2023-24

Health Science Education Graduate Program
Student Handbook

MSc. HEALTH SCIENCE EDUCATION

HEALTH SCIENCES | McMaster University

Welcome!

Welcome to the Health Science Education (HSED) Graduate Program at McMaster University. We are pleased that you have selected our program to pursue your passion for education. The HSED Program is designed primarily for active health professionals who wish to strengthen their abilities as educators and to develop proficiency in various forms of education scholarship. It is also open to non-clinicians who aspire to be scholars in the field of health science education. The HSED Program provides students with opportunities to develop a comprehensive understanding of current professional practice in health science teaching and learning as well as important research, innovation, and evaluation approaches. This handbook provides students with resources that will aid in the successful completion of a MSc degree in Health Science Education.

It is very important to note that this handbook is a supplement to the School of Graduate Studies (SGS) Graduate Calendar and is not intended to modify or replace information found in the SGS Graduate Calendar. Students are encouraged to access the Graduate Calendar and the Resources section of the SGS website for information regarding McMaster University regulations, sessional dates, deadlines, enrollment information, fees, student-initiated forms, services, and more.

Information about the HSED Program, HSED-specific forms, updates, events, and more can be found on the HSED website at: hsed. mcmaster.ca

Announcements, news, updates, community highlights, and more can be found on the HSED Twitter page: @McMasterHSED

We wish you all the best during your time in the HSED Program!

PLEASE NOTE:
If there is any discrepancy between a department or program handbook and the School of Graduate Studies Calendar, then the School of Graduate Studies Calendar shall be considered the authority.

Approved by the Associate Dean of Graduate Studies, Health Sciences (June 2023).

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NOTE: HSED Program policies require students to direct all communication with the Program through their McMaster email. Please include your student number either in the subject line or the body of the email. Thank you.

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1. Program Outline

1.1 HSED: AN ONLINE PROGRAM

The HSED Program is a primarily asynchronous, online learning program.

HSED students are expected to have access to a reliable and functional Internet connection in order to successfully engage with the curricular requirements of the Program.

Engagement with learning material is mediated via the Avenue to Learn (A2L) online learning management system. A2L will be the central location for you to participate in classes and online discussions, submit your assignments, and find course content, learning objectives, assigned readings, course- related dates, schedules, and announcements.

An A2L User Guide is available through McMaster University. We also encourage students to populate their A2L profile page and peruse other students' profile pages while interacting throughout A2L courses (e.g., in discussion forums). For details on filling in the A2L profile page, please see Appendix A.

1.2 PROGRAM STRUCTURE

HSED students have the option to complete the Program via either the course-based or the Thesis-based stream:

The **course-based stream** is designed to promote the development of mastery broadly across areas of academic health professions education, including curriculum design, assessment, simulation, leadership, and program evaluation. This stream involves the completion of 2 Residency Weeks, 2 core courses, 3 elective courses, and the submission of the completed Capstone Portfolio (or Scholarly Paper for students admitted prior to 2020).

The **thesis-based stream** is designed to promote the development of specific mastery in a particular area of academic health professional education as well as skills in the conduct of education research. This stream requires students to complete 2 Residency Weeks, 2 core courses, 1 elective (typically a methods course), and to successfully defend an independent thesis, which involves the written and oral presentation of a novel study with potential to impact the field.

HSED students also have the option to complete the program on a full-time or part-time schedule:

- **Full-time students** can move through the curriculum at their preferred speed with the expectation that they are finished all requirements within 2 years.
- **Part-time students** will complete their studies at their own pace within 3 to 5 years. These students are limited to accruing a maximum of 9 credit units each academic year (excluding those associated with HS EDUC 700 and HS EDUC 707).

Schematics outlining program structures can be found on the HSED website (hsed.mcmaster.ca) under "Program Overview" (a subsection that is nested under "Future Students").

1.3 HSED STUDENTS

The HSED Program is a primarily professional program designed for:

- Health Professionals that are seeking to develop mastery pertaining to teaching, learning, curriculum design, assessment, and academic leadership in health professions education. These students may choose to pursue course-based or thesis-based studies.
- Non-health professionals that work in academic health professions education contexts, and wish to develop mastery in teaching, learning, curriculum design, assessment, and academic leadership in health professions education. These students may choose to pursue course-based or thesis-based studies.
- Aspiring research scientists in the field of health professions education. These students must participate in thesis-based studies.

1.4 PROGRAM REQUIREMENTS

Course-based stream	Thesis-based stream
SGS 101: Academic Research, Integrity, and Ethics SGS 201: AODA HS EDUC 700: Residency Week 1 HS EDUC 707: Residency Week 2 HS EDUC 701: Learning & Curriculum (3 units) HS EDUC 703: Assessment in HPE (3 units) HS EDUC 708: Scholarly Paper* (6 units) Capstone Portfolio** 3 Elective Courses (3 units/ea.)	SGS 101: Academic Research, Integrity, and Ethics SGS 201: AODA HS EDUC 700: Residency Week 1 HS EDUC 707: Residency Week 2 HS EDUC 701: Learning & Curriculum (3 units) HS EDUC 703: Assessment in HPE (3 units) HS EDUC 709: Thesis (12 units) 1 Elective Courses (3 unit)

*HS EDUC 708 is only available to students who entered the HSED Program before the 2020-21 academic year.

**HS EDUC 708 and the Capstone Portfolio are anti-requisites; see below (Scholarly Paper and Capstone Portfolio).

1.5 SCHOOL OF GRADUATE STUDIES REQUIREMENTS

All graduate students at McMaster University are required to successfully complete:

- **SGS 101**, a short, online offering concerned with Academic Research, Integrity, and Ethics
- **SGS 201**, a short, online offering concerned with the Accessibility for Ontarians with Disabilities Act (AODA)

HSED students are required to complete these courses during their first year of study. More information on these courses can be accessed at:

https://gsa.mcmaster.ca/wp-content/uploads/2020/04/GSA-Handbook-for-New-Graduate-Students-domestic-version-1.0.pdf

1.6 RESIDENCY PERIODS

Although primarily an online program, all HSED students are required to complete two annual on-campus, in-person Residency Weeks, held concurrently every June:

<u>HS EDUC 700: Residency Week I</u>
This week-long course offers an overview of the program, including the overarching goals, learning outcomes, instructional methods, content, resources, and assessment methods. This required course is designed for graduate students from a wide range of health science disciplines and is offered in an intensive on-campus format during a week-long residency period, which includes our annual <u>Norman Education Research Day (NERD)</u>. Students are required to attend all days.

HSED students attend Residency Week 1 in the Summer term prior to beginning any of their course work. For example, students planning to begin studies in September 2023 would attend Residency Week 1 in June 2023.

<u>HS EDUC 707: Residency Week II</u>
This week-long course explores advanced aspects of scholarship, research, and academic writing. It is specifically designed as an intensive proposal development workshop that prepares students for the writing associated with their Capstone Portfolio or thesis. This course is offered in an in-person, on-campus format in the first full week of June alongside our annual <u>Norman Education Research Day (NERD)</u>. Students are required to attend all days. Students who plan to attend Residency Week 2 must enroll into SGS 700 in addition to HS EDUC 707.

The stream (i.e., course-based or thesis-based) and schedule (i.e., full-time or part-time) in which students are enrolled determines when in the program they should attend Residency Week 2:

Full-time and **part-time course-based** students should plan to attend Residency Week 2 as their final degree requirement, in the last summer of study. This timing positions the Residency Week as relevant to the completion of the student's Capstone Portfolio, which reflects knowledge developed over all completed courses and self-direct learning modules. Accordingly, students should have all Capstone Portfolio milestones completed and submitted prior to Residency Week 2 attendance. The deadline for pre-Residency Week milestone and draft Education Philosophy submission is typically towards the first Monday of May. The HSED Program Office will issue regular reminders.

Full-time thesis-based students should attend Residency Week 2 in the summer of their first year, prior to embarking on their second and final year of study. This timing positions the Residency Week as relevant to development of their emerging thesis proposal. Accordingly, these students should be working with their supervisor committee such that they have a draft thesis proposal prepared prior to attending the Week.

Part-time thesis-based students should attend Residency Week 2 in the summer that is in closest proximity to their thesis proposal development.

> **NOTE**: Full attendance at both Residency Weeks is mandatory. Requests for accommodations pertaining to Residency Week attendance may be forwarded to the HSED Office. The HSED Program will not accommodate absences from either Residency Week for the purposes of attending to clinical duties and responsibilities.

1.7 PLACEHOLDER COURSES

The Program recognizes that students will not always be active in the program; however, it is a School of Graduate Studies requirement that all students maintain continuous enrollment. This can be achieved in terms when one is not taking a course by registering in one of two placeholder courses, each with a distinct purpose:

SGS 700 is appropriate for students who are not taking a course but engaging with independent curricular activities, such as the Capstone Portfolio or Thesis.

SGS 711 is *exclusively* for part-time, course-based students who are not enrolled in any courses and are not engaging with any independent curricular activities (e.g., Capstone Portfolio). **Students cannot be enrolled in SGS 711 during the first or final term of Program**.

The HSED Program monitors student enrollment and activity continuously, and is prepared to offer guidance to students that ensures they are enrolling in appropriate placeholders when necessary. For more information on placeholder courses, please refer to the SGS Graduate Calendar.

1.8 SCHEDULED BREAKS

Students have the opportunity to prospectively arrange a scheduled break in study for one term per year, with the exception of the first or last term of enrolment. The Scheduled Break policy is intended for use in foreseeable situations where the Leave of Absence policy does not apply. Students may not be engaged with the curriculum during the break. The provisions related to tuition fees and term counts are the same as for a Leave of Absence. Breaks must be required via the Program, and the Program must approve the schedule. Students who are interested in planning a scheduled break should contact the HSED Program Office: hsed@mcmaster.ca.

1.9 PROGRAM POLICIES

1.9.1 POLICY ON RE-ENTRY FOLLOWING GOOD STANDING WITHDRAWAL

Students who voluntarily withdraw from the Program in *good standing* may be considered for re-entry during a subsequent Program admissions cycle. Notably, a good standing withdrawal is not concomitant with a guaranteed future re-admission. Students pursuing re-admission must complete the Application for re-admission form and pay an application fee. Applications will be adjudicated by the HSED Assistant Dean and the HSED Committee Chair will determine whether the course work completed previously continues to satisfy relevant degree requirements. If re-admission is approved, the student may begin graduate work aligned with the beginning of the Fall, Winter, or Spring/Summer term.

If re-admission is approved, the student may begin graduate work aligned with the beginning of the Fall, Winter, or Spring/Summer term. A student who is re-admitted should maintain continuous enrollment until they complete their studies.

1.9.2 POLICY ON THE USE OF GENERATIVE ARTIFICAL INTELLIGENCE

Generative AI tools, such as OpenAI's ChatGPT, Google's Bard, and Microsoft's Bing, are advanced language models which produce human-like text in response to prompts. There are also other platforms which can produce code, images, videos, presentations, and audio.

The use of such tools in coursework will be determined by course coordinators. In some cases, their use may be prohibited, in others the coordinator may set strict parameters around their use. Please connect with your course coordinator about how generative AI tools will be contemplated within your course.

Note, however, that the Health Science Education Graduate Program **strictly prohibits any use of these generative AI tools for the completion of all non-course requirements** including the Thesis, Scholarly Paper, and Capstone Portfolio components. All submissions are expected to be produced solely by the student.

2. HSED Courses

2.1 2023-24 COURSE SCHEDULE

Term	Courses Offered
Fall 2023	HS EDUC 701: Learning and Curriculum
	HS EDUC 705: Education Technology
Winter 2024	HS EDUC 703: Assessment in Health Professions Education
	HS EDUC 704: Simulation-Based Education
	HS EDUC 710: Program Evaluation
Summer 2024	HS EDUC 706: Leadership & Management
	HS EDUC 712: Critical Pedagogies
	HS EDUC 700 & 707: Residency Weeks 1 & 2
Term Optional	HS EDUC 708: Scholarly Paper
	HS EDUC 709: Thesis
	HS EDUC 777: Special Topics
	Capstone Portfolio

NOTE: Please consult the School of Graduate Studies Academic Calendar for further information regarding course add/drop dates, sessional dates for each term, and other important information.

2.2 GRADING IN HSED COURSES

Grades in HSED core and elective courses are reported as letter grades as listed below:

Letter Grade	Percentage
A+	90%-100%
A	85%-89%
A-	80%-84%
B+	77%-79%
B	73%-76%
B-	70-72%
F	≤ 69%

2.3 CORE COURSES

HS EDUC 701: Learning & Curriculum in Health Science Education

This course explores the science of memory, thinking, and learning, and its application to teaching and curriculum design in health science education. Students apply epistemological and theoretical frameworks from cognitive and educational psychology, and teaching strategies and methods such as problem-based learning, concept-based learning, and simulation-based learning to their own professional teaching practice area. This course is offered online.

HS EDUC 703: Assessment in Health Professions Education

In this course, students will explore concepts and theories underlying assessment and evaluation in health sciences education. Key topics include the fundamentals of assessment, reliability, and validity, and the applications of these topics to assessment and evaluation instruments appropriate for health sciences academic and clinical settings. Students will explore various types of assessment, including knowledge-based (e.g., multiple choice), performance-based (e.g., the Objective Clinical Structured Examination), rater-based, and portfolio and reflection-based formats. Students will also learn the skills needed to critically appraise assessment measures and develop a basic understanding of program evaluation methods. This course is offered online.

2.4 ELECTIVE COURSES

HS EDUC 704: Fundamentals of Skill Acquisition: Implications for Simulation-based Education

This course explores the basic theories of motor, procedural, and team-based learning and their application to simulation-based learning and assessment. Students will apply these frameworks in a way that promotes an evidence-based approach to the many questions that surround clinical skill learning, including appropriate assessment, the role of the instructor in self-directed andragogy, and choosing the right simulator, the implications for simulation-based teaching, and more. This course is offered online.

HS EDUC 705: Educational Technologies in Higher Education

In this course, students explore andragogical approaches and considerations for using educational technologies in higher education learning environments. Students will also explore course design and development as well as select topics relating to the use of educational technologies for teaching and learning (e.g., evaluating learners, facilitation). Students will learn to critically appraise the use of technology in an educational context. Students will also have hands-on experience with technologies used in higher education. This course is designed for graduate students from a wide range of health science disciplines. This course is offered online.

HS EDUC 706: Management and Leadership in Health Professions Education

In this course, an inter-professional team facilitates discussions as students relate the theoretical and conceptual fundamentals of educational leadership in academic health sciences and community practice contexts to their own current or desired practice environments. Leadership, planning, mentorship, communication and safety, motivation, and the change process are highlighted through online asynchronous learning, discussions, and student assessment. Synchronous course orientation will provide an opportunity for students to immerse themselves. This course is offered online.

HS EDUC 710: Fundamentals of Program Evaluation in Health Science Education

This course will introduce students to the major concepts and methods involved in program evaluation and will examine different approaches to evaluation of programs. A framework for thinking about evaluation theory will be developed that allows students to explore how different theorists attempt to tackle fundamental problems in the field. A wide range of quantitative and qualitative design options will be discussed. The course will provide students with knowledge of the current controversies and major challenges facing this field. This course is offered online.

HS EDUC 712: Critical Pedagogies & Inclusive Teaching Practices

This course will examine critical scholarship and its application to teaching and learning in health professions education. In this course, critical scholarship will broadly refer to three connected bodies of literature: critical theory, critical literacy, and critical pedagogy. The course is designed to help students place themselves in relation to the contradictions that arise in the practice of social justice within education; asking the central questions: *how can we as individuals promote freedom and justice within an educational context that reproduces social stratification? How do we challenge systems of domination through our teaching, learning, and respective professional practices?* Students will have the opportunity to engage with texts from a variety of disciplines to become familiar with engaged pedagogy that promotes freedom, social justice, and community. Recognizing that the classroom does not operate outside of the social, this course will prepare and encourage learners to critically interrogate their teaching practices to contest the unequal power relations that exist both inside and outside of the formal contexts of education. This course is offered online.

HS EDUC 777: Special Topics in Health Professions Education

This elective course requires interested students to develop and complete a framework for study that fosters exploration of a special topic of relevance to Health Professions Education in collaboration with a mutually interested HSED faculty member (with supervisory status). The framework must describe the intended learning outcomes, teaching and learning activities, and assessments as well as the alignment between these components, and be presented to the HSED Program for approval prior to the course being offered. It is anticipated that these frameworks will typically include the development of a comprehensive reading list, literature review activities, a schedule of facilitated discussions, and the completion of a major term paper and/or series of smaller assignments. However, the specific objectives, activities, and assessments will vary depending on student interest, faculty guidance, and the nature of the agreed upon topic.

2.5 ELECTIVE COURSES OUTSIDE HSED

HSED students are permitted to take elective courses outside of the HSED Program. Students must seek approval from the Assistant Dean, HSED and the instructor of the desired course if they wish to take an external elective course. It is important to note that all programs reserve class spaces for their own students first. This means that there are rarely guarantees that an HSED student will be admitted into another program's course until space in the class has been confirmed.

This is a list of courses in other McMaster graduate programs that have been pre-approved by the HSED Program:

2.5.1 ONLINE EXTERNAL ELECTIVES

HRM 702: Introduction to Biostatistics

Basic statistical concepts and techniques as they apply to analysis and presentation of data in biostatistical and epidemiology practice. The course covers: graphical presentation of data, elementary probability, descriptive statistics, probability distributions, and introduces hypothesis testing using parametric and non-parametric methods. Specific techniques covered include z-tests, t-tests, ANOVA, contingency tables, regression, and correlation. This course is offered in-person in the Fall term.

HRM 727: Theory and Practice of Measurement

Principles of subjective assessment in topic areas ranging from educational evaluation to patient-based measurement of health attitudes or health status. Discussion includes: principles and methods of constructing rating scales and approaches to assessing the measurement properties of such scales. Special emphasis on assessment of reliability and validity – various forms of reliability (test-retest, interobserver, split-halves), distinction between reliability and agreement, and indirect methods to assess validity of an instrument in the absence of a "gold standard". Advanced topics in generalizability theory and Item Response Theory will be introduced. Format is that of lecture, plus small group discussion. This course is offered in-person in the Winter term.

HRM 751: Observational and Analytic Research Methods

The course is designed to introduce students to the basic concepts and methods used in observational (non-experimental) studies to conduct needs assessments (e.g., prevalence of disease or order), to understand the determinants of health (e.g., association between independent/exposure variables and dependent/outcome variables in analytic research) and to emphasize concepts that are essential to the conduct of epidemiologic studies including internal and external validity, random variability, bias, effect modification, causality, and generalizability. The topics will focus on three broad areas: i) the formulation of research questions and use of theory to explicate the relationships among key variables; ii) study design options, sampling, measurement and analysis; and iii) the control of error. This course is offered in-person in the Fall term.

REHAB 774: Quantitative Research Methods

This course provides learners with an introduction to quantitative research methods commonly used in rehabilitation practice. It is intended to prepare learners to understand the foundations of clinical research, engage in critical evaluation of research, explore opportunities for research in their clinical practice, and enhance their skills as research collaborators. The course emphasizes the development of knowledge related to the formulation of research questions; reporting guidelines; specific observational designs as well as randomized control trials, systematic reviews and meta-analyses. This course is offered online in the Spring/Summer term.

REHAB 772: Introduction to Qualitative Research

This is a graduate course for health professionals who have had little or no exposure to qualitative research and wish to acquire an introductory knowledge of qualitative research philosophy, methods, and methodological process. The course emphasizes the development of knowledge related to the philosophical and theoretical foundations of qualitative research, major qualitative research approaches, primary techniques for gathering data, and data management, analysis, and interpretation. Overall, this course encourages students to think more critically their assumptions, positionality, and experiences; as well as to see multiple interpretations and constructions of reality in relation to research. This course aims to help students understand the nature of lived experience and the importance of thinking and acting in critically reflexive ways. This course is offered online in Spring/Summer term.

HTH SCI 4ID3/6ID3: Innovation by Design (IBD)

This course will enable interdisciplinary student groups to engage in design thinking as a methodology to assess health area problems/challenges, collect meaningful data, iterate alternative design options, and build a prototype solution for validation with user groups. Students will learn conceptual approaches to 'design thinking' and develop capabilities with spotting, supporting and scaling up new innovative ideas explored through a user-centered empathy focus. This course not being offered in the 2023-24 academic year.

2.5.2 HYBRID OR IN-PERSON EXTERNAL ELECTIVES

HLTH POL 747: Conceptual and Qualitative Research Methods
This course covers principles and methods for qualitative and conceptual analyses relevant to the fields of health policy. Qualitative methods include descriptive or interpretive empirical investigation of social and personal phenomena such as events, experiences, meanings, culture, social dynamics, etc. Conceptual methods explore, analyze, and develop concepts and ideas, including understanding their genesis and meanings, tracing their uses and effects in policy, and cultivating their further development in policy discourse. Conceptual work is inherent to most empirical qualitative methods but is also used in non-empirical scholarly research in health policy. This course is offered in a hybrid (in-person & online) format in the Winter term.

NURS 745: Qualitative Health Research Methods
This course introduces learners to theoretical traditions and corresponding methods of qualitative research using health and health care research as examples. Specific topics covered include: theoretical paradigms of qualitative research, types of research questions best answered by qualitative methods, sampling objectives and procedures, methods of data collection, methods of analysis and interpretation, ethical issues, and responsibilities of qualitative researchers. Criteria for evaluating qualitative research will be discussed and applied to specific research studies. Learners will gain "hands on" experience using qualitative methods through in-class and take-home exercises. This course is offered in-person in the Winter term.

NURS 770: Mixed Methods Research Designs
This course introduces students to the major concepts and issues involved in mixed methods approaches to tackle important questions in the field of health services and policy. Students will develop a decision-making framework on when and how to use mixed methods when engaging with health services and policy problems. The course will provide students with knowledge of the current controversies and major challenges in the use of mixed methods and models of research. Students are expected to design a mixed method study as part of the course and critically evaluate the design options chosen by a classmate. This course is offered in-person in the Winter term.

3. Capstone Portfolio

For course-based students joining the HSED Program in Fall 2020 and thereafter, the Scholarly Paper final degree requirement will be replaced by the Capstone Portfolio. The Capstone Portfolio is an opportunity to integrate knowledge attained throughout HSED courses with various education research principles. It exposes students to a wide variety of current health professions education scholarship, techniques, and methodologies, and considers several approaches to advancements in the field. The Capstone Portfolio will also allow students to demonstrate their commitment to initiative and of personal responsibility and accountability within their learning plan.

3.1 COMPONENTS OF THE CAPSTONE PORTFOLIO

As the name suggests, the Capstone Portfolio consists of an assemblage of curricular activities and outputs that will be presented by the student at the end of the Program for final assessment.

The Portfolio will contain several practical and applied elements:

- The final assignments associated with each of the students' five (5) completed courses.
- A record of engagement in 10 MERIT Rounds seminars. A full-time course-based student may complete the program in one year. In these instances, the student is required to attend 60% of the MERIT rounds that are offered during the period of enrolment.
- An education research or education innovation proposal.
- A statement of Education Philosophy.

Each of these elements are described in detail below. Please ensure that you review these descriptions prior to beginning the Capstone Portfolio process as this information is essential to the successful completion of the Capstone Portfolio requirements. For an overview of the learning activities, components, submission, and assessment of the each of these four components, please refer to Appendix B.

3.2 COLLATION OF COURSE ASSIGNMENTS

Throughout their time in the HSED Program, course-based students will have taken 5 graduate-level courses. This component serves as a collation of the student's productivity in the Program. Each course assignment is designed to have practical relevance to the student's professional education practice. In bringing them together, the student will have a collation of work that will hopefully resonate in their health professional teaching and learning environments.

Students are required to resubmit their final assignments from the five (5) courses they have taken to complete the course requirements of the HSED Program; this will include the two core courses (HS EDUC 701 and HS EDUC 703) and three elective courses. For more information on core and elective courses, see section 2. These are then combined with their seminar record, education research or innovation proposal, and their Education Philosophy statement to create a comprehensive education dossier. The student is also asked to generate and submit a one-page overview of their collated dossier, which ties together the relevant themes and concepts that define their educational developments and perspectives. The program offers synchronous online sessions during Residency Week 1 and in teach term, which are dedicated to supporting learners in developing the dossier overview. Throughout the academic year, an optional virtual synchronous workshop will be held on the second Thursday of the last month of every term. These workshops are open invitations for students to engage with peers and faculty to further develop their Philosophy and dossier, regardless of which stage its development is at. Each term, the Program Office will issue a reminder and a link for students to indicate their intention to attend that term's session.

For the 2023-24 academic year, the schedule* for Philosophy and dossier workshops is:

Academic Term	Scheduled Session (Eastern Time)*
Fall 2023	December 14, 2023 at 9 AM
Winter 2024	April 11, 2024 at 12 PM
Spring/Summer 2024	August 8, 2024 at 3 PM

*While the dates for these sessions are firm, the proposed times are currently tentative.

In order to resubmit their assignments, students must:
1. Ensure each assignment is identified based on the course it was completed for.
2. Compile the five (5) final assignments into one PDF document.
3. The PDF document should be named "Lastname.FirstInitial_CollatedAssignments.pdf" (e.g., Nasser.M_CollatedAssignments.pdf)
4. The PDF file should be uploaded to the "Final Assignment Collation" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Collated course assignments will not be remarked; however, the student may wish to respond to assessment feedback from the course instructor prior to including the assignments in their Portfolio. This presents students the opportunity to include the best versions of their work.

3.3 SEMINAR SERIES

The HSED Program is closely aligned with the McMaster FHS Program for Education Research, Innovation, and Theory (MERIT), which hosts between 7-10 Education Research Rounds throughout the year. These events happen at regular intervals and invite McMaster faculty and external scholars to present programs of research, study findings, and novel perspectives on health professions education research and scholarship. Each presentation event is accompanied by a set of learning objectives that are specific to the topic being presented within that session. Additional information about MERIT is available at merit.mcmaster.ca

Through close programmatic alignment, these rounds are open to all members of the HSED student body. While these are public events with dedicated space for an audience to engage the presentation, the MERIT program also makes sessions available via synchronous online broadcasting of the presentation (via Zoom), as well as asynchronously through an archive of recorded presentations that can be viewed via a secure MERIT YouTube Channel.

Students are required to attend a **minimum of ten (10) rounds** presentations prior to their completion of the Program:

- For students attending in-person, registration requires a name and student number on the attendance sheet provided at the session.
- Students that attend a seminar online in a synchronous fashion are required to register their attendance with the MERIT host at the beginning of each Education Rounds presentation.
- Students that choose to view the seminar in an asynchronous online fashion are to do so via A2L, where a continuous discussion forum and direct links to the seminar recordings on the MERIT YouTube Channel will be available. Students viewing asynchronously are required to comment within the discussion forum upon viewing the seminar, identifying the topic of the seminar, and providing a reflection on what was learned through viewing the presentation. The posts within this forum are reviewed to validate student participation.

Students are able to attend seminars that are outside of MERIT offerings. These seminars can be used to fulfill the minimum 10 rounds requirement. Students should notify the Program Office of their plans on attending a non-MERIT seminar **in advance** of the seminar date. The Program Office will **not** accept retroactive requests.

The Seminar Series requirement is assessed based on participation. A Seminar Series Attendance Form can be found in the Capstone Portfolio A2L course shell and on the HSED website at hsed.mcmaster.ca/current-students/forms. The form will require students to record the dates, times, and topics of the MERIT rounds they attended. It provides an option for indicating asynchronous attendance.

It is the student's responsibility to fill in and submit the Seminar Series Attendance Form. In order to submit the form, students must:

1. Ensure the Seminar Series Form is filled out accurately and is saved as a PDF file.
2. The PDF document should be named "Lastname.FirstInitial_SeminarSeries.pdf" (e.g., Nasser.M_SeminarSeries.pdf)
3. The PDF file should be uploaded to the "Seminar Series" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Submitted Seminar Series Attendance Forms will be verified against Program-obtained attendance records and/or the relevant discussion forum posts and will be assessed based on completion.

3.4 EDUCATION RESEARCH OR EDUCATION INNOVATION PROPOSAL

The education research or education innovation proposal assignment challenges HSED students to develop a comprehensive grant application to support a new research study, or new education development relevant to health professions education. The proposals are formatted according to the guidelines of a popular health professions research and innovation funding competition. In this way, we anticipate this assignment will serve as a foundation for students to pursue funding for education scholarship immediately upon graduation.

The activity requires students to consider all aspects of completing research or development activities, including articulating one's epistemological lens, the necessary methods and analyses, the potential impact of the work, and instrumental ethics and budgeting considerations.

To complete this assignment, HSED students will progress through a series of 15 online learning modules that are organized into 4 overarching units. Teach module is comprised of a set of unique lectures, videos or podcasts, readings, and learning activities. They begin with a focus on the deeper conceptual and philosophical considerations necessary for determining one's orientation to research and innovation in health professions education. Subsequent modules cover several important topics to the development of a strong grant proposal. A brief overview of the modules can be found in Appendix C.

These modules are accompanied by a set of 10 mandatory assignments – referred to as Milestones. Each Milestone requires application of concepts covered in the learning modules and will ultimately comprise a portion of the final proposal; such that their gradual completion serves to guide students in the development of a comprehensive draft. Students are required to move through these modules and complete the Milestones in a self-direct manner. Certain Milestones must be resubmitted as part of the final Education Proposal submission. For more information on each Milestone, please see Appendix C.

Students must complete all Milestones prior to attending HS EDUC 707: Residency Week 2. The resultant draft will form the basis of the Residency Week 2 activities. During this week, students will engage with peers and HSED faculty to revise and refine their draft into a proposal that is ready for submission to a relevant funding competition. Accordingly, the final Education Proposal will be generated through a process of development, review, feedback, and revision.

All Milestone assignment forms are available via the Capstone Portfolio A2L course shell under Content and via the HSED website at https://hsed.mcmaster.ca/current-students/forms. Once Milestones are completed, they must be submitted via specific submission folders in A2L which can be found under Assessment > Assignments.

In order to submit the final version of the Education Proposal (after attending Residency Week 2) students must:

1. Save their final Education Proposal as a Word file.
2. Ensure the Word file is named "Lastname.FirstInitial_ERIGProposal.docx" (e.g., Nasser.M_ERIGProposal.docx).
3. Upload the Word file to the "Final Proposal Submission" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell, along with Milestones 1, 3C, and 6, which need to be **resubmitted** as a part of the final Education Proposal submission (i.e., they must be submitted in both their specific submissions folder and the final Education Proposal submission folder on A2L).

The assessment of the Education Proposal will be entirely formative and will entail direct faculty input during Residency Week 2. Students are expected to complete each Milestone assignment; however, only Milestone 1 (Statement of Epistemological Worldview), Milestone 3C (including the signed Peer Feedback Form and Guided Feedback Response Form), and Milestone 6 (TPCS Ethics training certificate) will be submitted alongside the final Education Proposal.

IMPORTANT NOTES:

- Although self-directed, the Education Proposal is conceptualized as a gradual learning activity insofar that all modules and Milestones should not be addressed over a small period of time in the Program. That is, students should not rush to complete all modules and Milestones right away, partition off a week or two in the middle of the Program for them or leave them all until the weeks preceding Residency Week 2. Rather, students are encouraged to space their engagement with the modules and Milestones out, participating in them at relatively consistent intervals between the beginning of the Program and prior to Residency Week 2.
- It is not a requirement for students to secure funding or even to submit their proposal to an external competition, but we are hopeful that many of our students will put their proposals forward and will be successful.
- Once students have cultivated an interest in a certain aspect of Education Research or Innovation, and have initiated the Milestone assignments, they are strongly encouraged to complete the remaining Milestones and proposal on that same topic area.

NOTE: The modules supporting the Education Research or Innovation Proposal are the same as those that support the HPER curriculum offered by the FHS Program for Faculty Development (PFD) at McMaster University. The HSED Program has no formal overarching policy that contemplates the honouring of pre-Program completion of the HPER pathway. Students who join the HSED Program having completed this pathway may submit a petition for credit as per the regulations set out in the School of Graduate Studies Calendar. If the petition is successful, the prior credit will be reviewed by the HSED Program for consistency of the product with the Program's intended learning outcomes on a case-by-case basis. In the case the pre-Program completion is deemed insufficient with respect to Program objectives, students may be required to revise their proposal, offer a reflection about the proposal, or to re-engage the modules from the start. In all cases, students will still be required to attend Residency Week 2.

3.5 STATEMENT OF TEACHING PHILOSOPHY

Each student will generate a one-page Statement of Teaching Philosophy that will be included in their Capstone Portfolio. Students are asked to consider and articulate their personal narrative about education, the ways in which they convey their discipline to learners, their unique perspectives on their discipline, their contributions to education, their beliefs about how students learn, and their actions in the HPE research environment.

Students will begin contemplating their Statement of Education Philosophy during Residency Week 1. The Program also offers synchronous online sessions in each term, which are dedicated to supporting learners in developing their Education Philosophy. Students are encouraged to revisit and revise their Education Philosophy following the completion of each course.

The Statement of Education Philosophy is also specifically revised by students who choose to complete HS EDUC 712 (Critical Pedagogies & Inclusive Teaching Practices). For these students, the version included in the Capstone Portfolio will reflect an additional iteration of revisions and edits.

At the time of submitting the Statement for the Capstone Portfolio, students are asked to re-visit their most recent version, to reflect upon the impact and influence that the Program had on its development, and to revise the document accordingly. In this regard, we anticipate that the Statement developed at the beginning of the Program will be distinct from the one submitted at the completion of the Program.

Access to the Teaching Philosophy lecture material, assignment details, and statement template are available in the Teaching Philosophy module within the Capstone Portfolio course shell on A2L.

In order to submit the Statement of Teaching Philosophy, students must:
1. Ensure their revised, one-page Statement of Teaching Philosophy is saved as a PDF file.
2. The PDF file is named "Lastname.FirstInitial_StatementofTeachingPhilosophy.pdf" (e.g., Nasser.M_ StatementofTeachingPhilosophy.pdf).
3. Upload the PDF file to the "Statement of Teaching Philosophy" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Assessment of the Statement of Teaching Philosophy will be done formatively through faculty consultation and collaboration during Residency Week 2.

Throughout the academic year, an optional virtual synchronous workshop will be held on the second Thursday of the last month of every term. These workshops are open invitations for students to engage with peers and faculty to further develop their Philosophy and dossier, regardless of which stage its development is at. Each term, the Program Office will issue a reminder and a link for students to indicate their intention to attend that term's session.

For the 2023-24 academic year, the schedule* for Philosophy and dossier workshops is:

Academic Term	Scheduled Session (Eastern Time)*
Fall 2023	December 14, 2023 at 9 AM
Winter 2024	April 11, 2024 at 12 PM
Spring/Summer 2024	August 8, 2024 at 3 PM

*While the dates for these sessions are firm, the proposed times are currently tentative.

3.6 SUBMITTING THE CAPSTONE PORTFOLIO

All components of the Capstone Portfolio must be submitted through A2L as indicated above. Please refer to Appendix D for a helpful checklist to aid in the successful completion and submission of all the four Capstone Portfolio components.

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4. Thesis

4.1 THESIS OVERVIEW

The final evaluation for Thesis-based HSED students is the written and oral defense of a Thesis before an examination committee. Both components, oral and written, must be successfully completed. If a student fails either part of the Thesis, the curriculum and Thesis examination committees will decide if the student may retry the defense.

4.2 SUPERVISION

The supervisor is the initial contact person and acts as the student's primary representative to the rest of the HSED faculty in all aspects of the student's goals in taking the HSED Program. The faculty supervisor should be aware of the student's interests, goals, and progress and should offer ongoing advice to facilitate student success. The objectives of the supervisor-student relationship include the following:

- The supervisor will welcome the student at the beginning of a student's enrollment in the HSED Program.
- The supervisor and the student will meet regularly to discuss progress through the Program and evaluations that have been received.
- The student will keep the supervisor informed about course work, project activities, and research courses. It is the student's responsibility to keep their supervisor informed about their direction and progress in the Program.
- The supervisor can assist the student in the selection of appropriate courses to optimize their education in the elective parts of the Program.
- The supervisor will assist the student to assemble an appropriate Thesis Supervisory Committee.

All McMaster Faculty who are involved with the HSED Program (students, supervisors, committee members, advisors, etc.) must complete the appropriate paperwork to receive graduate status in the HSED Program. This process is required regardless of their status in other McMaster programs. If in doubt, please consult the Program Office at hsed@mcmaster.ca

A change of thesis supervisor may be negotiated with the involvement of the Program Office. If there are problems with Thesis supervisor-student compatibility, the Program Office must be consulted in order to remedy the problem and determine if the student should select a new Thesis supervisor. A change in the student's Thesis supervisor requires the approval of the Dean of Graduate Studies. Please contact the Program Office (hsed@mcmaster.ca) with any concerns.

4.3 THE SUPERVISORY COMMITTEE

The Supervisory Committee is composed of at least three (3) members who have supervisory or non-supervisory status within the HSED Program, including the primary supervisor. A faculty appointment at McMaster University is required for supervisory or non-supervisory status. Faculty members, please contact the HSED Program Office for details on the procedure for obtaining this status. It is possible to include an optional fourth "associate" member. This person may be a McMaster faculty member, or they may be someone else who brings relevant expertise. If the potential advisor does not have a faculty appointment within the Faculty of Health Sciences at McMaster University, the FHS policy "Associate Memberships of Supervisory Committees" may be used to guide that person's involvement in the committee. The supervisor and student should work together to assemble a suitable Supervisory Committee.

The Supervisory Committee should be balanced in terms of background or expertise and include content experts from the Program. The student's thesis supervisor and thesis committee must approve the topic that the student wishes to research and sign off on the student's thesis proposal. The supervisor assumes the responsibility for guiding and supervising the student's thesis work, as per regulations for Master's theses outlined in the SGS Graduate Calendar.

The policy of the HSED Program is that students should choose supervisors and two supervisory committee members who will be the most helpful to them in the preparation of their thesis. The roles of the various members of the committee are described in detail below. While the supervisor takes on the main task of directing and monitoring progress, it is important that committee members react early and often to major methodological and conceptual decisions. This is achieved through a series of supervisory committee meetings wherein drafts of the key chapters of the thesis are shared. An oral defense can only be contemplated when the committee agrees that the current version of the written thesis is acceptable for examination.

4.3.1 SUPERVISORY COMMITTEE FREQUENCY

The Supervisory Committee should be declared within the first 12 months of starting study. "Declared" means that the committee has met, all members have applied and been granted supervisory or non-supervisory status, and all members have signed a Supervisory Committee meeting report (available on the HSED website).

The committee should meet at least once per year that the student is active in the program, although more frequent meetings are recommended. It is highly recommended that committee meetings are held in conjunction with the following thesis milestones:

- Student enters program, committee is formed
- Thesis proposal is developed and approved
- Data collection completed, analysis is underway
- Draft of complete thesis is approved to proceed to defence

When students are actively engaged in research, more frequent committee meetings will help with data acquisition and interpretation. Please see section 4.6 below for more information on thesis timelines.

4.3.2 SUPERVISORY COMMITTEE DOCUMENTATION

After every supervisory committee meeting, the student bears responsibility for completing and submitting a Supervisory Committee Meeting Report, which is available at hsed.mcmaster.ca/current-students/handbook-forms. The report requires the signatures of all members and statements from both the student and supervisor. After completion, the report should be sent to hsed@mcmaster.ca for the signature of the Assistant Dean. The form will be kept in HSED records. Both the student and supervisor should also keep a copy of this form for their own records.

4.4 THE EXTERNAL EXAMINER

In addition to the members of the Supervisory Committee described above, an external examiner is required. The external examiner is a McMaster Faculty member who is external to the student's thesis committee and will be nominated by the supervisor and approved by the Program. The external examiner is generally knowledgeable about some aspects of the context, or methodology of the thesis topic (i.e., acts as a content expert). This person is to be contacted directly by the thesis supervisor after the individual is approved as an external examiner by the Program. Please avail the Program Office of who the proposed external examiner is at least 8 weeks before a planned defense, so the approval can be initiated in a timely manner.

4.5 THE EXAMINING COMMITTEE

The Examining Committee is charged with administering the thesis defense, and normally consists of three internal examiners and one external examiner. Internal examiners are members of the Supervisory Committee. One of these three internal examiners is the student's thesis supervisor. At least three examiners, including two members of the Supervisory Committee, must be present for the defense. All members of the Examining Committee are expected to comment on the written document and are to prepare questions for the defense.

The external examiner is invited to the defense by the thesis supervisor and must hold a relevant faculty position within McMaster University. The Chair of the Defense should be an HSED Faculty member that is not part of the Supervisory Committee. Supervisory Committees may nominate a Chair for a student's defense or the HSED Program will facilitate the arrangement of a Chair. Faculty members engaged in any roles associated with the supervision or examination of a thesis in the Program should refer to the HSED Instructor Handbook for additional information.

4.6 THESIS TIMELINES

Please see Appendix E for a checklist to help facilitate successful completion of each stage of the thesis process.

4.6.1 THESIS PROPOSAL TIMELINE

Students should begin developing a thesis topic immediately after enrollment in the Program. Topics may also be adjusted in discussions with the thesis supervisor and committee. The Program expects students to engage a thesis supervisor immediately upon initiating the HSED Program. At least one Supervisory Committee meeting must be held within 6 months of starting the Program.

Once a student has identified a thesis supervisor and two internal committee members, they must complete a formal written research proposal outlining their project. This must be submitted to and approved by the Supervisory Committee prior to commencing research. The research proposal must also be submitted to the HSED Program Office. Submission to the Office must be no later than 1 year after Program entry.

The thesis will demonstrate integrative thinking, an understanding of the relevant literature, and involve the execution of original research focusing on a health science education topic that is selected by the student in consultation with their thesis supervisor. The proposal will be individualized to the student's area of interest.

Prospective students who hope to complete the 1-year thesis-based program must fulfill additional criteria prior to course enrolment:

1. The applicant must have an established supervisory relationship with an approved faculty member.
2. Applicants must have access to an extant dataset that serves their desired research project.
3. Applicants must demonstrate experience with the methods that they utilize in their research project.

The following guiding questions may be considered during the process of identifying a thesis topic:

1. Describe your area of interest.
2. In what domain of Health Professions Education does it fall (i.e., curriculum development, learning, skill acquisition, assessment, etc.)?
3. What are your literature foundations? What is the historical perspective?
4. What theory/theories will guide your research?
5. What are your research questions?
6. Propose a research design.

The HSED Program expects all thesis students to conduct a comprehensive literature review as *part* of their dissertation. Accordingly, the Program does not typically approve structured reviews as the sole focus of thesis projects.

The student may choose to give the proposal to their thesis supervisor for comments prior to distributing it to the remainder of the committee. Alternatively, the student may choose to distribute the proposal to all internal Supervisory Committee members at the same time. Please note that the external examiner is not involved in committee activities until the defense.

Within one month of distributing the thesis proposal, a Supervisory Committee meeting should be held. The student, thesis supervisor, and committee members must all attend this meeting. This meeting serves to orient the Supervisory Committee to the overall purpose of the proposed research and distill what the members of the committee expect of the student. Questions and contentious issues can also be answered and resolved to everyone's satisfaction.

At this point, the Supervisory Committee will also negotiate how it will support the student during the development of the thesis. Once the committee and student accept the final proposal, all members must sign the HSED thesis Proposal form. The student must also sign a statement indicating that the thesis will not present a significant overlap with papers written for any other HSED course. The thesis proposal is then ready to be reviewed by the HSED Program.

After obtaining approval from their Supervisory Committee, along with the necessary signatures, the student will submit the completed HSED thesis Proposal form to the Program Office. This approval serves to ensure that the student has an appropriate Supervisory Committee in terms of School of Graduate Studies status and relevant expertise as it pertains to the chosen thesis topic, as well as a feasible plan for project completion.

4.6.2 TIMELINE FOR WRITING THE THESIS

After the approval of the thesis proposal, Supervisory Committee meetings should then occur at regular intervals, (at minimum) for the following purposes:

- Further Methodological Development / Progress Data update (if appropriate)
- Data Analysis/Results Review
- Final Review prior to defense and after all committee members have read a thesis draft – edits can be provided at this meeting prior to the defense copy being circulated.

Please note that Supervisory Committee Reports must be completed at each meeting. Supervisory Committee Report forms can be found at: hsed.mcmaster.ca/current-students/forms. Regular student-supervisor meetings should occur in addition to and separately from the Supervisory Committee meetings.

The Program expects that, on average, 9 to 12 months of full-time intensive research is required to complete the thesis, following the completion of courses, slection of a topic, and including the successful acquisition of data. This may vary among students, and while some students may choose not to devote their full time to the thesis, the Program expects the cumulative work for a thesis to encompass more than a year of study.

4.6.3 THESIS DEFNESE TIMELINE

In the term that students intend to defend their thesis, they are **required** to enroll in HS EDUC 709 (Thesis). This enrollment is necessary to ensure that the thesis assessment can be appropriately captured on the student's transcript. Students, supervisors, and committees are encouraged to consider deeply the term of enrollment in HS EDUC 709, as subsequently expediting or delaying completion of the thesis will require an additional administrative process to ensure that this course is aligned with the appropriate term.

Once a student has registered for HS EDUC 709, the student and their supervisor will agree on a defense date for the term they are registered in. When booking the defense date, the supervisor will confirm this date with the Program Office at least **8 weeks** in advance. If the defense date is less than 8 weeks into the term the student is registered in HS EDUC 709, the supervisor will alert the Program Office prior to the start of the term of the desired defense date. The supervisor is also required to confirm the following information when booking the defense:

- The proposed External Examiner (for Program approval).
- The Examining Committee membership.
- Confirmation that the external and internal members of the Examining Committee have agreed to the defense date and time.
- The most recent title of the student's thesis.

As soon as a defense date is confirmed, the Program Office will begin the process of securing a Chair for the defense.

The student will be responsible for providing the Program Office a final copy of their thesis **no later than 6 weeks** before the defense date. The final copy will be distributed by the Program Office to the External Examiner and Examining Committee to allow time for adequate review prior to the defense date. The External Examiner will require **four weeks** to review the thesis and will provide the thesis report back to the Program Office **no later than 2 weeks** before the scheduled defense date.

Please note that it is required that thesis defenses are held on a McMaster University campus site; the HSED Program has preferred locations and/or processes and insists on facilitating booking for defenses. Virtual accommodations can, in some instances, be made for examiners unable to attend in-person. Supervisors who would prefer a fully virtual defense should contact the Program Office **at least 8 weeks** before the scheduled defense date.

Table 1. Important dates and deadlines for students completing their thesis.

Activity	Spring/Summer 2023	Fall 2023	Winter 2024	Spring/Summer 2024
Final Date to Enroll in HS EDUC 709	May 12th, 2023	September 8th, 2023	January 12th, 2024	May 10th, 2024
Final Date to Identify External Examiner and Chair and to set Time, Date, and Location	May 26th, 2023	September 22nd, 2023	January 26th, 2024	May 24th, 2024
Final Date to Submit Master's thesis to HSED (Prior to Defense)	June 23rd, 2023	October 20th, 2023	February 23rd, 2024	June 21st, 2024
Final Date to Defend	August 8th, 2023	December 5th, 2023	April 9th, 2024	August 6th, 2024
Final Date to File thesis with Graduate Studies and Complete Degree Requirements	September 5th, 2023	January 2nd, 2024	May 7th, 2024	September 3rd, 2024

4.7 THESIS FORMAT

For any questions regarding the writing of the thesis, the first step is to consult the School of Graduate Studies' Guide for the Preparation of Master's and Doctoral theses. All graduate theses must conform to the style and form requirements as detailed in this Guide. Please consult the latest version of the Guide, which can be found here: Guide for the Preparation of Master's and Doctoral Theses.

Students should note that the text of the standard graduate thesis consists of an Introduction section or chapter, followed by several well-defined sections or chapters. These sections include the Research Methods, Analysis, Results, Discussion, and a Conclusion. The References section (or Bibliography) follows the text, and any appendices follow this.

If some of the research undertaken expressly for the MSc degree has previously been published or prepared by the student as one or more journal articles, book chapters, or other forms of publications, those items may be included within the thesis, subject to the School of Graduate Studies regulations.

All Theses must comply with the following format guidelines:

- A standard 10-12-point font has been used.
- TOP and LEFT margins should be 3.8cm, and RIGHT and BOTTOM margins should be 2.5cm.
- Title Page.
- Half-title Page.
- Descriptive Note.
- Abstract of 300 words or less.
- All preliminary pages are numbered in lower case Roman numerals.
- All pages must be numbered. The main body of the thesis, including text, bibliography, and appendices, must be numbered continuously using Arabic numerals.

To meet the requirements for a Master's degree, the thesis must be submitted in electronic form prior to the defense by the student. It must be delivered to the HSED Program Office prior to the defense. Students should be aware of the Sessional Dates planning the timing of their defense. Sessional Dates are found here.

The School of Graduate Studies Graduate Calendar contains a number of formal requirements pertaining to dates when theses must be submitted, the style which theses must follow, costs of binding theses, maximum permissible time for completion of degree requirements, and continuous registration. It is the responsibility of the student to understand and comply with each of these requirements. In particular, students must be aware that to be eligible for convocation in the Autumn or Spring, there are deadlines by which theses must be submitted to the School of Graduate Studies.

4.8 THE THESIS DEFENSE

The final evaluation for thesis-based graduate program students is the written and oral defense of a thesis before an Examining Committee (see section 4.5 for more details). Both components, oral and written, must be successfully completed. The thesis defense is estimated to be 3.5 hours in length and is a public examination; audience members are welcome to observe the oral presentation and questioning. Logistical details around the thesis defense will be circulated by email and posted on the HSED website. The thesis defense will typically adhere to the following process:

1. Thirty minutes before the scheduled start time for student set up and preparation.
2. At the beginning of the defense, the Chair will review the format of the examination and introduce the student.
3. Before the student presents, the Examining Committee will ask student and audience to step out of the room. The Examining Committee will then discuss their appraisal of the written thesis component.
4. The student and audience will then be invited back in. The student will be given a **maximum** of 30 minutes to present the thesis, including the methodological issues considered, highlights of the findings, and main contributions to the field. The Committee will have read a comprehensive document describing the work in detail before the defense, such that the presentation should not overly focus on the minutiae of the thesis.
5. Following the presentation, the Supervisory Committee will proceed with the questioning period, which should not exceed 2 hours.
6. The Chair and committee members will pose questions to the student. In the absence of the external examiner or a committee member, the questions submitted by the absent examiner will be asked by the Supervisor. Time permitting, members of the audience may be invited to ask questions. The Supervisory Committee is not required to consider audience questions in their appraisal of the oral defense.
7. At the end of the oral defense, the candidate and the audience will leave the examination room. The Examining Committee will make separate judgments on the written thesis and the oral defense.
8. The student will be brought back before the Examining Committee to receive the results of the examination and to discuss any changes required in the written thesis. The supervisor will be responsible for recording the feedback of the Supervisory Committee members during the defense.

After completing the defense, the student, supervisor, and Examining Committee are responsible for completing, signing, and submitting the following forms to the Program Office:

- Report of Examining Committee on Master's Thesis – Written Thesis
- Report of Examining Committee on Master's Thesis – Oral Defense
- School of Graduate Studies Final Submission Sheet
- Defense License

These forms are available at hsed.mcmaster.ca/current-students/forms

Additionally, the Chair of the Examining Committee will inform the student of any major or minor thesis changes required by the examiners; this information should also be recorded by the supervisor and noted in the thesis Final Submission Sheet. The student then has **3 weeks** to complete any major or minor revisions (see Table 1). After all changes have been made and approved as necessary, the student must submit the original completed forms to the Program Office for final submission. At this point, it is also the student's responsibility to log into MacSphere and submit their thesis as outlined in section 4.9 below.

4.9 SUBMITTING A THESIS TO MACSPHERE

- Go to MacSphere.
- In the top-right corner click on Sign onto My MacSphere and log in with your MAC ID.
- Click on Start a New Submission.
- Select Collection: Open Access Dissertations and Theses and click on NEXT to begin submitting your dissertation.
- Complete the submission screens as prompted. Once you click on, "I Grant The License", your dissertation will be submitted to SGS for processing.
- For your e-thesis to be published via MacSphere, the final version of your thesis should be named using the following file naming convention: FAMILYNAME_FIRSTNAME_MIDDLEINITIAL_FINALSUBMISSIONYEARMONTH_ DEGREE

Visit the SGS website for more information on thesis processes and submissions: https://gs.mcmaster.ca/current-students/completing-your-degree/masters-thesis/

5. Scholarly Paper

5.1 SCHOLARLY PAPER OVERVIEW

The Scholarly Paper is the final degree requirement for the course-based HSED Program for students who have entered the program before the 2020-21 academic year. Students who are admitted in 2020 and onwards are required to complete a Capstone Portfolio (see above section on Capstone Portfolio). However, students admitted before 2020 who have not yet begun their Scholarly Paper have the option of completing either the Scholarly Paper or Capstone Portfolio final degree requirement.

The Scholarly Paper should reflect the student's ability to integrate knowledge in areas of health science teaching and learning, research, leadership and education with its relevant analyses. Information should be presented in a scholarly manner, demonstrating the student's ability to discuss concepts in a concise, critical, and coherent fashion. The Scholarly Paper will focus on a topic selected by the student in consultation with their Scholarly Paper supervisor and one other faculty member, who will also read and grade the paper. The Scholarly Paper topic will be submitted to the HSED Program Office prior to commencement. Students will develop a proposal individualized to their area of interest in accordance with the Health Science Education Graduate Program's Guidelines for Scholarly Papers. The Paper need not involve the collection or analysis of primary data or the conduct of primary research.

5.2 SUPERVISION

The supervisor is the initial contact person and acts as the student's primary representative to the rest of the HSED faculty in all aspects of the student's goals in taking the HSED Program. The faculty supervisor should be aware of the student's interests, goals, and progress and should offer ongoing advice to facilitate student success.

The objectives of the supervisor-student relationship include the following:

- The supervisor and the student will meet regularly to discuss progress in the Program and evaluations that have been received.
- The student will keep the supervisor informed about course work and project activities and research courses. It is the student's responsibility to keep their supervisor informed about their direction and progress in the Program.
- The supervisor can assist the student in the selection of appropriate courses to optimize their education in the elective components of the Program.
- The supervisor will assist the student in determining appropriate mentors for their Scholarly Paper.
- The supervisor will assume one of the reader roles for the Scholarly Paper and will help determine an appropriate second reader.

All McMaster Faculty who are involved with the HSED Program (supervisors, Scholarly Paper, advisors, etc.) must complete the appropriate paperwork to receive graduate status in the HSED Program. This process is required regardless of their status in other McMaster University programs. If in doubt, please consult the Program Office at hsed@mcmaster.ca

A change of supervisor may be negotiated with the involvement of the Program Office. If there are any problems with a supervisor, the Program Office must be consulted in order to remedy the issue and determine if the student should select a new supervisor. Please contact the Program office (hsed@mcmaster.ca) with any concerns.

Course-based students are not required to identify a supervisor for their Scholarly Paper until they begin the Milestones prior to Scholarly Paper proposal submission, typically in the academic year in which they intend to initiate their Scholarly Paper (see section 5.5 below).

5.3 SCHOLARLY PAPER PREPARATION GUIDING QUESTIONS

The following questions may be helpful when considering potential Scholarly Paper topics:
1. Describe your area of interest.
2. In what domain of Health Professions Education does it fall (i.e., curriculum development, learning, skill acquisition, assessment, etc.)?
3. What are your literature foundations? What is the historical perspective?
4. What are the relevant concepts from your coursework to date that apply to your paper?
5. Describe the critical discussion you intend to present in this paper?

5.4 SCHOLARLY PAPER FORMAT

The paper must be 15 to 20 pages (excluding references and appendices) and double-spaced using 12-point type and one-inch margins.

The Scholarly Paper can take many different forms. For example, you might:

- Review a small area of research (e.g., the integration of 360° feedback assessment into a clinical practice environment), write a critique of the methods used, and suggest what needs to be done to develop better information in this area.
- Compare and contrast the methods involved in several papers that have disparate findings about a topic of interest. Discuss the differences and similarities in methods and their impact on the findings. Briefly describe the research that would need to be done to resolve the current controversy.
- Write a research proposal that could be used as the framework for a future study or application for funding. Pick a grant competition, irrespective of any real deadlines or application cycle, and generate a document that meets those requirements. N.B. – Grant competitions require documents that are typically much shorter than the 15–20-page requirement for this assignment and do not necessarily request that applicants provide comprehensive literature reviews or make explicit a need for demonstrated integrative critical thinking and/or synthesis of relevant knowledge. Accordingly, students pursuing this approach should format their papers according to the assignment guidelines and include the completed grant proposal as a portion of a fuller paper.
- Discuss a current controversy in a field of interest, including the origins and the views of leading proponents of each side of the controversy and draw your own conclusions.

5.5 STEPS FOR COMPLETING THE SCHOLARLY PAPER REQUIREMENT

The HSED Program has created a series of five (5) Milestone modules, which assist students in achieving important checkpoints as they progress through the Scholarly Paper writing process. Completion of these Milestones is compulsory as part of the Scholarly Paper writing process and requires supervisor input at each stage. Each module is signed off by the supervisor. It is the student's responsibility to send a copy to hsed@mcmaster.ca. The modules are available via A2L.

Milestones 1 through 4 will be completed in the semester prior to the formal writing of the Scholarly Paper. Milestone 4 will be the completion of the Scholarly Paper approval form to be submitted to the Curriculum Committee prior to the relevant term deadline. Milestone 5 is the writing of the Scholarly Paper and requires students to register in HS EDUC 708 at the beginning of their final term.

1. The Milestone 1 module encourages course-based students to engage a faculty member to be their supervisor for their Scholarly Paper. When this module is completed, the HSED Program Office (hsed@mcmaster.ca) should be notified to initiate the approval process for your Scholarly Paper topic.
2. Milestones 2, 3, and 4 are designed to help students complete the Scholarly Paper Topic Approval Form, which should be submitted to the HSED Program Office. Please refer to the Program website (hsed.mcmaster.ca) to see important dates for submitting the form for Request for Topic Approval. An electronic copy of the Scholarly Paper Topic Approval Form will then be circulated to members of the HSED Curriculum Committee for review and approval.
3. Students are notified of the due date of their paper. Once notified that the Curriculum Committee has approved their topic, students will have eight (8) weeks to complete their Scholarly Paper. Milestone 5 is the completion of the paper.
4. On or before the day that the Scholarly Paper is due, students must submit an electronic version via email to the HSED Program Office (hsed@mcmaster.ca). Once the final Scholarly Paper is handed in, it will be sent electronically by the Graduate Officer to the student's supervisor and 2nd Reader.
5. Oftentimes students are asked to address feedback given by the two readers of their Scholarly Paper. Feedback will be provided via a formal assessment, normally within two weeks of submitting the Paper. If the Paper is marked for needing additional revisions, students will have **one week** to resubmit.
6. Complete the School of Graduate Studies paperwork. Once the final Scholarly Paper requirement is satisfied, the Clear to Graduate – non-thesis Masters form must be completed to permit graduation. The student is responsible for obtaining the supervisor's signature on the form. The completed form is then submitted to the HSED Program Office (hsed@mcmaster.ca).

5.6 APPROVAL PROCESS TIMELINE

Table 2. Scholarly Paper Timeframe

Action Item	Timeframe*
1st draft of Scholarly Paper sent to supervisor	Four weeks post-approval
Edits	Five weeks post-approval
2nd draft of Scholarly Paper send to 2nd Reader	Seven-weeks post approval
Discussion with supervisor about 2nd Reader comments	Eight weeks post-approval
3rd draft of Scholarly Paper sent to supervisor	Nine weeks post-approval
Edits	5 days after 3rd draft is sent
Final Submission	Ten weeks post-approval

*Dates flexible based on availability for editing by student, supervisor, and 2nd Reader.

*The final Scholarly Paper may be written during the last term in which a student is completing courses, if only **one** course is being taken. Otherwise, the paper is usually written after all course work is completed.

5.7 HSED SCHOLARLY PAPER APPROVAL PROCESS

Milestones 1 through 4 must be completed before the Scholarly Paper Approval Process is completed. All Scholarly Paper topics require approval from the HSED Program before the student can proceed with their independent work.

The approval of Scholarly Paper topics ensures that the student has appropriate supervision but also that the chosen topic and breadth of the proposed essay are befitting for Masters-level academic work. Notification of Approval will be delivered to the student via the Program Office. An HSED Curriculum Committee meeting will be scheduled each term during the approval review period. Faculty members of the Committee will appraise requests at that meeting. If the Committee identifies major concerns, then the Notification of Approval will be delayed until the Program can address the matter with the student and supervisor.

5.8 SELECTING A SCHOLARLY PAPER TOPIC, SUPERVISOR, AND 2ND READER

A Scholarly Paper assessment is performed by the student's supervisor and a 2nd Reader. The 2nd Reader is to be identified *a priori* by the student and their supervisor. Course-based students are encouraged to seek a faculty member to be their supervisor for the Scholarly Paper. Scholarly Paper supervisors will be assigned to students by the Program Office if and where necessary.

The policy of the HSED Program is that students should also choose a 2nd Reader that will be helpful to them in the preparation of their Scholarly Paper. This individual should be chosen in consultation with the supervisor and should be capable of providing direction to the student about literature sources, and potential avenues of approach to the paper. The supervisor serves as the first assessor of the student's work. The student's nominated 2nd Reader will serve as the second assessor of the Scholarly Paper. From time-to-time, the 2nd Reader may not be a member of the HSED Program or the McMaster University Health Sciences Graduate Programs' faculty. For example, a student may ask a leader in their professional practice to serve as their 2nd Reader. If this individual does not have a McMaster University faculty appointment, the Program will nominate a third assessor who audit the process and ensure that a second assessment is endorsed by a HSED faculty member. The Scholarly Paper, like final papers for courses, is to be written solely by the student. Make sure to appropriately cite work in order to avoid plagiarism. The supervisor and 2nd Reader should not be directly involved in the writing or editing process but may suggest key references and/or provide general direction and feedback.

5.9 GUIDING ELEMENTS FOR REVIEW & ASSESSMENT OF SCHOLARLY PAPERS

Components of a successful Scholarly Paper include:

1. The Paper Identifies an Appropriate Topic or Problem: Students are expected to state clearly their topic area and to highlight the pertinent nuances and complexities within that topic.
2. The Coverage of the Topic: Students should strive for excellence in systematically searching for appropriate and relevant literature sources. The student will submit a bibliography (15-item minimum that excludes any courseware papers) when the Request for Scholarly Paper Topic form is submitted.
3. The Synthesis of the State of Relevant Knowledge: Students are expected to perform in-depth analysis of the literature and to provide the relevant details that link the literature to the proposed scholarly topic. The literature review should justify the importance of the topic.
4. A Demonstration of Integrative Critical Thinking: Students should demonstrate clear critical thinking as it considers perspectives on the issue, concern, debate, or contention and explores assumptions.
5. The Conclusion: Students should provide succinct and precise conclusions based on their review. The student's insights should be strongly supported in the report.
6. The Writing Mechanics: Students are expected to use appropriate spelling, grammar, prose, and citation formatting.

5.10 ASSESSMENT

Scholarly Papers will receive one of four Assessments:

Pass with Distinction – The paper demonstrates the highest standard for each of the above criteria. This assessment is concomitant with an (A+) letter grade.

Pass with Minor Revisions Needed – The paper is strong but would benefit from some revisions as an academic piece of work. The Evaluators agree that the paper passes. This assessment is concomitant with a letter grade between (B-minus) and an (A). Revisions are not mandatory and must be submitted before the relevant term deadline for a revised mark to be considered.

Major Revisions Required – The paper does not achieve a passing grade, but the evaluators agree that the paper has merit, and that the student should have an opportunity to make major revisions and resubmit a revised paper before the term deadline. The Evaluators and the Student should meet to discuss the revisions required to meet the standards for a passing grade before the student revises and resubmits the paper.

Unsatisfactory – The paper is considered far below academic standards and assigned an (F) letter grade.

5.11 SCHOLARLY PAPER IMPORTANT DATES

Table 3. Important dates and deadlines for students completing their Scholarly Paper.

Activity	Fall 2023	Winter 2024	Spring/Summer 2024
Milestones 1-4 Due	September 8th, 2023	January 5th, 2024	May 10th, 2024
Students Notified of Approval	September 15th, 2023	January 12th, 2024	May 17th, 2024
Papers are Due	November 24th, 2023	March 22nd, 2024	July 26th, 2024
Assessments are Delivered	December 8th, 2023	April 5th, 2024	August 9th, 2024
Revisions are Due	December 22nd, 2023	April 19th, 2024	August 23rd, 2024

6. Commitment to Inclusive Teaching Practices

The Health Science Education (HSED) Program recognizes that health professions education is situated within the hierarchies that impact all of society, and that its practices and policies have the potential to contest social inequity, challenge systems of domination, and foster reforms that promote freedom, social justice, and community. In order to ensure that the Program realizes this potential, the following commitments are expressed so as to guide a process of eliminating oppressive educational content and maximizing our attention to inclusive teaching practices. The HSED Program is committed to:

1. Continuous monitoring, review, and improvement of its course materials, teaching and learning activities, assessments, and policies with respect to removing oppressive practices and maximizing inclusivity.
2. Providing resources and supports to facilitate continuous quality improvement activities.
3. Empowering faculty, staff, course coordinators, supervisors, instructors, and teaching assistants to customize an individualized approach to addressing oppression and inclusivity within their educational work.
4. Empowering students as active contributors in our continuous quality improvement activities, centering their voices in the process of customizing approaches to our commitments.
5. Being mindful of the whole student experience.
6. Supporting generative academic discourse and dialogue on all topics and perspectives relevant to health professional education, even when those conversations may be uncomfortable.

To this end, the HSED Program aims to continually engage in review of course materials towards eliminating oppressive content and enhancing inclusive teaching practices. This review will be directed to numerous elements of courses, including, but not limited to, appraisal of reading materials, lecture images, lecture content, cases, approaches to assessment, and test and quiz questions.

In this regard, the HSED Program welcomes feedback from students and their engagement in the development of course-specific inclusive teaching commitment statements and terms of engagement, as well as their operation within the course environment. This feedback and engagement will be solicited outside of the context of formal course and instructor evaluations.

Students with questions, concerns, suggestions, and/or feedback with respect to course-specific terms of engagement as stated in course syllabi are encouraged to reach out to the relevant course coordinator through the method of contact indicated in the syllabus; alternatively, the HSED Program Office can coordinate relevant communication between the student and faculty member.

Students with questions, concerns, suggestions, and/or feedback relating to the operationalization and practical aspects of a course's inclusive teaching commitments are encouraged to reach out to either the HSED Program Office, the HSED Student Representatives, or the Assistant Dean of the HSED Program.

Students with serious concerns, or those who do not feel comfortable sharing their experience(s) within the HSED Program are encouraged to contact the central McMaster University Student Support & Case Management.

If you have any questions about the procedural aspects of student engagement in the HSED Program's commitments to inclusive teaching practices, feel free to contact the HSED Program Office at hsed@mcmaster.ca

7. Faculty

The HSED Program maintains an updated list of supervisory and non-supervisory faculty that can be found at: hsed.mcmaster.ca/about-us/faculty

A designation of non-supervisory status affords approved McMaster University faculty members the opportunity to participate as Scholarly Paper supervisors or 2nd Readers, and as members of thesis Supervisory Committees. The designation of supervisory status permits faculty to engage in the same roles as those with non-supervisory status, but also affords the opportunity of serving the role of thesis supervisor and a course coordinator for HS EDUC 777 (see section 2.4).

Note that SGS requires that all faculty members involved in graduate student supervision be approved by the graduate program, the Vice Dean, Health Sciences, and Associate Dean of Graduate Studies (FHS), and SGS in order to supervise HSED students. Requests for non-supervisory and supervisory status with the HSED Program can be facilitated by the HSED Program Office. Please direct inquiries about eligibility to hsed@mcmaster.ca

8. Financial Information

The most recent tuition and supplementary fees can be found at: registrar.mcmaster.ca/fees/graduate

9. Frequently Asked Questions (FAQs)

HOW MUCH TIME DO I HAVE TO COMMIT TO THE PROGRAM EACH WEEK?
Of course, it varies from student to student. The core faculty of the HSED Program agree that students should allot approximately 5-10 hours per course, per week. This includes watching lectures, completing the readings, participating in discussion forums, and working on assignments.

HOW ARE THE LECTURES SET UP ONLINE? DO WE HAVE TO LOG IN AT A SPECIFIC TIME EACH WEEK?
Most lectures are pre-recorded and uploaded at the beginning of the week. Students can watch each lecture at their leisure. Assignments are typically due at 11:59 PM ET of the date assigned (penalties for late assignments will apply unless prior approval is sought).

SHOULD I CHOOSE THE COURSE-BASED OR THESIS-BASED STREAM?
This depends on your interests and career goals. If you are focused on developing mastery to support the application of a wide base of knowledge and skills relevant to health professions education, then it may be best to pursue the course-based stream. If you are interested in conducting research in a very specific area of health science education, then taking the thesis-based stream may be a better option.

WHAT IF I'M UNABLE TO FULFILL MY PROGRAM REQUIREMENTS DUE TO EXTREME CIRCUMSTANCES?
If a student is unable to fulfill their requirements in the HSED Program because of illness or other circumstances, please contact the HSED Program Office (hsed@mcmaster.ca) immediately regarding a Leave of Absence or requesting a withdrawal in good standing. The Assistant Dean of HSED Program will then review the request. This policy is in line with Section 2.4.5 of the School of Graduate Studies' Graduate Calendar.

HOW CAN I CONTRIBUTE TO THE EDUCATION PROCESSES AND POLICIES OF THE PROGRAM AS A STUDENT?
It is important to the HSED Program to have student representation. As such, we will have three (3) student representatives - one (1) student representative from the incoming student cohort, and two (2) student representatives from the remaining student population. Each cohort will elect their student representatives for the year at the beginning of the academic year. Student representatives are non-voting members of the HSED Curriculum Committee.

DO I HAVE TO FIND A SUPERVISOR BEFORE I START THE PROGRAM?
Thesis students are required to have identified a supervisor before beginning the program. This is not a requirement for course-based students. Course-based students should have an idea of who they wish to have as a Scholarly Paper advisor near the end of their first year of studies so that they have time to find their research interests and carefully select an appropriate faculty member.
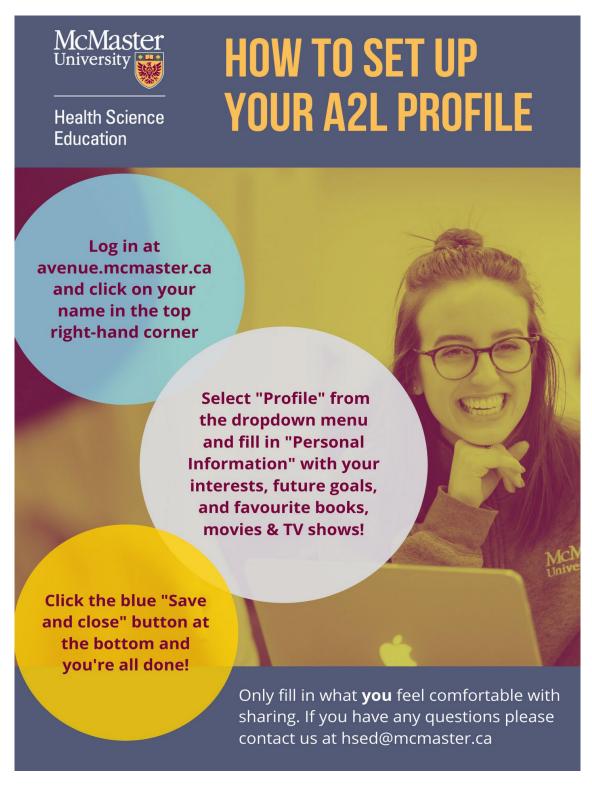
DO INTERNATIONAL STUDENTS REQUIRE STUDENT VISAS?
International students accepted to the Program are not required to apply for and obtain a student visa, except in the case of thesis students who will be conducting their studies at a McMaster University campus site.

APPENDIX A: A2L Profile Guide

HOW TO SET UP YOUR A2L PROFILE

Log in at avenue.mcmaster.ca and click on your name in the top right-hand corner

Select "Profile" from the dropdown menu and fill in "Personal Information" with your interests, future goals, and favourite books, movies & TV shows!

Click the blue "Save and close" button at the bottom and you're all done!

Only fill in what **you** feel comfortable with sharing. If you have any questions please contact us at hsed@mcmaster.ca

APPENDIX B - Capstone Portfolio Component

Table A. Overview of the four Capstone Portfolio Components

	Course Assignments	Seminar Series	Research or Innovation Proposal	Teaching Philosophies
Learning Activities	Completion of 5 courses.	Attendance at 10 MERIT Rounds seminars.	Engagement in 15 e-learning modules and completion of 10 proposal Milestones. Engagement in Residency Week 2	Completion of HS EDUC 701. Re-review of Teaching Philosophy module. Engagement in Residency Week 2
Components	The final assignment completed in each course.	Completed seminar series attendance form; including relevant discussion forum posts where applicable.	10 Milestones. Final Proposal along with Milestones 1, 3C, & 6.	Statement of Teaching Philosophy.
Submission details	Each assignment to be submitted *together* in the Final Assignment Collation folder on A2L.	Attendance form is available here and on A2L. Submitted to Seminar Series Form folder on A2L.	Templates and Milestone forms available here and on A2L. Submitted to specific proposal submission folders on A2L.	Template for completion is available here and on A2L. Submitted to Teaching Philosophy folder on A2L.
Assessment	Completion. Final course assignments are not re-assessed as part of the Capstone Portfolio assemblage.	Completion. Attendance sheets will be validated against Program records.	Completion. Students will receive comprehensive formative assessment during Residency Week 2.	Completion. Students will receive comprehensive formative assessment during Residency Week 2.

APPENDIX C - Overview of Education Proposal System

Table B. Overview of e-Learning Modules supporting Education Proposal Development

Unit	Module	Deliverables
The Nature of Knowing (Unit 1)	Philosophical Worldviews	Milestone 1: Statement of Epistemological Worldview*
	The Nature of Evidence	
	Common Methods of Education Research	
Approaching the Project (Unit 2)	Searching and Reviewing the Literature	Milestone 2: Study Outline (2A and 2B)
	Defining Research Objectives & Formulating Research Questions	
	Setting & Defending Methodological Choices	Milestone 3: Research Methodology Proposal (3A, 3B, 3C)*
Telling your Story & Reaching your Audience (Unit 3)	Generating an Introduction	Milestone 4 Research Impact
	Writing a Methods Section & Articulating Hypotheses	
	The Anatomy of a Discussion	Milestone 5: Research Questions and Methods Summary
	Rhetoric and the Articulation of Potential Impact	
The Logistics of Getting a Project Done (Unit 4)	Considerations for Research Ethics	Milestone 6: Ethics Training*
	Working Collaboratively: Building a Research Team	Milestone 7: Research Project Team
	The Road to Publication	Milestone 8: Budget & Timeline
	Budgets, Study Schedules, and Management	Milestone 9: Knowledge Translation
	Planning Knowledge Translation and Dissemination Activities	Milestone 10: Education Research or Innovation Proposal Draft*

For (re-)inclusion in final Education Proposal submission

Milestone 1: Statement of Epistemological Worldview

Each student will generate a Statement of Epistemological Worldview that will be included in their Capstone Portfolio. This statement consists of a brief 1-page essay in which students describe their personal epistemological preferences. Completion of this statement requires the application of readings and resources suggested during Unit 1 of the Capstone Portfolio modules. Students are encouraged to revisit this statement throughout their engagement with the modules, refining their articulation of epistemological leanings as they approach Residency Week 2. Milestone 1 will be included as part of the final Education Proposal submission.

Milestone 2: Study Outline

This Milestone contains two parts, 2A and 2B, and must be completed in sequence:

- **Milestone 2A: Summary of Study Outline**: this Milestone module requires students to complete a 2.5-page summary of an HPE issue or question of particular interest and include a literature search and review (in the form of an annotated bibliography), critical synthesis, and the development of an early study outline that is situated in the current state of the field.
- **Milestone 2B: Critical Appraisal Worksheet**: requires students to complete a critical appraisal of one of the key articles that supports the completion of Milestone 2A.

Milestone 3: Research Methodology Proposal

This Milestone contains three parts, 3A, 3B, and 3C, which must be completed in sequence and requires each student to interact with a peer in the HSED Program. Students are encouraged to "team up" for these activities, in group sizes of their choice. The Program can facilitate partnerships where necessary. Students are required to develop their proposed methodology for their research study based on the literature search, annotated bibliography, and critical appraisal of a paper completed in Milestone 2.

- **Milestone 3A: Research Methodology:** Students are presented with a series of research development questions and required to answer each with respect to the study outline described in Milestone 2A.
- **Milestone 3B: Peer Review:** After completion of Milestone 3A, students will exchange their research development responses with a peer in the HSED Program who will provide feedback. Peers are asked to critically appraise the strengths and weaknesses pertaining to the proposed research method, paying specific attention to the alignment between their epistemology, research question, research methods, and intended outcomes. Peer input will be presented on a signed feedback form.
- **Milestone 3C: Peer Review Response**: Responding to critical feedback is a key skill in academia. Using the template provided, students will generate a response to the feedback elicited in Milestone 3B, which explains how the comments and suggestions raised were addressed. A revised version of the Milestone 3A assignment should be included. Milestone 3C will be included as part of the final Education Proposal submission.

Milestone 4: Research Impact

For all researchers, it is important to consider the impact of the research and how it will ultimately change the field. For this Milestone module, students will articulate, in 250 words or less, a vision for how the proposed research will impact health professions education.

Milestone 5: Research Question & Methods Summary

For this assignment students will develop the first two sections of their grant proposal, amalgamating the work they have done thus far in articulating their research question and refining research methodology to generate a 2-page background and methods outline.

Milestone 6: Ethics Training

For this Milestone, students must complete the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) Training module available at https://tcps2core.ca/. Once complete, students will receive a certificate that must be uploaded to the A2L Milestone 6 Submission Folder. Milestone 6 will also be included in the final Education Proposal submission. Note: Students who have already completed the TCPS 2 training before entering the HSED Program may use their existing certificate to fulfill this milestone.

Milestone 7: Research Project Team

For this Milestone module, supply a description of a hypothetical research team. The research team can be a big part of the success of a project. When grant agencies review grants, a big part of their adjudication process is rating the research team– does this team have the methodological expertise, experience, and diversity required to successfully complete the project? Please note that for the purposes of this Milestone, students do not actually have to recruit the team, but rather generate a "fantasy draft" of their ideal team that would help them obtain funding.

Milestone 8: Budget and Timeline

This Milestone module requires students to create a 1-page budget for their research project based on a provided template. Students are also required to provide a hypothetical timeline for their research or innovation proposal. An example timeline is provided on A2L.

Milestone 9: Knowledge Translation Plan

Students will provide a brief (1-page) overview of how they plan to achieve their research impact (Milestone 4) through a knowledge translation plan.

Milestone 10: Final Grant Proposal Draft

This Milestone module will require students to compile and condense the work accomplished in the previous nine Milestone modules to create a **draft** grant proposal based on provided templates. Distinct templates for Education Research and Education Innovation proposals are provided on A2L and can be found at https://hsed.mcmaster.ca/current-students/forms.
This draft proposal acts as the student's "ticket" to Residency Week 2, which is organized as a comprehensive workshop for refinement and completion of the grant application.

> **NOTE:** All Milestone assignment forms are available via A2L or the HSED website. Completed Milestones must be uploaded to specific submission folders in A2L found under Assessment > Assignments. Milestones 1, 3C, and 6 will need to be resubmitted as a part of the final Education Proposal submission (i.e., they must be submitted in both their specific submissions folder and the final Education Proposal submission folder on A2L).

APPENDIX D - Submitting the Capstone Portfolio

The following checklist will facilitate the process of submitting the Capstone Portfolio:

Collation of Course Assignments:
- ☐ Five final assignments compiled into one PDF document.
- ☐ Ensure each assignment is identified based on the course it was completed for.
- ☐ The PDF document should be named "Lastname.FirstInitial_CollatedAssignments"
- ☐ The PDF file should be uploaded to the "Final Assignment Collation" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Education Research or Innovation Grant Proposal:
- ☐ Each of the ten (10) Milestone Assignments are submitted to their respective folders under Assessments > Assignments in the Capstone Portfolio A2L course shell.
- ☐ Final Education Research or Innovation Grant Proposal is saved as a Word file.
- ☐ Ensure the Word file is named "Lastname.FirstInitial_ERIGProposal.docx" (e.g., Novin.S_ERIGProposal.docx).
- ☐ Upload the Word file to the "Final Proposal Submission" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.
- ☐ Milestones 1, 3C, and 6, have been resubmitted to the Final Proposal Submission" folder in A2L (i.e., they are submitted in both their specific submissions folder and the final Education Proposal submission folder on A2L).

Seminar Series Form:
- ☐ Ensure the Seminar Series Form is filled out accurately and is saved as a PDF file.
- ☐ The PDF document should be named "Lastname.FirstInitial_SeminarSeries.pdf" (e.g., Nasser.M_ SeminarSeries.pdf).
- ☐ The PDF file should be uploaded to the "Seminar Series" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Statement of Teaching Philosophy:
- ☐ Ensure their revised Statement of Teaching Philosophy saved as a PDF file.
- ☐ The PDF file is named "Lastname.FirstInitial_StatementofTeachingPhilosophy.pdf" (e.g., Nasser.M_ StatementofTeachingPhilosophy.pdf).
- ☐ Upload the PDF file to the "Statement of Teaching Philosophy" folder under Assessments > Assignments in the Capstone Portfolio A2L course shell.

Submission of all four components will be validated by the HSED Program Office.

APPENDIX E - Thesis Checklist

The following checklist will facilitate the successful completion of the Thesis:

Thesis Proposal:
- ☐ Supervisor confirmed.
- ☐ Internal Supervisory Committee members confirmed (n=2).
- ☐ Supervisory Committee meeting within 6 months of HSED matriculation.
- ☐ Thesis Proposal draft completed.
- ☐ Thesis Proposal draft circulated to Supervisory Committee.
- ☐ Thesis Proposal Form approved and signed by Supervisory Committee.
- ☐ Thesis Proposal Form submitted to HSED Program Office.

Writing the Thesis:
- ☐ Supervisory Committee meetings occurring regularly.
- ☐ Supervisory Committee Reports submitted to Program after each and every meeting.
- ☐ Student-supervisor meetings occurring regularly.

Planning the Thesis defense:
- ☐ Defense date selected.
- ☐ Enrolled in HS EDUC 709 during term of defense date.
- ☐ Program Office notified of the following at least 8 weeks in advance of defense date:
  - ☐ The proposed External Examiner (for Program approval)
  - ☐ The Examining Committee membership.
  - ☐ Confirmation the external and internal members of the Examining Committee have agreed to the date and time.
  - ☐ The most recent title of the student's thesis.
  - ☐ Preference for virtual defense (if applicable).
- ☐ Thesis formatted appropriately (see section 4.7).
- ☐ Thesis submitted to Program Office at least 6 weeks in advance of defense date.
- ☐ Notify all Examining and Supervisory Committee members of finalized defense date, time, and location.

Thesis defense (~3.5 hours):
- ☐ Arrive at defense at least 30 minutes in advance to set up.
- ☐ Introductions by Chair.
- ☐ Step out for deliberations.
- ☐ Return for oral defense (30 minute maximum).
- ☐ Respond to Examining Committee (and possibly audience) questions (2 hours maximum).
- ☐ Step out for deliberations.
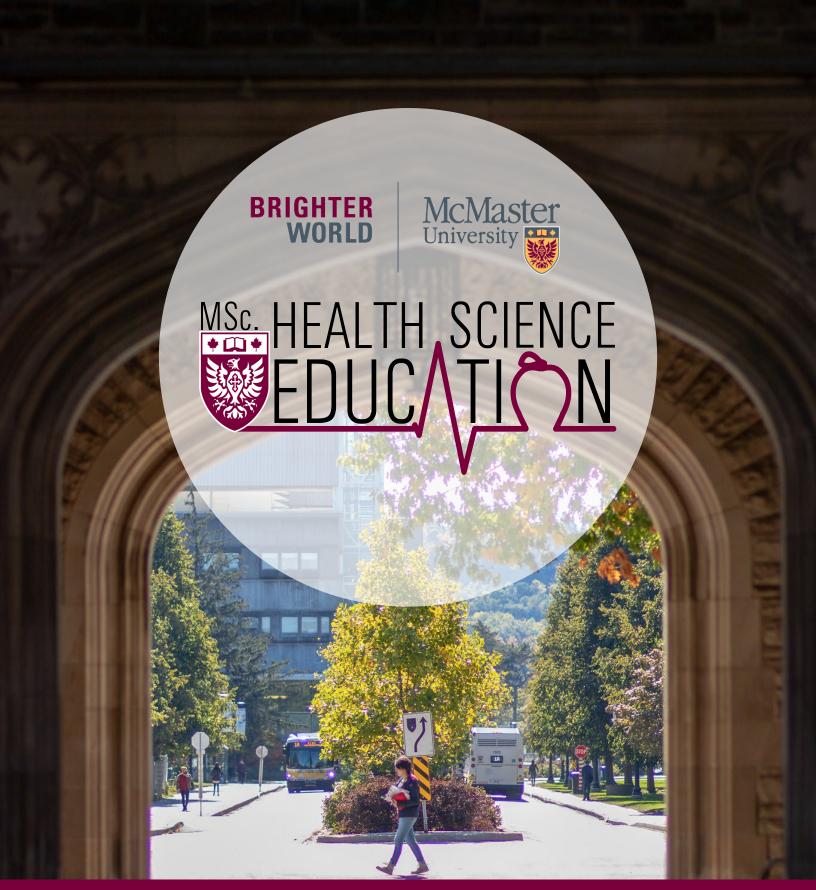- ☐ Return for final judgement.

After completion:
Complete and sign the following four (4) forms:
- ☐ Report of Examining Committee on Master's Thesis – Written Thesis
- ☐ Report of Examining Committee on Master's Thesis – Oral Defense
- ☐ School of Graduate Studies Final Submission Sheet
- ☐ Defense License

- ☐ Record Examining Committee feedback (supervisor)
- ☐ Apply major and minor revisions, if applicable.
- ☐ Seek reapproval, if applicable.
- ☐ Submit all four (4) original completed forms to the HSED Program Office.
- ☐ Upload final thesis copy to MacSphere.

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MSc. HEALTH SCIENCE EDUCATION

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