



<p><b>1.0 Degree Title</b> Please specify the two degrees for concurrent degree programs</p> <div style="border: 1px solid black; padding: 2px;">Master of Science (M.Sc)</div>	<p><b>2.0 Administering Faculty or GPS</b></p> <div style="border: 1px solid black; padding: 2px;">Graduate and Postdoctoral Studies (GPS)</div>
<p><b>1.1 Major (Subject/Discipline) (30-char. max.)</b></p> <div style="border: 1px solid black; padding: 2px;">Bioethics</div>	<p><b>Offering Faculty &amp; Department</b></p> <div style="border: 1px solid black; padding: 2px;">FMHS/ School of Population and Global Health</div>
<p><b>1.2 Concentration (Option) (30 char. max.)</b></p> <div style="border: 1px solid black; height: 20px;"></div>	<p><b>3.0 Effective Term of Implementation (Ex. Sept. 2019 or 201909)</b> Term</p> <div style="border: 1px solid black; padding: 2px;">202409</div>
<p><b>1.3 Complete Program Title (info from boxes 1.0+1.1+1.2+5.2)</b></p> <div style="border: 1px solid black; padding: 2px;">Master of Science (M.Sc); Bioethics</div>	

**4.0 Rationale and Admission Requirements for New Program/Concentration**

Please see page 3 for additional information

**5.0 Program Information**  
Indicate an "x" as appropriate

<p><b>5.1 Program Type</b></p> <p>Bachelor's Program</p> <p><input checked="" type="checkbox"/> Master's</p> <p>M.Sc.(Applied) Program</p> <p>Dual Degree/Concurrent Program</p> <p>Certificate</p> <p>Diploma</p> <p>Graduate Certificate</p> <p>Graduate Diploma</p> <p>Professional Development Cert</p> <p>Ph.D. Program</p> <p>Doctorate Program (Other than Ph.D.)</p> <p>Self-Funded/Private Program</p> <p>Off-Campus Program</p> <p>Distance Education Program</p> <p>Other (Please specify)</p>	<p><b>5.2 Category</b></p> <p>Faculty Program (FP)</p> <p>Major</p> <p>Joint Major</p> <p>Major Concentration (CON)</p> <p>Minor</p> <p>Minor Concentration (CON)</p> <p>Honours (HON)</p> <p>Joint Honours Component (HC)</p> <p>Internship/Co-op</p> <p><input checked="" type="checkbox"/> Thesis (T)</p> <p>Non-Thesis (N)</p> <p>Other</p> <p>Please specify</p> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	<p><b>5.3 Level</b></p> <p>Undergraduate</p> <p>Dentistry/Law/Medicine</p> <p>Continuing Studies (Non-Credit)</p> <p>Collegial</p> <p><input checked="" type="checkbox"/> Masters &amp; Grad Dips &amp; Certs</p> <p>Doctorate</p> <p>Post-Graduate Medicine/Dentistry</p> <p>Graduate Qualifying</p> <p><b>5.4 Requires Centrally-Funded Resources</b></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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**6.0 Total Credits or CEUs (if latter, indicate "CEUs" in box)**

45

**7.0 Consultation with Related Units**

Related Units	x	Yes	No
Financial Consult	x	Yes	No

Attach list of consultations.

8.0 Program Description (Maximum 150 words)

The M.Sc. in Bioethics focuses on training in theories, methods and practices in bioethics. The thesis will identify and address a research question around ethical concerns in the areas of medicine, healthcare, health policy and the life sciences.

9.0 List of proposed new Program/Concentration

If new concentration (option) of existing program, a program layout (list of all courses) of existing program **must** be attached.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit Weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

**Master of Science (M.Sc.) Bioethics (45 credits)**

**Required Courses (36 credits)**

BIOE 623 Healthcare Ethics (3 credits)  
BIOE 680 Bioethical Theory (3 credits)  
BIOE 690 M.Sc. Thesis Literature Survey (3 credits)  
BIOE 691 M.Sc. Thesis Research Proposal (3 credits)  
BIOE 698 M.Sc. Thesis Submission (18 credits)  
PHIL 643 Seminar: Medical Ethics (3 credits)  
PPHS 624 Public Health Ethics and Policy (3 credits)

**Complementary Courses (9 credits)**

9 credits from the following:

BIOE 681 Bioethics Practicum (3 credits)  
BIOE 683 Topics in Biomedical Ethics (3 credits)  
BIOE 686 Directed Readings 1 (3 credits)  
BIOE 687 Directed Readings 2 (3 credits)  
CMPL 642 Law and Health Care (3 credits)  
HGEN 660 Genetics and Bioethics (3 credits)  
RELG 571 Ethics, Medicine and Religion (3 credits)

Or other courses at the 500 level or higher with permission of the supervisor and the School of Population and Global Health.

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## ADDITIONAL INFORMATION

### Box 4.0 Rationale and Admission Requirements for New Proposal

Since 1992, the Biomedical Ethics Unit (BMEU) has coordinated a Master's Option in Bioethics through several other programs on campus. While the Options have been very successful, the administration of the options has been burdensome and inefficient. It has also had the effect of excluding many interested and promising students from gaining admissions. Harmonizing the Thesis Options into a free-standing MSc in Bioethics would create a cohesive cohort (alongside the non-thesis MSc students) of Master's students pursuing their interests in Bioethics. The formation of the Department of Equity, Ethics and Policy (DEEP), which has absorbed BMEU, enables the School of Population and Global Health to offer a freestanding Bioethics Master's program. Through courses that BMEU was already offering and the development of new courses, the program will train students to conduct research on bioethics topics and critically consider timely and contemporary bioethical issues. The students we anticipate recruiting for the MSc Thesis options are those with an aptitude for research and likely to use the MSc as a stepping-stone to further graduate studies and research careers [as opposed to the non-Thesis MSc students who we expect will be those looking to complement their professional degrees or those interested in entering the workforce after receiving their degrees].

#### Admissions requirements:

Four members of DEEP will sit on the Admissions Committee. The Committee will consider applications upon receipt of the following documentation:

- Completed application form
- Non-refundable application fee
- Official copies of academic transcripts of post-secondary studies from all previously attended universities. Bioethics is an interdisciplinary arena, therefore we will consider applicants with Bachelor's degrees in any field.
- Curriculum vitae
- Three recent letters of recommendation
- A 1-2 page personal statement of interest
- A 10-15 page writing sample
- CGPA of 3.3 out of 4.0 or GPA of 3.5 out of 4.0 for the last two years of study
- Proof of English proficiency for non-Canadian applicants whose mother tongue is not English and whose undergraduate education was not in English.

Test of English as a Foreign Language (TOEFL) IBT (Internet-Based Test): 86 overall, no less than 20 in each of the four component scores

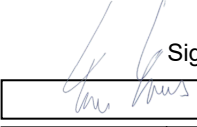
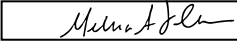
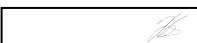
[IELTS](#) (International English Language Testing System): a band score of 6.5 or greater (Academic module)

The Admissions Committee's mandate is to decide whether: a) The applicant has the admission requirements to do graduate work, b) The Program is able to provide the scholarly expertise and supervision required for the student's interests. After evaluation, the Committee will decide whether to recommend acceptance of the candidate to the Office of Graduate and Postdoctoral Studies.

### Box 7.0 List of Consultations

Experimental Medicine  
Family Medicine  
Human Genetics  
Law  
Philosophy  
Religious Studies  
Epidemiology, Biostatistics, Occupational Health and Public Health

See Appendix for consultations

10.0 Approvals			
Routing Sequence	Name	Signature	Meeting Date
Department	Tim Evans		
Curric/Acad Committee	Melissa Vollrath		Oct. 18 2022
Faculty 1	Farhan Bhanji		Oct. 26, 2022
Faculty 2			
Faculty 3			
CGPS			
SCTP			
APC			
Senate			
Submitted by			
Name		To be completed by ES:	
Phone		CIP Code	
Email			
Submission Date			

**REMINDERS:**

\*Box 5.4 – Must be completed; see section 6.5.4 within the New Program Guidelines at:

<https://www.mcgill.ca/sctp/guidelines>.

\*\*All new program proposals must be accompanied by a 2-3 page support document.

## BIOETHICS AT MCGILL

### *The Thesis program*

The School of Population and Global Health proposes to establish a MSc Bioethics Thesis program at McGill which will be offered alongside a non-thesis MSc in Bioethics Thesis degree. The thesis program is designed for students who intend to pursue further studies in Bioethics, or in a discipline adjacent to Bioethics like Philosophy, Law, Sociology etc. Students in the thesis option will receive funding and close supervision in Bioethics research methods.

There is a large unmet demand for training that will prepare students to pursue academic careers in Bioethics. This unmet demand is especially striking in Canada. We propose to establish a MSc Bioethics Thesis program at McGill to meet this demand. Although this has long been the desire of the Biomedical Ethics Unit, this degree program is now possible where it had not been previously. Since joining the School of Population and Global Health (SPGH), the Biomedical Ethics Unit (BMEU) has been incorporated into a new department: the Department of Equity, Ethics, and Policy (DEEP). It thus now has status as a teaching unit to operate and offer an MSc program. Through this program, McGill will establish leadership in Bioethics training in Canada, while remaining apace with leading US academic medical centres. It will also establish training leadership in specific areas like research ethics, public health ethics, and empirical bioethics research—areas for which there is increasing student demand.

One of the key recommendations of the 2019 Cyclical Review of the BMEU was that it “be granted the institutional status and autonomy necessary to develop its own freestanding Master’s level program in Bioethics. Doing so will enable it to set its own admission requirements and bioethics course content and will improve the quality of the experience for students.” Within the report, the reviewers note that “having control over a standalone program will enable the BMEU to appeal to a wider pool of students, especially from social science and humanities disciplines not represented in the current programs that accept students into the specialization in bioethics. It would also allow the BMEU to develop a larger offering of bioethics courses that might be tailored more specifically to the needs of students pursuing a program in bioethics (as opposed to a different program with a ‘specialization’ in bioethics).” The current Graduate Program Director for the Bioethics Options fields dozens of inquiries each fall from students looking for an MSc in Bioethics. Many of these students are currently turned away because of their ineligibility for admission through our collaborating departments.

After successfully coordinating Bioethics Options since 1996, we are well prepared for this transition. The courses we have been teaching for more than 20 years will be updated and streamlined to form a cohesive base of required courses for our students. Complementary courses will continue to be provided by faculty affiliated with DEEP and by the departments that we have been working with for the Bioethics Options. All of the affiliated departments support this shift.

McGill would be one of four Canadian universities to offer a freestanding Bioethics Master's Program (the other three being Université de Montreal, University of Toronto, and Memorial University). The range of disciplinary expertise represented in the Department of Equity, Ethics and Policy (from epidemiology and economics through to moral philosophy) would make the McGill program stand out from others. Other stand out features include the international profile of many Department members, and the well-developed networks in the Global South that exist within McGill's School of Population and Global Health, and range of expertise would be unmatched by any of these programs. Within Québec, the Université de Montréal, through its École de santé publique, offers a few program options in bioethics. A research Master's [Maîtrise de recherche] is oriented towards research in bioethics, while a professional Master's [Maîtrise professionnelle] introduces students to the field of bioethics. These programs' success, the steady number of students in our Bioethics Options, and the number of student inquiries we receive and cannot currently accommodate indicates a need for greater graduate-level training capacity in Bioethics.

BMEU's merger with the Institute for Health and Social Policy to form DEEP dramatically expands both the depth and breadth of offerings. In addition, the excellence of related programs at McGill, including programs in Epidemiology, Social Studies of Medicine, Neuroscience, as well as relationships with hospitals like the McGill University Hospital Centre and Jewish General Hospital, will offer students an extraordinary opportunity to develop a variety of skill sets, content knowledge, and professional training. For example, students can take electives and receive supervision from professors in other departments, and enrolled in the practicum will have opportunities to observe clinical ethics consultation at one of Quebec's premier tertiary care facilities.

## BIOETHICS CURRICULUM

The field of Bioethics is fundamentally interdisciplinary, drawing on theoretical work, primarily in philosophy, along with theory and research in other disciplines including sociology, history, clinical medicine, and health policy. Bioethics scholars use a variety of empirical, legal, and analytic approaches to provide practical guidance on contemporary ethical challenges in the life sciences, health care, health policy, and population health. Traditionally, this incorporates ethical concerns inherent in informed consent for healthcare, medical decision-making, human subjects research, resource allocation, and implementation of new biomedical interventions and technologies. Emergent challenges now being addressed by scholars in academic Bioethics programs include a broad range of ethical dilemmas, such as those posed by global health endeavours, climate change, food and food security, animal welfare, and artificial intelligence. Graduates of Bioethics programs go on to careers in clinical ethics, research oversight, health policy, medicine, law, and academia.

M.Sc Bioethics Thesis (45 credits) Program Proposal  
EXECUTIVE SUMMARY For Biomedical Curriculum Committee

Given the diversity of intellectual influences and the range of potential careers, effective Bioethics training programs generally have three objectives, each of which will be met within our freestanding program. The first is to offer an overview of foundational theories and practices of bioethics through required core coursework. For instance, one key course, “Bioethical Theory,” will teach basic philosophical principles and theories underlying medical ethics (e.g., Principlism, Virtue Ethics, Feminist Ethics). This course will develop skills with various approaches to ethical analysis from a range of disciplinary traditions.

The second key objective is to develop content and methodological competencies around particular Bioethics problems. This will be achieved through three additional required courses offered by faculty members (i.e., Healthcare Ethics, Research Ethics, and Public Health Ethics). In addition, students will take courses on topics related to their thesis through 3 complementary 3-credit courses.

The third key objective is to develop basic skills in developing analysis or policy through addressing ethical challenges within healthcare, medical, or research settings. This will be achieved through course assignments and a Master’s thesis. The primary objective of the thesis is to develop skills in a) identifying ethical problems in medicine, research and life science policy, b) utilizing at least one methodology used in bioethics, and c) devising analysis or recommendations that are grounded in theory and evidence. Students are expected to complete their coursework in Year 1, and spend Year 2 researching and writing their thesis by working closely with a thesis supervisor.

By the time students graduate with a M.Sc. in Bioethics, they should be conversant in recurring Bioethics controversies. They should also have developed critical thinking capacities in Bioethics, a basic understanding of different research methods used in Bioethics and advanced competency in at least one, as well as deep content knowledge about a particular challenge or problem within Bioethics. Lastly, students should be capable of initiating and completing research aimed at identifying and analyzing problems in Bioethics.

#### RELATED PROGRAMS AT MCGILL

Currently, Master’s Options in Bioethics are offered through the following Master’s programs: LLM in Law, MA in Philosophy, MA in Religious Studies, MSc in Experimental Medicine, MSc in Family Medicine, and MSc in Human Genetics. The Bioethics training and exposure that the Option students currently receive comes entirely from courses offered through the Biomedical Ethics Unit core or affiliated faculty.

The Master’s Option program currently offered require coordination with six participating academic entities across campus, each with their own admissions process and course and thesis requirements. This program has typically enrolled 6-12 students/year, and draws students from across North America, Europe, and various other regions. However, coordination through six departments has been challenging. BMEU has found it nearly impossible to run a cohesive program; in addition, it turns away numerous applicants who do not “fit” into any of these pre-

M.Sc Bioethics Thesis (45 credits) Program Proposal  
EXECUTIVE SUMMARY For Biomedical Curriculum Committee

established Master's programs. These include students with backgrounds in the social sciences, social work, humanities, public health, political science, and public policy. In the future, we expect that the majority of the students who might have applied to the Bioethics Options will now decide to apply for the MSc Bioethics instead. In fact, a few of the departments intend to retire the Bioethics Option (namely Experimental Medicine and Family Medicine), while others may choose to keep it open for the few students who choose to apply. The MSc Experimental Medicine, Bioethics Option, is likely to be retired in short order regardless of the status of the new MSc Bioethics. The arrangement with Experimental Medicine was one of expedience and not one of affinity with Bioethics content. The LLM Bioethics Option will continue as it always has: this is a different degree than an MSc and is eligible for those with a Bachelor's of Law.

Aside from the Bioethics Options currently in existence, there are no other closely related programs at McGill. The MSc in Public Health Non-Thesis offers interdisciplinary programming in global health, epidemiology, and health policy. However, it does not offer any program stream in ethics/bioethics. The ethics course currently offered to MScPH students on public health ethics is taught by a DEEP faculty member and will become one of the required courses for the Bioethics M.Sc. students. There are individual courses offered on campus related to bioethics and these will be offered as complementary courses to Bioethics students. However, there are no other Master's programs related to our proposed program.

#### GROWTH AND DEVELOPMENT

We expect to see an initial cohort of three students per year, in addition to enrolling approximately 10 non-thesis degree students who will comprise the majority of the cohort. There are at least eight faculty members in DEEP prepared and willing to supervise these students. This has been standard for our option and we expect it will continue. In addition, we have always had and will continue to have the support from the department's associate members who are also permitted to supervise students. We currently receive 35-45 applications for the Bioethics Options across the six departments. We expect that most of those will now apply for the MSc (thesis or non-thesis) in Bioethics instead (with the exception of those students applying for an LLM). In addition, we expect to attract new applicants who were not previously eligible (e.g., those with backgrounds in public health, bioethics, social sciences, political science, psychology). As the program becomes established, we hope to hire new faculty to accommodate more students in the future, with a goal of enrolling five to eight MSc Thesis students per year within five years' time.



**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 April 2022**

**TO: Andrea Bjorklund, Associate Dean (Graduate Studies) – Faculty of Law**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course *CMPL 642 Law and Health Care* taught by your department that has been included in the program's list of courses.

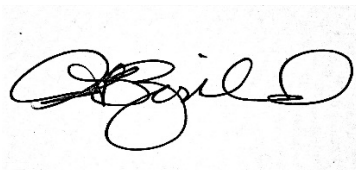
      X      

NO OBJECTIONS

\_\_\_\_\_

SOME OBJECTIONS

COMMENTS:



Signature: \_\_\_\_\_

Date: \_\_\_\_\_

6 May 2022

**APPENDIX 1**

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 10 May 2022**

**TO: Dr. Rebecca Fuhrer  
Chair - Department of Epidemiology, Biostatistics and Occupational Health (EBOH)**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

**The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.**

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

**Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course *PPHS 624 Public Health Ethics and Policy* taught by your department that has been included in the program's list of courses.**

**XX            NO OBJECTIONS            XX            SOME OBJECTIONS**

**COMMENTS:**

EBOH has no objections to the creation of the MSc in Bioethics. However, we are concerned about its impact on a course offered in our Department and anticipate that creation of a new Bioethics Master's will likely increase enrolment in PPHS 624 (a required course for Bioethics), a course that is heavily subscribed to by EBOH students and that has consistently earned praise from students in our program. As the Bioethics Master's program moves forward, it will be important for SPGH to anticipate administrative and budget arrangements to reflect the contributions of different departments to programs outside their department. This means that we strongly urge SPGH to anticipate administrative, budget, and teaching resources necessary to allow PPHS 624 to serve Bioethics Master's while continuing to play a vital role in the Epidemiology MSc and PhD programs and the MScPH program in EBOH.

**Signature:**  \_\_\_\_\_

**Date:**     10 May 2022

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 November 2022**

**TO: Dr Anne-Marie Lauzon, Graduate Program Director – Division of Experimental Medicine**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal.

**X**

\_\_\_\_\_ **NO OBJECTIONS**

\_\_\_\_\_ **SOME OBJECTIONS**

**COMMENTS:**

**Signature:**



**Date:**

**April 14, 2022**

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 April 2022**

**TO: Dr Isabelle Vedel, Graduate Program Director (Masters)**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

**The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.**

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

**Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal.**

**X      NO OBJECTIONS    \_\_\_\_\_    SOME OBJECTIONS**

**COMMENTS:**

**Signature: Marion Dove**

Digitally signed by Marion Dove  
DN: cn=Marion Dove, o=McGill  
University, ou=Department of  
Family Medicine,  
email=marion.dove@mcgill.ca,  
c=CA  
Date: 2022.04.22 10:45:39 -0400'

**Date: April 22, 2022**

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 November 2022**

**TO: Dr Eric Shoubridge, Chair – Human Genetics**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

**The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.**

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

**Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course *HGEN 660 Genetics and Bioethics* taught by your department that has been included in the program's list of courses.**

**\_\_\_\_\_ xxx \_\_\_\_\_ NO OBJECTIONS \_\_\_\_\_ SOME OBJECTIONS**

**COMMENTS:**

**Signature:**



**Date:**

**3 November, 2022** \_\_\_\_\_

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 April 2022**

**TO: Dr Ian Gold, Chair - Department of Philosophy**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course *PHIL 643 Seminar: Medical Ethics* taught by your department that has been included in the program's list of courses.

\_\_\_\_\_ **X** \_\_\_\_\_

**NO OBJECTIONS**

\_\_\_\_\_

**SOME OBJECTIONS**

**COMMENTS:**

**Signature:**

*Ian Gold*

**Date:**

**6 May 2022**

**CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS**

**DATE: 5 April 2022**

**TO: Dr Garth Green, Director of School of Religious Studies**

**FROM: Dr Jennifer Fishman, Graduate Program Director – Biomedical Ethics Unit**

**The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.**

**Program Title: Master of Science (M.Sc.) Bioethics (Thesis)**

**Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course *RELG 571 Ethics Medicine and Religion* taught by your department that has been included in the program's list of courses.**

**X              NO OBJECTIONS  SOME OBJECTIONS**

**COMMENTS:**

**I understand from program proposal documents shared with me that the proposed SSMU Bioethics MSc would not affect the SRS Bioethics MA. On that condition, I am glad to see its advent, and will be glad to see it run parallel with our degree. I further am encouraged that our core course will be employed therein.**

**Signature:                                 garth w green**

**Date:   4 may 2022**