



FMED 672 - DENT 672

APPLIED MIXED METHODS IN HEALTH RESEARCH

1. General Information

Number of credits: 1

Class size limit: 20 students

Instructors

- Pierre Pluye MD, PhD (pierre.pluye@mcgill.ca) and Kathleen Rice PhD (kathleen.rice@mcgill.ca) from the Department of Family Medicine, Faculty of Medicine.
- Alissa Levine BA, MA, PhD (alissa.levine@mcgill.ca) and Belinda Nicolau, DMD, PhD, (belinda.nicolau@mcgill.ca) from the Faculty of Dentistry.

Course start date: Tuesday May 2nd, 2023

Seminar day and time

There will be two in-class meetings:

- **One half-day introduction from 9:00 am to 12:00 on Tuesday May 2nd** (presentation of the students, instructors and syllabus, mixed methods refresher, and Q&A period).
- **One half-day seminar from 9:00 am to 12:00 on Tuesday June 20** (5-min students' presentation, and 25-min feedback from trainees and instructors: time will be adapted to the number of students).

Location

- Department of Family Medicine, 5858 Côte-des-neiges, 3rd Floor, Suite 300, Montréal.

Recommended Prerequisites

Training or experience in mixed methods research or mixed studies reviews (or with permission of the instructors). In preparation for this course, students can attend the 2-credit Winter FMED 614 online course "Foundations of Mixed Methods", or the one-week intensive McGill Mixed Methods Summer Institute.

Access to the Instructors

- Pierre Pluye, Room 327, and Kathleen Rice, Room 330 (Family Medicine, 5858 Côte-des-neiges, 3rd Floor, Suite 300); Tel. Pierre Pluye 514-398-8483; Kathleen Rice, 514-399-9217.
- Alissa Levine & Belinda Nicolau, Room 500 (Population Oral Health, 2001 McGill College Avenue); Alissa Levine 514-216-0730; Belinda Nicolau 514-398-4400 ext. 094655.

Who may take this course?

Graduate students and postgraduate fellows from all disciplines can take this course *only if* they are currently planning, conducting or reporting a mixed methods primary research or a mixed studies review, e.g., are writing a protocol or a manuscript. This course is open to research professionals. While the focus is on health research, the course is pertinent for any graduate student motivated to apply mixed methods.



Objectives and course description

- In health and social sciences, mixed methods are defined as the integration of qualitative and quantitative methods. The integration occurs at least the level of research question, designs and analysis. It may also occur at the level of worldviews, literature review and data collection.
- Mixed methods research and mixed studies reviews are increasingly popular in health sciences. These innovative methods enable a better understanding of complex health issues.
- This course provides practical guidance on how to plan, conduct, assess and report mixed methods primary research, and mixed methods reviews (mixed methods applied to literature reviews). Students will write protocols or manuscripts, and peer-review each other's work.
- The course is aimed to promote participants' autonomy in terms of planning and conducting mixed methods research and mixed studies reviews. During the face-to-face seminars, participants will be involved in a research-like peer-review environment. Participants will apply mixed methods.

2. Learning outcomes

By the end of this course, students will be able to:

- Apply mixed methods research and mixed studies reviews in health sciences;
- Write a mixed methods protocol or manuscript/article;
- Develop confidence in reviewing mixed methods proposals or manuscripts/articles.

3. Course material, content and planning

Required readings: Available on MyCourses.

Reference books:

- Creswell, J. W., & Plano Clark, V. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Heyvaert, M., Hannes, K., & Onghena, P. (2016). *Using mixed methods research synthesis for literature reviews: the mixed methods research synthesis approach*. London: SAGE Publications.

Content and planning: Overview

Half-day introduction seminar

- Roundtable and course overview
- Refresher on common designs and integration strategies for mixing qualitative and quantitative methods
- Presentation of guidance for reporting mixed methods protocols and manuscripts

Written assignment: Manuscript or protocol on a mixed methods research or a mixed studies review

- Prepare your written assignment:
 - ✓ Report a planned, in-progress, or completed mixed methods research or a mixed studies review [protocol or manuscript];
 - ✓ Submit maximum 10 pages (excluding references, illustrations and appendices, e.g., instrumentation);



- ✓ Ensure that the emphasis within your assignment is on the methods;
- ✓ For convergent designs: do not use the word “phase”, but rather “component” (e.g., use the following sub-headings: qualitative component, quantitative component and integration of qualitative and quantitative components);
- ✓ Include clear description of your mixed methods design, and illustrate it with a diagram;
- ✓ Report qualitative design/methods in one section; and quantitative design/methods in another section;
- ✓ Ensure that all methodological aspects are described (reported);
- ✓ Use appropriate guidance for reporting qualitative, quantitative and mixed methods aspects (or mixed studies reviews);
- ✓ Emphasize the integration section, and describe an integration strategy or the combination of integration strategies (see FMED 614 modules for example).
- Use reporting guidance (slides posted in MyCourse/672/class 1):
 - ✓ GRAMMS: you do not need to describe “priority” (controversial issue);
 - ✓ Cresswell & Plano-Clark 2018 book;
 - ✓ APA Standards 2018 (for PhD students, but only if it fits with your project).
- Request help to answer questions when needed:
 - ✓ Ask the TA and your peers in the Mycourse discussion forum (Q&A);
 - ✓ Contact the course instructors directly through email when needed (Dres Levine and Nicolau for DENT students).
- Post your written assignment before the deadline.
- Then, review all peers’ assignments, take your own notes, and be ready to discuss.

Half-day seminar (or webinar when needed): Final assignment

- Students will present a summary of their written assignment (5 slides maximum).
- In-class peer-review assignment: Students will provide oral constructive feedback comments to peers.

4. Assignments and evaluation

Assignments	Grade
• Participation in seminars and contributions to the Q&A forum	10%
• Written assignment: Students will submit a protocol or a manuscript on a mixed methods primary research study, or a mixed studies review. Deadline: June 5 (11:59 pm).	30%
• In-class final assignment: Students will present their work to the group (e.g., 5 minutes of presentation followed by 25 minutes of group discussion): June 20.	30%
• In-class peer-review: Students will read and peer-review each other’s work, and present their peer review notes in class (comments, suggestions and questions): June 20.	30%



5. Useful resources and further information

A communication policy for regulating participants' discussions is available on the course website. Resources for referencing materials are as follows: Vancouver group (<http://www.icmje.org>) & APA manual (www.uwsp.edu/psych/apa4b.htm).

The scoring method is as follows:

A/A- Exemplary achievement of the course objectives. Work exhibited is of an independent, creative, contributory nature. To earn a grade of A or A-, students must do more than display information in predetermined formats and show they can summarize accurately, analyze and synthesize information; they must demonstrate an ability to apply what they have read in new contexts to solve new problems.

B+/B Superior achievement of the course objectives. The performance is clearly and significantly above the satisfactory fulfillment of course requirements. Overall, the students can discuss the assigned readings well and the text can be read and understood with minimal difficulty, but it contains little that pushes beyond what was given. In addition, a B+ or B paper may improperly frame arguments so that the reader cannot tell where the writer's ideas and the source's ideas start and end.

B- The students achieve the course objectives but their work either says very little (e.g., obvious, shallow arguments or summaries) or the work is difficult to read and understand. A "B-" is also given to students who come to class prepared, but do not contribute to discussions. Nevertheless, these students show interest in the discussion (as demonstrated by listening, note taking, etc)

F: Unsatisfactory achievement of course objectives to an extent that the student must repeat the course to receive credit. Students in this range often don't participate, have not read the material or done the homework. Students may be disruptive or overtly rude, thereby negatively influencing the participation of others.

Classification of Marks

Grades	Grade Point Grade	Numerical Scale of Marks
A	4.0	85-100%
A-	3.7	80-84%
B+	3.3	75-79%
B	3.0	70-74%
B-	2.7	65-69%
F (fail)	0	0-64%



6. McGill policy statement

Language of Submission:

“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. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

« Conformément à la Charte des droits de l’étudiant de l’Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l’un des objets est la maîtrise d’une langue). »

Academic Integrity:

“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/).»

Text-matching Software:

This course will not be using text-matching software.

Students are informed that they may be required to attest to the authenticity of their work by:

- a) submitting an annotated bibliography;
- b) submitting photocopies of sources.

7. Additional statements

- “The [University Student Assessment Policy](#) exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g. the timing of evaluation due dates and weighting of final examinations.”
- “© 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.”
- “As the instructor of this course I endeavor to provide an inclusive learning environment. Students with a disability: please contact the instructors to arrange a time to discuss the situation. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the [Office for Students with Disabilities](#), 514-398-6009.”



- Students are encouraged to submit “[End-of-course evaluations](#) are one of the ways that McGill works towards maintaining and improving the quality of courses and the student’s learning experience. Please note that a minimum number of responses must be received for results to be available to students.”
- In keeping with McGill's preparedness planning strategies with respect to potential pandemic or other concerns, the Administration suggests that all course outlines contain the statement: “In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.”
- Additional policies governing academic issues which affect students can be found in the McGill Charter of Students' Rights (see [document](#)).
- McGill has policies on sustainability, paper use and other initiatives to promote a culture of sustainability at McGill. (See the [Office of Sustainability](#).)
- Guidelines for the use of mobile computing and communications (MC2) devices in classes at McGill have been approved by the APC. Consult the [Guidelines](#) for a range of sample wording that may be used or adapted by instructors on their course outlines.