.

F. Bruno

Organizing & Managing a Knowledge Synthesis Project: A short tutorial

Just like any project, a research study requires considerable planning and organizing. This tutorial will discuss strategies to help you with managing your activities with tools and techniques to streamline your research processes.

Session 4 - Sept 28

POP QUIZ 1

There will be 15-30 questions generated from the required course readings. Topics Covered: Evidence-Based Nursing and Fundamentals of Systematic Reviews

A. Lambrou

Organizing your Citations: How to Use EndNote

The librarian will show you a number of tricks for using this reference management software. You might want to practice beforehand, so bring your questions. (This software will also help you reference your citations using the APA format. No sense in losing marks for APA!).

Session 5 Oct 5

Presentation I Submit presentation file on Oct. 4 by 17h on myCourses. In preparation for your presentation, consider the following the tips:

1. Present your topic to the class with key references to provide a background and rationale for your project;
2. Describe a theoretical framework or key concepts that may be used;
3. Present your research questions or objectives; and
4. Describe what study designs you have found and proposed eligibility criteria

Please use PowerPoint slides for your 10-minute presentation. You will have another 10 minutes for class commentary and discussion. There are no marks allocated for this presentation. This is an opportunity to increase the rigor of your proposed knowledge synthesis project.

Learning Contract Due: Please submit the signed copy of your Learning Contract & Role Matrix on myCourses.

Peer Review: Please submit Feedback on 2-3 Group Presentations on myCourses by October 8

- Provide constructive feedback to your peers in class and in myCourses. Reflect on your feedback; revise accordingly.
- One mark will be allocated for class participation. Submit your peer review feedback to the project group members. Submit your feedback on myCourses in order to receive your participation mark. Please be generous in your feedback. Give to at least 2 groups.

Session 6 - Oct 19

A. Tsimicalis & L. Merry

Quality Assessment of Quantitative Research Studies

Evidence-based nursing is about applying the best available evidence to your PICOT question (Roberts & DiCenso, 1999). Quantitative research designs provide evidence for PICOT questions focused on the cause, prognosis, diagnosis, prevention, treatment, or economics of health problems (Roberts & DiCenso, 1999). Many different quantitative designs exist, each with a specific purpose and with various strengths and limitations (Roberts & DiCenso, 1999). The following readings are aimed to enhance your knowledge of quantitative designs and offer a few examples within nursing.

➤ Required Readings

1. Polit, DF, & Beck CT (2012). Nursing Research: Generating and Assessing Evidence for Nursing Practice (9th ed). Philadelphia: Lippincott Williams & Wilkins.
 - a. Chapter 9: Quantitative Research Design
 - b. Chapter 10: Rigor and Validity in Quantitative Research
 - c. Chapter 11: Specific Types of Quantitative Research
 - d. Chapter 12: Sampling Quantitative Research

Recommended Readings

1. Ciliska, D., Cullum, N., & Di Censo, A. (1999). The [fundamentals of quantitative measurement](#). *Evidence-Based Nursing*, 2(4), 100-101.
2. Roberts, J., & DiCenso, A. (1999). [Identifying the best research design to fit the question. Part 1: quantitative designs](#). *Evidence-Based Nursing*, 2, 4-6.
3. Sheldon, T. (2000a). [Estimating treatment effects, real or the result of chance?](#) . *Evidence Based Nursing*, 3(2), 36-39.
4. Sheldon, T. (2000b). [Statistics for evidence-based nursing](#). *Evidence Based Nursing*, 3(1), 4-6.
5. Thompson, C. (1999). [If you could just provide me with a sample: examining](#)

[sampling in qualitative and quantitative research papers](#). *Evidence-Based Nursing*, 2(3), 68-70.

- Russell, C., & Gregory, D. M. (2003). [Evaluation of qualitative research studies](#). *Evidence-Based Nursing*, 6, 36-40.

Session 7 - Oct 26

Pop Quiz 2

There will be 15-30 questions generated from the required course readings. Topics Covered: Quantitative Research Studies

Ms. Laforest & Ms. Clausen

Quality Assessment of Qualitative Research Studies

Reporting a qualitative study: a PhD student's perspective

➤ Required Readings

- Polit, DF, & Beck CT (2012). [Nursing Research: Generating and Assessing Evidence for Nursing Practice](#) (9th ed). Philadelphia: Lippincott Williams & Wilkins.
 - Chapter 20: Qualitative Research Design and Approaches
 - Chapter 21: Sampling in Qualitative Research
 - Chapter 22: Data Collection in Qualitative Research
 - Chapter 23: Qualitative Data Analysis

Recommended Readings

- Whittemore, R. Chase, SK, Mandel C.L. (2001). [Validity in Qualitative Research](#). *Qualitative Health Research* 11: 522-537.
- Russell, C., & Gregory, D. M. (2003). [Evaluation of qualitative research studies](#). *Evidence-Based Nursing*, 6, 36-40.

Session 8 - Nov 2

A. Tsimicalis & L. Merry:

Data Extraction

There are a number of tools available to guide your data extraction and quality assessment. Consider the recommendation by Sanderson et al. (2007). Also, reflect upon what information should be extracted from your eligible studies. Select your tool(s), devise an electronic form, and begin piloting your data extraction. Generally, you will include details of study characteristics, participant characteristics, intervention and setting, and results. Please bring a tool to class.

In-class Activity: We will construct your data extraction forms, tailored to your research topic, so please do not forget to bring a tool. Please share your tools!

Data Synthesis

Remember, the central objective of your review is to summarize the evidence on a specific clinical question. Your secondary objective is to critically evaluate the quality of the primary studies. How do you plan summarizing the evidence? You may want to conduct a simple tabulation of study characteristics (e.g. year, setting, study design, quality) and results.

➤ **Required Readings**

1. Sanderson, S., Iain D Tatt, I. D., Higgins, J.P.T. [Tools for assessing quality and susceptibility to bias in observational studies in epidemiology: a systematic review and annotated bibliography](#). *International Journal of Epidemiology*, 36 (3), 666-676.
2. Hannes, K., Craig Lockwood, C. & Pearson, A. (2010). [A Comparative Analysis of Three Online Appraisal Instruments' Ability to Assess Validity in Qualitative Research](#). *Qualitative Health Research*, 20(12), 1736-1743.
3. Hsieh, H-F & Shannon, S.E. (2005). [Three Approaches to Qualitative Content Analysis](#). *Qualitative Health Researcher*. 15, 1277-1288.

Session 9 - Nov 9

M. Purden

Overview of NUR2-630

For most of you, NUR2-630, 631, and 632 are compulsory courses that guide you through your capstone project. This clinical research project will expose you to real-life primary research and will be a platform for integrating concepts and skills learned from NUR2-612. Dr. Purden will be giving an information session pertaining to your coming research project.

POP QUIZ 3

There will be 15-30 questions generated from the required course readings. Topics Covered: Qualitative Research Studies

Session 10 - Nov 16

Group Presentations 2

Submit presentation file on Nov 15 by 17h on myCourses. In preparation for your revised presentation, consider the following tips:

- 5-6 slides max. Encourages a clear and concise message.
- 1st slide: "This is what we presented the last time". Research Question. Design.
- 2nd slide: "This is what we have done according to subsequent feedback".
- 3rd slide: "This is where we are now". KS stage (appraisal? data extraction? synthesis? write-up?)
- 4th slide: "These are our successes/challenges"
- 5th slide: Burning questions

Please use PowerPoint slides for your 10-minute presentation. You will have another 10 minutes for class commentary and discussion. There are no marks allocated for this presentation. This is an opportunity to increase the rigor of your proposed knowledge synthesis project.

Peer Review

Submit your peer review feedback to the project group members. Submit your feedback on myCourses via 2 team's discussion thread **AND** the Assignment Module by November 19 in order to receive your participation mark. Please be generous and constructive in your feedback. Give to at least 2 groups.

Session 11 - Nov 23

S. Castiglione

Moving into Action: I know what I want to change, now what? An Overview of implementing practice changes

In reality, the implementation of the evidence-based nursing is a complex and multifaceted process (Rycroft-Malone, 2010). In fact, it takes an average of 17 years for evidence to be implemented into practice (Balas & Boren, 2000). Guided by the PARIHS Framework (Jo Rycroft-Malone, 2004), consider how you may implement evidence into an 'ideal' practice setting. Now, consider implementing the evidence if you were practicing in the setting described by Scott and Pollock (2008) (S. D. Scott & Pollock, 2008). Are there any individual characteristics that may influence your capacity to use research (Estabrooks, et al., 2003)?

➤ Required Readings

1. Squires, JE., Estabrooks, C., Gustavsson, P., Wallin, L., (2011). [Individual determinants of research utilization by nurses: A systematic review update](#). *Implementation Science*, 6, 1-21.
2. Rycroft-Malone, J. (2004). [The PARIHS Framework : A framework for guiding the implementation of evidence-based practice](#). *Journal of Nursing Care Quality*, 19(4), 297-304.
3. Rycroft-Malone, J. (2010). [Using theory and frameworks for facilitate the implementation and evidence into practice](#). *Worldviews on Evidence-based Nursing*, 7(2), 57-58.
4. Scott, S. D., & Pollock, C. (2008). [The role of nursing unit culture in shaping research utilization behaviors](#). *Research in Nursing and Health*, 31, 298-309.
5. Thompson, D. S., Moore, K. N., & Estabrooks, C. A. (2008). [Increasing research use in nursing: implications for clinical educators and managers](#). *Evidence-Based Nursing*, 11(2), 35-39.

In-class Activity

Now that you have a better sense of the evidence generated from your knowledge synthesis project, consider your implications for practice. Ponder on how the evidence integrated with other information may influence the management of the patient's problems. Consider your clinical expertise, patient preference for alternative forms of care, and available resources. What would you recommend? We are fortunate to have an expert with us today. Let us use her time wisely.

K. Williams

Implementing Research into Practice: Knowledge Dissemination Strategy by a Graduate Student

This presentation will showcase one strategy used by a former student as a result of his Knowledge Synthesis Project.

L. Merry

Interpretation and Write-up: Concluding the Knowledge Synthesis Project

Session 12 - Nov 30

Course Evaluation & Feedback

Nursing education programs are subject to constant curricular review and revision (Chappy, Jambunathan, & Marnocha, 2010). Surveying students may validate the adequacy of the curriculum (Chappy, et al., 2010). A high response rate with constructive feedback is most desirable. Please complete the evaluation form that will be sent to you by email. I would also greatly benefit from some in-class discussion.

612 Students

Writing for Publication: Insights from Graduate Students

Publishing is central to the mission of nursing research. If you have generated significant knowledge in nursing or you have gathered and analyzed data about an important issue, it is time to share your results with the nursing society. Your colleagues from last year's class will share their experience in preparing, writing, and submitting their knowledge synthesis manuscript for peer review by a journal.

Session 13 - Dec 7

Final Presentations in E-poster format

Peer Review

Feedback on 2-3 e-posters to be submitted by Dec 10

Final Knowledge Synthesis Project due: **Sunday, December 20th at
23h59**

***SUBMISSION MUST INCLUDE: Knowledge Synthesis Paper, Learning Contract &
Role Matrix (Final)***