

To : Members of Graduate Council

From : Christina Bryce
Assistant Graduate Secretary

The next meeting of Graduate Council will be held on **Tuesday May 18th at 9:30 am via Zoom.**

Listed below are the agenda items for discussion.

Please email cbryce@mcmaster.ca if you are unable to attend the meeting.

A G E N D A

- I. **Minutes of the meeting of April 20th, 2021**
- II. **Business arising**
- III. **Report from the Vice-Provost and Dean of Graduate Studies**
- IV. **Report from the Graduate Associate Deans**
- V. **Report from the Associate Registrar and Graduate Secretary**
- VI. **Faculty of Health Sciences Graduate Policy and Curriculum Committee Report**
- VII. **Faculty of Science Graduate Curriculum and Policy Committee Report**
- VIII. **Spring 2021 Graduands (to be distributed)**

Graduate Council
Tuesday April 21st at 9:30 am via Zoom

Present: D. Welch (Chair), J. Gillet, S. Hanna, M. Horn, K. Hassanein, M. Thompson, B. Gupta, M. Dion, A. Shi, S. Raha, B. Farmer, M. Parlar, S. Madeiros, S.K. Dhimi, O. Loertscher, C. Seiler, K. Tsang, E. Wright, N. Tan, S. Dickson, J. Shedden, A. Roddick, J. Kish, S. Zakaria, M. Naisani, J.P. Xu, S. Baschiera (Associate Registrar and Graduate Secretary), C. Bryce, (Assistant Graduate Secretary)

Regrets: N. Tan, S. Bannerman, E. Wright

I. Minutes of the meeting of March 16th, 2021

It was duly moved and seconded **'that Graduate Council approve the minutes of the meeting of March 16th, 2021.'**

The motion was **carried**.

II. Business arising

There was no business arising.

III. Report from the Vice-Provost and Dean of Graduate Studies

Dr. Welch reported on the following items:

- With the current lockdown, the graduate studies space in Mills Library is closed;
- Students can still arrange for room to defend their Ph.D. on campus until the end of August;
- Updates to vaccination eligibility;
- Changes to the information being sent to external reviewers and updates to the supervisory committee report to note the impact on the trajectory of research work related to Covid;
- Fall 2021 planning reports have been submitted with the expectation of a public report in a few weeks;
- The restructuring at Laurentian University, noting there is considerable activity to see how McMaster can assist graduate students in some of these situations;
- A very successful first Gradflix competition;
- International arrivals, noting a lot of churn and the transition from the current arrival plan to the new (to be approved) plan. May 31st is the arrival deadline to quarantine on campus and there is no plan to subsidize airport quarantines and/or hotel stay for folks beyond this time;
- IQAP reviews are going well, noting that it has been great to hear how programs are managing and adapting during the pandemic;
- Graduate admissions numbers are very positive in terms of people wanting to start in September with applications and acceptances up dramatically compared to the same time last year.

Council members discussed the new arrival plan for international students.

In response to a question about the enrollment caps in the Strategic Mandate Agreement as it related to the admission numbers presented Dr. Welch noted that this is something that programs and associate

deans are looking at. He noted that a big factor in the numbers is that they are turning offers around more efficiently than they did last year and that there are significant numbers of unfunded students at any given time.

IV. Report from the Graduate Associate Deans

Dr. Hanna (Faculty of Health Sciences) reported on the following item:

- The Research Plenary event is coming up in third week of May, including a pandemic-themed panel session.

Dr. Hassanein (Faculty of Business) reported on the following items:

- The application cycle is proceeding well and acceptances are higher than normal;
- The AACSB accreditation process for the Faculty.

Dr. Gupta (Faculty of Science) reported on the following items:

- Fall admissions going well with most programs seeing a significant increase in applications and acceptances;
- Monitoring arrival of international students, looking to see how many are coming in the fall term;
- Fall term courses will be mainly online with the exception of a few courses;
- Two winners from Gradflix competition were from Science;
- Annual alumni event.

Dr. Gillett (Faculty of Social Science) reported on the following items:

- Continuing to monitor offers, noting more interest and uptake;
- Looking for ways to support students through pandemic
- MPP starting up May 1st.

Dr. Thompson (Faculty of Engineering) reported on the following item:

- A welcome package for incoming international graduate students put together by the Engineering Graduate Student Society.

Dr. Horn (Faculty of Humanities) reported on the following item:

- IQAP activities in the Faculty of Humanities.

V. Report from the Associate Registrar and Graduate Secretary

There was no report.

VI. Faculty of Business Graduate Curriculum and Policy Committee Report

Dr. Hassanein presented the following items for approval:

- Change to the requirements and related calendar copy for the Business Analytics specialization in the M.B.A. program;
- An update to the electives list for the Blended Learning Part Time MBA program.

It was duly moved and seconded, **'that Graduate Council approve the changes proposed by the Faculty of Business as described in the documents'**

The motion was **carried**.

VII. Faculty of Engineering Graduate Curriculum and Policy Committee Report

Dr. Thompson presented the following items for approval:

- Engineering Physics cleaned up language in calendar copy, revised course requirements and added a smart systems research field;
- Electrical and Computer Engineering cleaned up language regarding course requirements, particularly trying to help students understand the requirements around taking courses outside their department and at 600 level;
- Materials Science and Engineering revised their comprehensive examination;
- Master of Engineering Design increased the number of courses required from a core group, which corresponds to an earlier approved change;
- Master of Engineering in Systems and Technology added a stream in process systems stream in their offerings.

It was duly moved and seconded, **‘that Graduate Council approve the changes proposed by the Faculty of Engineering as described in the documents’**.

The motion was **carried**.

VIII. Faculty of Humanities Graduate Curriculum and Policy Committee Report

Dr. Horn presented three changes for approval:

- An international dual degree stream for Classics proposed at the M.A. level;
- A change to course requirements and calendar copy for the Communication Management Masters;
- A change to program name and other alternations to program and calendar copy for Gender Studies and Feminist Research.

It was duly moved and seconded: **‘that Graduate Council approve the changes proposed by the Faculty of Humanities as described in the documents’**.

The motion was **carried**.

IX. Faculty of Social Sciences Graduate Curriculum and Policy Committee Report

Dr. Gillett presented the item for approval, noting that the School of Social Work proposed a change to their course requirements to Social Sciences 701 as an option and a couple of adjustments to their calendar copy.

It was duly moved and seconded, **‘that Graduate Council approve the changes proposed by the Faculty of Social Sciences as described in the documents’**.

The motion was **carried**.

X. Graduate Calendar Administrative Section Revisions

There were a number of changes to the sections, including removing redundant information, corrections to the language used around visa and study permits and a new notation that students are required to follow the rules of the program they're taking courses in among others.

It was duly moved and seconded, **'that Graduate Council approve the changes to the calendar administrative sections as set out in the document.'**

The motion was **carried**.

XI. New Scholarships and Scholarship Changes

It was duly moved and seconded: **'that Graduate Council approve the new scholarships and changes to scholarships as outlined in the document'**.

The motion was **carried**.

XII. Final Assessment Reports

Ms. Baschiera explained that the reports were for the information of Graduate Council and were the output of IQAP reviews with outcomes decided by McMaster's Quality Assurance Committee. All were deemed reasonable and will be proceeding through the normal review cycle.

XIII. Youth in Extended Society Care Bursary Program

Ms. Baschiera presented the item for information explained that it is an initiative in collaboration with the Child Welfare Political Action Committee. The program will provide support for current and former youth in care pursuing their first undergraduate or graduate degree. At the graduate level it is open to applicants from all of Ontario.

To : Graduate Council

From : Christina Bryce
Assistant Graduate Secretary

At its meeting on March 25th, and via e-ballot on February 25th and April 19th the Faculty of Health Sciences Graduate Policy and Curriculum Committee approved the following recommendations.

Please note that these recommendations were approved by the Executive Committee of the Faculty of Health Sciences.

For Graduate Council Approval

1. **Biomedical Engineering*****
 - **Change to Course Requirements**
2. **Child Life and Pediatric Psychosocial Care**
 - **Change to Calendar Copy**
3. **Physiotherapy**
 - **Change to Admission Requirements**

For Graduate Council Information

4. **Health Research Methodology**
 - **New Course**
 - i. 747 Advanced Methods in Evidence Synthesis
 - **Change to Grading Basis**
 - i. 777 Methods for Diagnostic and Prognostic Research
5. **Psychotherapy**
 - **New Course**
 - i. 710 Practicum I
6. **Speech Language Pathology**
 - **Change to Course Description**
 - i. 711 Problem-Based Tutorial I
 - ii. 712 Clinical Skills Lab I
 - iii. 721 Problem-based Tutorial II
 - iv. 722 Clinical Skills Lab II
 - v. 731 Problem-based Tutorial III

- vi. 741 Problem-based Tutorial IV
- vii. 742 Clinical Skills Lab IV

*****Please note these changes were also approved by the Faculty of Engineering**



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | | | |
|--|-----|--|--|--|----|
| <u>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</u> | | | | | |
| 1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed. | | | | | |
| 2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). | | | | | |
| 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | | | |
| DEPARTMENT | | School of Biomedical Engineering | | | |
| NAME OF PROGRAM and PLAN | | Biomedical Engineering MAsc. & PhD | | | |
| DEGREE | | | | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | |
| CREATION OF NEW MILESTONE <input checked="" type="checkbox"/> | | | | | |
| CHANGE IN ADMISSION REQUIREMENTS | | No | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | | No |
| | | | | | |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | | | | | |
| OTHER CHANGES | YES | EXPLAIN: | | | |
| | | Addition of the two electives courses below to our program offerings. NEURO MED-SCI-705 Neurochemistry Antimicrobial Resistance from Principles to Practice MED SCI NEUROSCIENCE 740 Advanced Concepts of Drug-Receptor Interaction | | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

These two courses will be offered as additional electives for students enrolled in either the MASc. or the PhD. Program.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

To offer additional health/medical science courses to our students.

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

September, 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

Both of these courses are currently offered by the departments of Neurosciences and Medical Sciences.

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Ravi Selvaganapathy Email: selvaga@mcmaster.ca Extension: 23486 Date submitted: March 29, Feb 23, 2021

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,
cbryce@mcmaster.ca

SGS/2013

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | |
|--|---|---|--------------------------|
| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | |
| 1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed. 2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | |
| DEPARTMENT | Pediatrics | | |
| NAME OF PROGRAM and PLAN | Child Life and Pediatric Psychosocial Care | | |
| DEGREE | MSc. Child Life and Pediatric Psychosocial Care | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | <input type="checkbox"/> | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | <input type="checkbox"/> |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | <input checked="" type="checkbox"/> | EXPLAIN: We would like to remove the * notation for which courses are valued at 1.5 credits within our graduate calendar copy, as there is the possibility that we will in future bring forward a request to move our Residency courses to 0 credits. There is also a request to add another core Stream 1 course to the elective option list for our Stream 2 students. | |
| OTHER CHANGES | EXPLAIN: | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

The edits being brought forward would remove the notations of which courses in our curriculum are 1.5 credits, as well as the number of full program units. At this time, our residency courses are 1.5 credits and offered as pass/fail courses. There is the possibility that we may bring them forward to seek a change to 0 credits, as the Health Sciences Education program has done. Removing the notation of the 1.5 credit amount would enable an alignment with grad. calendar should this occur, but would also not impact learners should they remain at 1.5 credits.

There is also a request to include our CLPPC 708 course as an additional elective option for our Stream 2 students after receiving several requests. This addition to our approved optional course list would streamline processes for any Stream 2 learners interested in this course.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

New graduate calendar.

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

No.

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

Under the requirements for Stream 1:

Course requirements

~~Students are required to successfully complete graduate course work in addition to clinical internships and clinical skills seminars. All courses are required, with the exception of course CLPPC 720 which is offered to students eligible for remediation, with at least a B standing 48 units of mandatory courses. All courses are half courses with the exception of 4 quarter courses (*) and clinical internships (6 units), and are The 24-month program schedule is as follows:~~

First Year Fall Term:

- CLPPC 700/Child Life Studies Residency Week*

- CLPPC 702/The Child, Youth and Family in Healthcare
- CLPPC 703/Educational Research Methods in Health Sciences Education

First Year Winter Term:

- CLPPC 706/Pediatric Psychosocial Assessment
- CLPPC 705/Grief, Loss and Bereavement in Childhood and Adolescence
- CLPPC 707/Evaluating Evidence: An Approach to Critical Evaluation of the Literature*

First Year Summer Term:

- CLPPC 709/The Vulnerable Child and Youth
- CLPPC 708/Child Life: Foundations of Play
- CLPPC 712/Professional Ethics*
- CLPPC 710/Child Life Studies Residency Week 2*

Second Year Fall Term:

- CLPPC 715/Clinical Internship 1 (360 hours)
- CLPPC 718/Clinical Skills Seminar 1

Second Year Winter Term:

- CLPPC 716/Clinical Internship 2 (360 hours)
- CLPPC 719/Clinical Skills Seminar 2

Second Year Summer Term:

- CLPPC 717/Program Planning and Evaluation
- CLPPC 713/Independent Master's Project

All courses are offered online with the exception of the mandatory on-campus residency week courses, and clinical internships.

Required Online Modules

Online modules must also be taken by all graduate students:

- SGS 101/ Academic Research Integrity and Ethics
- SGS 201/ Accessibility for Ontarians with Disabilities act (AODA)

These modules must be completed within the first month of a student's first term in Year 1.

~~Students are required to successfully complete the above graduate course work in addition to clinical internships and clinical skills seminars. All are required, with the exception of course 720 which is offered to students eligible for remediation.~~ Under the requirements for Stream 2

~~Students are required to successfully C-complete with at least a B-standing-7 core and 3 elective graduate courses. All courses are half courses with the exception of 4 quarter courses (*).~~

Core Courses:

- CLPPC 701/Pediatric Psychosocial Care Residency 1*

- CLPPC 703/Educational Research Methods in Health Sciences Education
- CLPPC 707/Evaluating Evidence: An Approach to Critical Evaluation of the Literature*
- CLPPC 712/Professional Ethics*
- CLPPC 711/Pediatric Psychosocial Care Residency 2*
- CLPPC 704/Current Issues in Pediatric Psychosocial Care
- CLPPC 713/Independent Master's Project

Elective Options

- CLPPC 714/Special Topics in Pediatric Psychosocial Care
- RS 708 Reasoning and Decision Making
- RS 770 Leadership in Rehabilitation
- CLPPC 709/The Vulnerable Child and Youth
- CLPPC 706/Pediatric Psychosocial Assessment
- CLPPC 705/Grief, Loss & Bereavement in Childhood and Adolescence
- CLPPC 708/Child Life: Foundations of Play
- CLPPC 717/Program Planning and Evaluation
- CLPPC 702/Children, Youth and Families in Healthcare
- CLPPC 721/Independent Study
- Other graduate elective(s) approved in advance by the program

All courses are offered online with the exception of the mandatory on-campus residency week courses. Course CLPPC 720 is only offered to students eligible for remediation.

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Cathy Humphreys Email: humphrc@mcmaster.ca Extension: 22795 Date submitted: Mar.23, 2021

Commented [HC1]: This is an in program course that we would like to add to the list of approved elective options.

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013

MSc Child Life and Pediatric Psychosocial Care Graduate Calendar

MSc General Regulations for Admissions

Applicants are expected to meet the School of Graduate Studies requirements for admission. Post-graduate coursework will also be considered in GPA calculation, and calculated on a case-by-case basis.

Applicants whose native language is not English, will be required to demonstrate evidence of proficiency in the use of the English language, as outlined in the General Regulations of the Graduate School. The minimum acceptable TOEFL (iBT) score is 92 overall with a minimum of 22 for reading 24 for speaking, 24 for listening and 22 for writing, or 600 (paper based) **with a minimum of 45 for speaking score and a minimum of 50 in the other areas**. Alternately an overall minimum IELTS score of 7.0 will be required.

MSc degree - Stream 1 option

Stream 1 of the Child Life and Pediatric Psychosocial Care program provides academic and clinical training to prepare students to practice as entry level child life specialists. This stream is only offered full-time. The anticipated completion of all program requirements for students enrolled in stream 1 is 2 years from initial enrollment.

Stream 1 Application Requirements

Stream 1 applicants are required to submit:

- An official transcript(s) of academic work completed to date at all post-secondary institutions attended, sent directly from the issuing institution(s). Non-English transcripts must be translated and notarized. Applicants may apply during the fourth year of their degree. In such cases, the pre-admission GPA for eligibility purposes is calculated using the most recent 10 courses towards their degree. Should an applicant in this category be offered admission to the program, the offer is "conditional" upon successful completion of their four-year degree by June 30 in that year, and maintenance of a B+ average in their final year of study.
- A minimum of two undergraduate courses in child development. This course work must cover growth and development from birth to 18 years of age as a requirement for child life specialist certification eligibility through the Association of Child Life Professionals. Should an applicant still completing this course work be offered admission to the program, the offer is "conditional". Admission will be contingent upon confirmation of these courses being successfully completed by June 30 in that year.
- A current CV
- A volunteer work form demonstrating completion of 100 volunteer hours in a child life setting. Applicants who have not fully completed these hours may still apply. Should an applicant who has not demonstrated completion of these hours be offered admission, the offer is "conditional". Admission will be contingent upon confirmation of these 100 hours being complete by June 30 in that year.
- Three confidential reference forms:
 - Two confidential academic reference forms from an instructor most familiar with the applicant's academic work.

- One confidential reference form from a supervisor familiar with the applicant's work with children
- A personal statement (maximum 750 words) of intent that addresses the specific questions posed in the application checklist.

Stream 1 Additional Admission Requirements

- Successful completion of the program's multiple-mini-interviews.
- An offer of admission is contingent upon a "clear" approved police check, or approval by the Program Director. This condition of admission follows the Police Records Check Policy - Faculty of Health Sciences.

Meeting the above minimum admissions requirements does not guarantee admission. Limited space will be available. The admission process is competitive.

Course requirements

Students will be required to successfully complete graduate course work in addition to clinical internships and clinical skills seminars. All courses are required, with the exception of course CLPPC 720 which is offered to students eligible for remediation. The 24 month program Complete, with at least a B- standing 48 units of mandatory courses. All courses are half courses with the exception of 4 quarter courses (*) and clinical internships (6 units), and are schedule isd as follows:

First Year Fall Term:

- CLPPC 700/Child Life Studies Residency Week*
- CLPPC 702/The Child, Youth and Family in Healthcare
- CLPPC 703/Educational Research Methods in Health Sciences Education

First Year Winter Term:

- CLPPC 706/Pediatric Psychosocial Assessment
- CLPPC 705/Grief, Loss and Bereavement in Childhood and Adolescence
- CLPPC 707/Evaluating Evidence: An Approach to Critical Evaluation of the Literature*

First Year Summer Term:

- CLPPC 709/The Vulnerable Child and Youth
- CLPPC 708/Child Life: Foundations of Play
- CLPPC 712/Professional Ethics*
- CLPPC 710/Child Life Studies Residency Week 2*

Second Year Fall Term:

- CLPPC 715/Clinical Internship 1 (360 hours)
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- CLPPC 719/Clinical Skills Seminar 2

Second Year Summer Term:

- CLPPC 717/Program Planning and Evaluation

- CLPPC 713/Independent Master's Project

All courses are offered online with the exception of the mandatory on-campus residency week courses, and clinical internships.

Required Online Modules

Online modules must also be taken by all graduate students:

- SGS 101/ Academic Research Integrity and Ethics
- SGS 201/ Accessibility for Ontarians with Disabilities act (AODA)

These modules must be completed within the first month of a student's first term in Year 1.

~~Students are required to successfully complete the above graduate course work in addition to clinical internships and clinical skills seminars. All are required, with the exception of course 720 which is offered to students eligible for remediation.~~

Clinical Internship Requirements

In addition to the required coursework, students in Stream 1 will be required to successfully complete two twelve-week internships to establish minimum entry-level competence within the scope of child life practice across identified domains. Internships and competency areas follow the criteria set forth by the Child Life Council (CLC). Clinical internships will be evaluated utilizing an internship evaluation tool designed to assess skills and knowledge base reflective of the CLC Child Life Competencies, and the Child Life Professional Certification Exam Classification System. It will be utilized a minimum of twice per internship with the clinical preceptors in each internship, and the faculty Internship Coordinator/Clinical Educator to assess student progress and professional competencies. Internship locations at children's hospitals, general hospitals, and/or community settings vary each year, and may occur in different regions and cities. Students are responsible for their own transportation and all associated costs in order to meet this program requirement.

Health Sciences Graduate programs with clinical courses requires that all clinical activities associated with such courses must be successfully achieved for attainment of a passing grade in the course. Unsatisfactory standing or serious deficits in matters related to work in clinical settings (e.g. patient safety, ethical behaviour, professional competence), or professionalism when interacting with patients and families may result in termination of the clinical internship. In most situations termination of the clinical placement constitutes a failure and will result in the student receiving a grade of F in the Clinical Internship course and may result in dismissal from the program. Students will receive a Program Handbook, and Clinical Education Handbook which provide additional information and details regarding procedures, guidelines and requirements. In the event of a discrepancy between these documents and the Graduate Calendar, the Graduate Calendar represents the official policy.

MSc degree - Stream 2 Option

Stream 2 the Child Life and Pediatric Psychosocial Care program provides advanced practice skills in pediatric psychosocial care. It is offered on both a full and part-time basis to applicants who already hold qualifications as a healthcare professional with an interest in pediatric psychosocial care. Clinical internships and clinical skills seminars are therefore not required. The anticipated completion time of all Stream 2 program requirements for full-time students is 1 year, and 2-4 years from initial enrollment for part-time students. Students admitted as a Stream 2 student are not permitted to transfer to Stream 1. Changing streams requires reapplication.

Stream 2 Application Requirements

Stream 2 applicants are required to submit:

- An official transcript(s) of academic work completed to date at all post-secondary institutions attended, sent directly from the issuing institution(s). Non-English transcripts must be translated and notarized.
- A current CV
- Proof of active registration in a professional association (e.g. membership number, certification or licensure number) must be included on the applicant's resume.
- Two confidential reference forms from an instructor most familiar with the applicant's academic work. Consideration on the use of an employer reference will be provided on a case-by-case basis.
- A personal statement (maximum 750 words) of intent that addresses the specific questions posed in the application checklist.

Meeting the above minimum admissions requirement does not guarantee admission. Limited space will be available. The admission process is competitive.

Course requirements

Complete with at least a B- standing 7 core and 3 elective graduate courses. ~~All courses are half courses with the exception of 4 quarter courses (*).~~

Core Courses:

- CLPPC 701/Pediatric Psychosocial Care Residency 1*
- CLPPC 703/Educational Research Methods in Health Sciences Education
- CLPPC 707/Evaluating Evidence: An Approach to Critical Evaluation of the Literature*
- CLPPC 712/Professional Ethics*
- CLPPC 711/Pediatric Psychosocial Care Residency 2*
- CLPPC 704/Current Issues in Pediatric Psychosocial Care
- CLPPC 713/Independent Master's Project

Elective Options

- CLPPC 714/Special Topics in Pediatric Psychosocial Care
- RS 708 Reasoning and Decision Making
- RS 770 Leadership in Rehabilitation
- CLPPC 709/The Vulnerable Child and Youth
- CLPPC 706/Pediatric Psychosocial Assessment
- CLPPC 705/ Grief, Loss & Bereavement in Childhood and Adolescence
- CLPPC 708/Child Life: Foundations of Play
- CLPPC 717/Program Planning and Evaluation
- CLPPC 702/Children, Youth and Families in Healthcare
- CLPPC 721/Independent Study
- Other graduate elective(s) approved in advance by the program

Commented [HC1]: This is an in program course that we would like to add to the list of approved elective options.

All courses are offered online with the exception of the mandatory on-campus residency week courses. Course CLPPC 720 is only offered to students eligible for remediation.

Required Online Modules

Online modules must also be taken by all graduate students:

- SGS 101/ Academic Research Integrity and Ethics
- SGS 201/ Accessibility for Ontarians with Disabilities act (AODA)

The School of Graduate Studies SGS 101 and 201 courses must be completed within the first month of a student's first Year 1 Fall term in Year 1.



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | |
|---|-----------------------------------|---|--------------------------------------|
| <u>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</u> | | | |
| <p>1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed.</p> <p>2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p> | | | |
| DEPARTMENT | School of Rehabilitation Science | | |
| NAME OF PROGRAM and PLAN | Physiotherapy | | |
| DEGREE | Master of Science (Physiotherapy) | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | X | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | CHANGE IN COURSE REQUIREMENTS |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | X | EXPLAIN: If approved, the requested change in admission requirements will impact a section of the calendar. | |
| OTHER CHANGES | EXPLAIN: | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

- Admission Requirement: Currently applicants to the MSc(PT) program are required to have:
 - one 3 unit (1/2 year) humanities course or social science course
 - one 3 unit (1/2 year) human anatomy course
 - one 3 unit (1/2 year) human physiology course
 - one 3 unit (1/2 year) statistics course.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

- Admission Requirement: The statistics pre-requisite will be adjusted such that students are required to have one 3 unit (1/2 year) statistics OR a research methods course in a health-related field.

A research methods course in a health-related field will be defined as: A research methods course in a health related field should address health related research designs, methodological quality, risk of bias assessment and or statistics. Relevant study designs include observational studies (e.g. epidemiology), quasi-experimental designs, randomized controlled trials and or diagnostic studies.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

- The reasoning for including a statistics pre-requisite is to allow all incoming students to succeed in problem-based tutorials and the research and evidence-based course. However, most research and evidence-based courses do cover statistics and would also similarly prepare students to engage in tutorials and research and evidence-based courses

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

- Admission Requirements: Effective as of July 1, 2021 for applicants who are seeking admissions in the Fall of 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

no

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

Note: The yellow highlights indicate the changes to be made.

Additional requirements include:

- a. A minimum of one (1) human anatomy course, at any level, with a grade of at least B+ (77%) or higher
- b. A minimum of one (1) human physiology course, at any level, with a grade of at least B+ (77%) or higher
- c. A minimum of one (1) statistics **or research methods course in a health-related field***, at any level, with a grade of at least B+ (77%) or higher
- d. A minimum of one (1) humanities or social sciences** course, at any level, with a grade of at least B+ (77%) or higher

**Note only subject areas identified by McMaster University's Faculties of Humanities or Social Sciences will be accepted.*

** One course cannot satisfy both the statistics/research methods prerequisite and the humanities/social sciences prerequisite. Two separate courses must be submitted on the applicant's ORPAS application.*

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Sarah Wojkowski Email: wojkows@mcmaster.ca Extension: 27814

Date submitted: March 31, 2021

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013

To : Graduate Council

From : Christina Bryce
Assistant Graduate Secretary

At its meeting on November 26th, February 11th and March 12th the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approved the following recommendations.

Please note that these recommendations were approved by the Faculty of Science.

For Graduate Council Approval:

- i. **Biology**
 - 1. **Change to Calendar Copy (M.Sc.)**
- ii. **Chemical Biology**
 - 1. **Change to Comprehensive Examination**
- iii. **Chemistry**
 - 1. **Change to Course Requirements**
- iv. **Kinesiology**
 - 1. **Change to Calendar Copy**
- v. **Math and Stats**
 - 1. **Change to Admission Requirements**
 - 2. **Change to Calendar Copy**
- vi. **Radiation Sciences**
 - 1. **Change to Program Requirements – New Stream**

For Graduate Council Information:

- i. **Biology**
 - 2. **Course Cancellation**
 - a. **762 Developmental Biology**
 - 3. **Change in Course Title**
 - a. **6T03 Neurobiology**
- vii. **Computational Science and Engineering*****
 - 1. **Change to Course Title and Description**
 - a. **700 Foundations of Scientific Computing**
 - b. **701 Foundations of Modern Scientific Computing**

2. Change to Course Description

- a. 703 Computational Linear Algebra
- b. 708 Symbolic computing and Automatic Differentiation
- c. 745 Parallel and High-Performance Computing
- d. 746 Advanced Parallel and High-Performance Computing

3. Course Cancellations

4. Cross-listed Course Cancellations

viii. Chemistry

1. New Course

- a. 700 Tools for the Chemistry Profession

ix. Geography and Earth Sciences

1. New Courses

- a. 716 Plate tectonics: Processes, models and reconstructions
- b. 717 Research Design in Human Geography

x. Kinesiology

1. Course Cancellations

- a. 714 Directed Readings in Kinesiology's Special Populations
- b. 720 Social and Psychobiological Factors in Health and Exercise Psychology
- c. 722 Advances in Biomechanics and Electromyography

2. Change to Course Description

- a. 713 Directed Readings In Kinesiology

xi. Medical Physics

1. New Courses

- a. 777 Anatomy for Medical Physicists
- b. 783 Radioecology for Health Physicists
- c. 786 Professionalism and Ethics

*****Please note these changes were also approved by the Faculty of Engineering**



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for **ALL** changes involving degree program requirements/procedures. **All** sections of this form **must** be completed.
2. An electronic version of this form (must be in MS WORD **not** PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

| | | | | | |
|--|-------------------------------------|--|--|--|--|
| DEPARTMENT | | Biology | | | |
| NAME OF PROGRAM and PLAN | | Biology MSc Program | | | |
| DEGREE | Master of Science in Biology | | | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | |
| CREATION OF NEW MILESTONE <input checked="" type="checkbox"/> | | | | | |
| CHANGE IN ADMISSION REQUIREMENTS | | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | | CHANGE IN COURSE REQUIREMENTS | |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | | MSc program requirement | | EXPLAIN: We would like all new graduate students to have a firm idea about their overall research project and the supervisory committee to guide their degree program | |
| OTHER CHANGES | EXPLAIN: | | | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

At present, the requirement for a summary of research project and the establishment of a supervisory committee is presented at the first committee meeting, which for September entry MSc students, is usually about a year into their graduate program.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

The biology graduate program requires that all September entry MSc students must submit a summary of their proposed research and the names of their supervisory committee members by the end of December of the same year.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

The reason for this change is to ensure that all our MSc students have a firm idea about their overall project and a supervisory committee in place within four months after the start of their MSc degree program. While most students know what their projects are by that time, we have had students who didn't have a clear idea about their projects after 4 months of entry into their MSc program which have caused uncertainty and anxiety among students about how they might not be able to complete their projects. By having this milestone, we hope to avoid the uncertainty and anxiety.

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

September, 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

None

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Jianping
October 8, 2020

Email: jpxu@mcmaster.ca

Extension: 27934

Date submitted:

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | |
|--|--|---|-------------------------------------|
| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | |
| 1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed. 2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | |
| DEPARTMENT | Chemistry and Chemical Biology | | |
| NAME OF PROGRAM and PLAN | Chemical Biology Graduate Program (CBGP) | | |
| DEGREE | Ph.D. | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (consultations in preparation of IQAP review) | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | <input type="checkbox"/> | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | <input checked="" type="checkbox"/> |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | <input type="checkbox"/> | EXPLAIN: The current explanation of the CBGP comprehensive exam in the CBGP graduate calendar is: "The Comprehensive Examination will consist of a seminar and oral defence.". We propose to require also a written report. | <input type="checkbox"/> |
| OTHER CHANGES | <input checked="" type="checkbox"/> | EXPLAIN: CBGP Graduate handbook | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

CURRENT GUIDELINES FOR THE CBGP Ph.D. COMPREHENSIVE EXAMINATION

Goals and Outline of the Comprehensive Examination

The comprehensive exam is a capstone event in the Ph.D. program. It is given 18-24 months post entry into the Ph.D. program, when students are expected to have matured into experts in their fields. The marking scheme is Pass, Pass with Distinction, or Fail.

The examining committee consists of three faculty members from the Graduate Program in Chemical Biology one of who will chair it as if it were a Ph.D. defence.

The exam consists of a 20 minute presentation and a question period with members of the supervisory committee. **THERE IS NO WRITTEN COMPONENT TO THE COMPREHENSIVE EXAM.**

1) Presentation

The presentation should roughly 20 minutes in length and cover the student research in a comprehensive fashion, clearly placing it in the context of their field. This should very much resemble in form and content, seminars students attend in the external seminar series.

2) Question Period

Following the presentation, the student and the advisory committee will engage in a question and answer session. Students should be able to answer questions germane to their field of expertise. At this stage of their career, students should be comfortable with the fundamental aspects of the research they have performed and the general scientific context of their work. In general, the Chair will oversee two rounds of questions from the committee. Feedback on the seminar content and presentation style will also be given.

3) Timing of Re-Examination

If a re-examination is necessary, it will normally take place within one month, but the actual timing will be determined on the basis of consideration of what is needed to correct the deficiencies. This may include a requirement for a graduate level course in an area deemed deficient, or a written document that reviews a specific research area and provides a formal proposal. A second failure will necessitate withdrawal from the Ph.D. program.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (Attach additional pages if space is not sufficient.)

We propose to restructure the chemical biology comprehensive exam to include a written report to be submitted before the oral exam. The comprehensive report should be in the form of an exhaustive critical review of the wider field of research the doctoral students is working in. The review may serve as a foundation for the first chapter of the future doctoral thesis. The suggested format is similar to a Nature Chemical Biology review (5K words and eight figures/tables maximum). The proposed change is part of a broader vision of our graduate curriculum in which supervisory committees, transfer and comprehensive exams define key milestones paralleling typical professional scientific activities, *i.e.* writing original research papers, research proposals and reviews, respectively.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

Currently, the CBGP comprehensive exam is exclusively oral and as a result it is challenging to consistently track the level of rigor, resulting in possible variability from student to student and year to year.

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

Sept 2021, if possible

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

n/a

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

"The Comprehensive Examination will consist of a written report, a seminar and oral defence."

Formatted: Highlight

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Giuseppe Melacini

Extension:

Email: melacin@mcmaster.ca

Date submitted: Jan 22, 2020

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

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| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | |
| <p>1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed.</p> <p>2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p> | | | |
| DEPARTMENT | Chemistry and Chemical Biology | | |
| NAME OF PROGRAM and PLAN | Chemistry, Thesis | | |
| DEGREE | MSc, PhD | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | <input type="checkbox"/> | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | <input type="checkbox"/> |
| | | CHANGE IN COURSE REQUIREMENTS | <input checked="" type="checkbox"/> |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | <input type="checkbox"/> | EXPLAIN: | |
| OTHER CHANGES | <input type="checkbox"/> | EXPLAIN: | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

We proposed to formalize the existing required departmental orientation (department, safety, ethics), the upcoming requirement for EDI training and current informal and hence uneven literacy and communication training in course form. A new course (Chem 700) is being created (separate form) based on a successful Chem 799 Special Topics pilot course that was taught in Fall 2020. This course will be required, but does not replace current course requirements, since we also want our students to acquire a solid foundation in their field of chemistry. We will therefore increase the course requirements from four to five graduate modules (1.5 credits each) at the MSc level, and from two to three graduate modules (1.5 credits each) for direct entry PhD.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

This course formalizes current orientation requirements, the upcoming required EDI component as well as scientific literacy and communication training (which has repeatedly been requested by the students during surveys and townhalls) and allows the students to earn course credit for it.

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

Fall 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

n/a

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

MSc Course Requirements

The minimum course requirement for the M.Sc. degree is ~~four~~five graduate modules or the equivalent, including Chem 700, with the remainder selected from any of the offered Chemistry modules, 600-level courses (one module credit each), or extra-departmental graduate courses (usually two module credits each). The minimum passing grade for any course is B-. Students are strongly encouraged to complete a minimum of two prescribed modules within their sub-discipline (see [Chemistry, Ph.D.](#)). A maximum of one 600-level course may be included in the minimum course requirement. Additional courses beyond the minimum requirement may be recommended by the supervisory committee.

PhD Course Requirements

The minimum course requirement for the Ph.D. degree varies with sub-disciplines as follows:

Analytical, Organic, Physical, and Theoretical Chemistry: There is no course requirement at the Ph.D. level for students who have completed the M.Sc. requirements (listed [here](#)). Students with direct entry into the Ph.D. program (without first completing an M.Sc.) must complete [Chem 700 and](#) a minimum of two prescribed modules within their sub-discipline (See [Service Module List under Chemistry Courses](#)), and must present a departmental research colloquium. However, in all cases, additional courses may be recommended by the supervisory committee.

A student who enters the Ph.D. program in these sub-disciplines with an appropriate M. Sc. degree from another university must complete [Chem 700 and](#) a minimum of two prescribed modules, or the equivalent, and present a departmental research colloquium (see [here](#)). Additional courses may be recommended by the supervisory committee in cases where background is deemed inadequate for the research being undertaken.

Inorganic Chemistry: The minimum course requirement for students in this sub-disciplined is [Chem 700 \(if not already completed\) and](#) two [additional](#) graduate modules or the equivalent beyond the requirements for the M.Sc. degree. Students with direct entry into the Ph.D. program (without first completing an M.Sc.) must complete [Chem 700 and](#) a minimum of two [additional](#) prescribed modules within this sub-discipline (see [Service Module List under Chemistry Courses](#)), and must present a departmental research colloquium. However, in all cases, additional courses may be recommended by the supervisory committee.

A student who enters the Ph.D. program in this sub-discipline with an appropriate M.Sc. degree from another university must complete [Chem 700 and](#) a minimum of two [additional](#) prescribed modules, or the equivalent, and present a departmental research colloquium (see [here](#)). Additional courses may be recommended by the supervisory committee in cases where background is deemed inadequate for the research being undertaken.

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Peter Kruse Email: pkruse@mcmaster.ca Extension: 23480 Date submitted: 26 Feb 2021

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

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| <u>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</u> | | | |
| <p>1. This form must be completed for <u>ALL</u> changes involving degree program requirements/procedures. <u>All</u> sections of this form <u>must</u> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <u>not</u> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is <u>required to attend</u> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p> | | | |
| DEPARTMENT | Kinesiology | | |
| NAME OF PROGRAM and PLAN | GSCPH KINESPHD | | |
| DEGREE | PhD – Doctor of Philosophy | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | <input type="checkbox"/> | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | <input type="checkbox"/> |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | <input type="checkbox"/> | EXPLAIN: | |
| OTHER CHANGES | <input checked="" type="checkbox"/> | EXPLAIN: Addition of text to strengthen allow courses from other departments | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

Currently under the Ph.D. Degree section it states the "Any other courses may be recommended by the candidate's advisor and/or supervisory committee."

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

We would like to add the following statement "Due to the nature of individual student programs, courses from other departments may be deemed acceptable by the Department."

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

Due to the initial statement, we would like to add some clarity and clearly indicate that these courses need to be approved by the department.

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

September 1, 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

No

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

Any other courses may be recommended by the candidate's advisor and/or supervisory committee. Due to the nature of individual student programs, courses from other department's may be deemed acceptable by the Department

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Dr. Peter Keir Email: pjkeir@mcmaster.ca Extension: 23543 Date submitted: 2020/11/20

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

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| <u>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</u> | | | |
| 1. This form must be completed for <u>ALL</u> changes involving degree program requirements/procedures. <u>All</u> sections of this form <u>must</u> be completed. | | | |
| 2. An electronic version of this form (must be in MS WORD <u>not</u> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). | | | |
| 3. A representative from the department is <u>required to attend</u> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | |
| DEPARTMENT | Mathematics and Statistics | | |
| NAME OF PROGRAM and PLAN | M.Sc. program in Mathematics | | |
| DEGREE | M.Sc. | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | X | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | CHANGE IN COURSE REQUIREMENTS |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | X | EXPLAIN: See below | |
| OTHER CHANGES | EXPLAIN: | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

The Graduate Calendar indicates that the applicant's grade average is to be computed based on the final year of study, whereas in reality the last two years are taken into account.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

it is proposed that the admission criteria for the M.Sc. program be amended to say that the applicants' grade averages are computed based on the last two years of study.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

The proposed change will bring the calendar description in line with our the departmental practices.

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

September 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

N/A

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

Original text

"Applicants will be considered for admission to the M.Sc. program if they have a B+ average in the final year of an honours Bachelor's degree in Mathematics, or in a related area"

New Proposed text

*"Applicants will be considered for admission to the M.Sc. program if they have a B+ average in the **two final years** of an honours Bachelor's degree in Mathematics, or in a related area"*

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Dr. Bartosz Protas Email: bprotas@mcmaster.ca Extension: x24116 Date submitted: March 1, 2021

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | |
|---|------------------------------|---|--------------------------------------|
| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | |
| <p>1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed.</p> <p>2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).</p> <p>3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p> | | | |
| DEPARTMENT | Mathematics and Statistics | | |
| NAME OF PROGRAM and PLAN | M.Sc. program in Mathematics | | |
| DEGREE | M.Sc. | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | |
| CHANGE IN ADMISSION REQUIREMENTS | X | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | CHANGE IN COURSE REQUIREMENTS |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | X | EXPLAIN: The sequence of analysis courses will be modified such that the course MATH 722 (Analysis II) will be alternated with MATH 723 (Functional Analysis) | |
| OTHER CHANGES | EXPLAIN: | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

The “analysis” sequence consists of two courses, MATH 721 (Analysis I) and MATH 722 (Analysis II), which are offered every year in the fall and winter term, respectively.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

It is proposed that the second course in the sequence MATH 722 (Analysis II) is alternated with the course MATH 723 (Functional Analysis).

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department’s program and/or tie to existing Program Learning Outcomes from the program’s IQAP cyclical review?):

The proposed change will broaden the scope of the analysis sequence. The change also reflects significant interest in the course MATH 723 (Functional Analysis).

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

September 2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

N/A

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

Original text in Mathematics Courses (under “Graduate Credit Courses”):

"The following 700-level courses are offered for graduate credit. Among these, the core sequences in Algebra 701/702, Analysis 731/722,..."

New Proposed text

"The following 700-level courses are offered for graduate credit. Among these, the core sequences in Algebra 701/702, Analysis 731/722 (alternated with 723),..."

Original text in the description of the M.Sc. Degree (under "C. Transfer Option"):

- MATH 721 / Analysis I
- MATH 722 / Analysis II

New proposed text

- MATH 721 / Analysis I
- *MATH 722 / Analysis II (alternated with MATH 723 (Functional Analysis))*

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Dr. Bartosz Protas Email: bprotas@mcmaster.ca Extension: x24116 Date submitted: March 1, 2021

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | | | |
|--|--|--|--|--|----|
| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | | | |
| 1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed. | | | | | |
| 2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). | | | | | |
| 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | | | |
| DEPARTMENT | | Physics and Astronomy | | | |
| NAME OF PROGRAM and PLAN | | Radiation Sciences (Medical Physics/ Health Physics /Radiation Biology), Ph.D. | | | |
| DEGREE | | Ph.D. | | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | | | |
| CHANGE IN ADMISSION REQUIREMENTS | | no | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | | no |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | | EXPLAIN: | | | |
| OTHER CHANGES | | EXPLAIN: | | | |
| | | <p><i>Change the nomenclature of existing fields to streams and Introduction of introduce a new stream to the existing Radiation Sciences program, the <u>M.Sc.Ph.D.</u> in Radiation Sciences (Health Physics).</i></p> | | | |

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DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

Under the umbrella of Radiation Sciences, we currently offer two streams, a Ph.D. in Radiation Sciences (Medical Physics) and a Ph.D. in Radiation Sciences (Radiation Biology).

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

We would like to add a third stream, the Ph.D. in Radiation Sciences (**Health Physics**). The focus of this stream will be health physics related and complement the two existing medical physics and radiation biology streams.

Course Requirements

The minimum course requirement for the Ph.D. degree in Radiation Sciences in the Medical Physics, Health Physics and Radiation Biology streams is the completion of at least one full course at the 700-level beyond the courses required for the M.Sc. degree.

Medical Physics stream

Candidates in the Medical Physics stream must complete the following:

Two half courses at the 700 level, including
MED PHYS 775 / Advanced Radiation Physics
unless it has already been completed.

Candidates are expected to have knowledge in Radiation Biology and in Radiation & Radioisotope Methodology. If a candidate lacks this knowledge, she/he will be directed by the program to pursue appropriate additional learning opportunities.

Health Physics stream

Candidates in the Medical Physics stream must complete the following:

Two half courses at the 700 level, including
MED PHYS 775 / Advanced Radiation Physics
MED PHYS 776 / Introduction to Operational Health Physics
unless it has already been completed.

Candidates are expected to have knowledge in Radiation Biology and in Radiation & Radioisotope Methodology. If a candidate lacks this knowledge, she/he will be directed by the program to pursue appropriate additional learning opportunities.

Radiation Biology stream

Candidates in the Radiation Biology stream must complete the following:
Two half courses at the 700 level.

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

There have been several Ph.D. applicants who wanted to pursue a research degree in Health Physics, and we had them register Radiation Sciences (Medical Physics). When these students were searching for jobs, they found that HR people in nuclear industries did not recognize that they did excellent health physics projects and health physics course work, simply because their degree title does not include "Health Physics". We would, therefore, like to add a new stream to the existing Radiation Sciences program, the Ph.D. in Radiation Sciences (Health Physics).

[For consistency, we suggest to adjust the nomenclature in the existing program calendar entry and change the existing "fields" into "streams". We suggest to change the existing "Medical Physics field" to "Medical Physics stream", and the existing "Radiation Biology field" to "Radiation Biology stream". We think that this better describes the program as a Ph.D. in Radiation Sciences, with the option to set the focus between three different streams which are related and hosted under the same umbrella.](#)

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR (please include a tracked changes version of the calendar section affected if applicable):

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Maikel Rheinstadter Email: rheinstadter@mcmaster.ca Extension: 23134 Date
submitted: November 9, 2020

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES / MILESTONES

| | | | | | |
|--|--|---|--|--|----|
| IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: | | | | | |
| 1. This form must be completed for ALL changes involving degree program requirements/procedures. All sections of this form must be completed. | | | | | |
| 2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). | | | | | |
| 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed. | | | | | |
| DEPARTMENT | | Physics and Astronomy | | | |
| NAME OF PROGRAM and PLAN | | Radiation Sciences: M.Sc. in Radiation Sciences (Health Physics) | | | |
| DEGREE | | M.Sc. | | | |
| NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX) | | | | | |
| Is this change a result of an IQAP review? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | |
| CREATION OF NEW MILESTONE <input type="checkbox"/> | | | | | |
| CHANGE IN ADMISSION REQUIREMENTS | | no | CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE | | no |
| | | | CHANGE IN COURSE REQUIREMENTS | | no |
| CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR | | | EXPLAIN: | | |
| OTHER CHANGES | | EXPLAIN: Introduction of a new stream to the existing Radiation Sciences program, the M.Sc. in Radiation Sciences (Health Physics). | | | |

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

Under the umbrella of Radiation Sciences, we currently we offer two streams, a M.Sc. in Radiation Sciences (Medical Physics) and a M.Sc. in Radiation Sciences (Radiation Biology).

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (*Attach additional pages if space is not sufficient.*)

We would like to add a third stream, the M.Sc. in Radiation Sciences (Health Physics). The focus of this stream will be health physics related, and complement the two existing medical physics and radiation biology streams.

The M.Sc. in Radiation Sciences (Health Physics) requires that a candidate complete satisfactorily the courses below. Candidates for this M.Sc. are also required to present and defend a thesis, which shall embody the results of original research. Candidates are expected to have knowledge in Radiation Biology and in Radiation & Radioisotope Methodology. If a candidate lacks this knowledge, she/he will be directed by the program to pursue appropriate additional learning opportunities.

MED PHYS 775 / Advanced Radiation Physics

MED PHYS 776 / Introduction to Operational Health Physics

RATIONALE FOR THE RECOMMENDED CHANGE (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

There have been several M.Sc. applicants who wanted to pursue a research degree in Health Physics, and we had them register Radiation Sciences (Medical Physics). When these students were searching for jobs, they found that HR people in nuclear industries did not recognize that they did excellent health physics projects and health physics course work, simply because their degree title does not include "Health Physics". We would, therefore, like to add a new stream to the existing Radiation Sciences program, the M.Sc. in Radiation Sciences (Health Physics).

PROVIDE IMPLEMENTATION DATE: (*Implementation date should be at the beginning of the academic year*)

2021

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

**PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR
(please include a tracked changes version of the calendar section affected if applicable):**

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Maikel Rheinstadter Email: rheinstadter@mcmaster.ca Extension: 23134 Date
submitted: November 9, 2020

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,
cbryce@mcmaster.ca

SGS/2013