MacPherson Student Partners Posting – Winter 2019

In 2013-14, the Arts & Science Program and the MacPherson Institute (then known as MIIETL) collaborated to create "student scholar" positions for students who are interested in pedagogical research and innovation. Since this time, a wide range of students from across campus have contributed to the enhancement of teaching and learning at McMaster by participating in projects run at or in partnership with the MacPherson Institute. Members of the student partner team have contributed to the design and development of new courses, helped to create resources for faculty and students, and collaborated with staff and faculty partners on research projects related to teaching and learning. Several have also co-authored research articles and conference presentations related to their work.

Encouraged by these successes, we're thrilled to continue the student partners program in Winter 2019. We're currently looking for students to work on a number of projects. Some of these are already underway, while others are just being formulated, so students will have opportunities to enter into the work at the stage that is most of interest to them. These positions will involve 25-65 hours of paid work, between January and April 2019. The specific number of hours worked will depend on the project.

Projects for which student partners are currently being recruited are described on the following pages. If you are interested in filling one of the student positions, you will be asked to identify **ONE to THREE** of these projects and write a brief (~250 word) interest statement for each. These project interest statements should include the following:

- A description of why the project seems interesting/important to you. (Why do you want to join the project team? What are your goals in relation to the project?)
- A proposal for the role you might play on the project team. (What might you *do* to develop the project and help it meet its goals? What work do you see yourself carrying out?)
- An indication of the skills/experiences/interests/perspectives that you'd bring to the project team. (Why are you a good fit for this project?)

To apply, submit your project interest statements, along with some information about yourself, using the following application form: **https://tinyurl.com/SPPWinter19**

Any student (undergraduate or graduate) enrolled at McMaster University is eligible to be a Student Partner. While prior experience with teaching and learning research/practice would be an asset, it is NOT required. We're interested in working with a wide variety of students with a range of backgrounds and experiences, including members of equity seeking groups. Some projects do indicate preferences for students with particular experiences, skills, or educational levels, so be sure to read the project descriptions carefully and make the case for why you would be a good fit.

Applications MUST be received by **27 November 2018 at 4:30p.m.** to be considered.

Further information about the student partners program, including guidelines for the application process, can be found in the Student Partners Handbook. If you have any questions about the student partner team, or about the MacPherson Institute and its work, please contact Dr. Beth Marquis at mi_sap@mcmaster.ca.

Project Descriptions: Winter 2019

Course Design and Delivery Consultants
Students will be paired with instructors to work collaboratively on (i) designing or redesigning aspects of a particular course, or (ii) providing feedback and suggestions on the delivery of a course (i.e., student partner attends some lectures and offers feedback).

Student partners will meet with the program coordinators from the MacPherson Institute (Rebecca Taylor and Gabrielle Foran) on Saturday, January 12 from 10am – 3pm, and then for approximately 1 hour per week to discuss relevant pedagogical theory, to provide meaningful feedback, and to offer effective mentorship.

The student partners are expected to meet with their faculty partner for 30-60 minutes per week to provide feedback and assistance in course development and delivery. In addition, the student partners will have approximately 2 hours per week for their own independent working time. The time commitment for the student partner is approximately 4 hours per week. We anticipate that this project will involve approximately 50 hours of work, over the winter term. Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

Below are the faculty partners who are seeking student partners to assist them in course design or delivery. *If you are applying for one of these partnerships, please clearly indicate which faculty member and course you are interested applying to in the FIRST SENTENCE OF YOUR STATEMENT OF INTEREST.*

Course: Media, Art, and Anthropology (Anthro 2MA3)
- Faculty Partner: Petra Rethmann
- Design or delivery partnership: Design
- Undergrad or grad preferred: Undergrad (prefer Social Science or Humanities student)
- Additional information: This instructor is excited to partner with an undergraduate student to gain their perspectives and insights on how to tackle the issue of media, particularly for Social Sciences students

Course: Canadian History 1885 – present (Hist 2TT3)
- Faculty Partner: Mary Chaktsiris
- Design or delivery partnership: Design
- Undergrad or grad preferred: Undergrad
- Additional information: This instructor will be designing a rotating blended learning approach with face-to-face tutorials and would appreciate a student's perspective. Possible design elements include a new assignment where students create 'time capsules'.

- Course: Visual Neuroscience (Neurosci 3J03)
  - Faculty Partner: Nikol Piskuric
  - Design or delivery partnership: Design
  - Undergrad or grad preferred: Undergrad

  o Additional information: This course is being redesigned to take on more of a neuroscience perspective. The faculty partner is keen to work with a student to ensure the redesigned components are valuable, interesting, and engaging.

Course: Intro to Language and Society for Business Students (IBH 1AC3)
- Faculty Partner: Nikolai Penner
- Design or delivery partnership: Design
- Undergrad or grad preferred: Undergrad
- Additional information: This course redesign is focused on developing an appropriate level of content related to basic linguistic terminology and the necessary tools to examine the relationship between language and society. The course is part of the new Integrated Business and Humanities program.

Developing a Course Worth Credit for Extracurricular Involvement in Student Groups
The goal of this project is to develop an Experiential Learning course for engineering students to earn course credit for their non-technical contributions on student societies or groups, through the development of a Learning Portfolio. To ensure this course most appropriately suits the needs and goals of a diverse student population, we are seeking two Student Partners to assist in the co-creation of this course. The type of work involved will likely include: researching existing best practices, identifying the types of students likely to enroll in this type of course and what their primary learning outcomes are, developing and analyzing qualitative results from surveys and focus groups, developing appropriate teaching techniques, and dissemination of the work.
This course is in the early curriculum committee approval stages, to be offered in the 2019 Fall term.

It will be developed and taught by Dr. Stephen Mattucci, a Postdoctoral Fellow in Engineering Education, and supported by Dr. Ken Coley, Engineering Associate Dean Academic.
Since we are in developmental stages we realize that many different skillsets can likely be utilized to develop this course, so we encourage anyone with a strong interest in experiential learning, and development of professional skills to apply. However, we imagine certain skills and experiences will be particularly useful, including:

- History of continued engagement with extracurricular engineering student groups and societies
- Social sciences background with experience developing and analyzing qualitative survey and focus group data
- Educational background (i.e. completed an ISW), and interest in developing a student-centered course

We anticipate that this project will involve approximately 40-50 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level

Developing Longitudinal and Alumni Surveys for the Life Sciences Program

The Life Sciences Program has undergone extensive development over the last 5 years. One of the major revisions has been to refocus the curriculum on 4 'pillars of learning', namely 1) communication skills, 2) laboratory/research skills, 3) experiential learning, and 4) knowledge translation. Accordingly, Life Sciences students take courses from 4 course lists that relate to these categories. The intention of the program redesign was to ensure that all graduating students possess the expert communication and research skills – in addition to a breadth and depth of knowledge – required for postgraduate education or work.

In order to examine whether the current curriculum is achieving these desired outcomes, we are designing longitudinal and alumni surveys that will assess the development of Life Sciences students throughout their undergraduate education, and beyond graduation. We are seeking Student Partners to help create the qualitative and quantitative tools that will be used to evaluate student progress and feedback. Hopefully, partners will also be involved in distributing the first round of longitudinal surveys, as well as in the preliminary analyses of survey results. Student perspectives and survey results will inform decisions related to future curriculum development in the Life Sciences Program.

We anticipate that this project will involve approximately 55 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

The successful applicants will work with the Life Sciences Program Coordinator, Dr. Nikol Piskuric, as well as other faculty and staff in the School of Interdisciplinary Science. We are seeking undergraduate students in levels II, III and IV of the Life Sciences Program.

Evaluating and Developing Specializations within the Life Sciences Program

In 2017, the Life Sciences Program launched 2 new specializations – Origins of Disease and Sensory Motor Systems. The specializations are designed to provide students with a breadth and depth of knowledge in a defined, interdisciplinary field, while also providing a sense of cohort within the largest program in Science. One goal of this Student Partners research-based project is to evaluate the effectiveness and value of the 2 new specializations, and to provide recommendations for improvement of these specializations moving forward. A second goal is to develop potential new specializations that are of interest to Life Sciences students. Together with the Life Sciences Program Coordinator, Dr. Nikol Piskuric, student partners will develop and distribute student and faculty surveys, as well as analyze and prepare summaries of survey results. Student Partners may also administer interviews and lead focus groups.

We anticipate that this project will involve approximately 60 hours of work. We are seeking applicants currently enrolled in the Life Sciences Program in levels II, III, or IV; enrolment within a specialization is not required.

Learning from your Mistakes

Post hoc review of tests/examinations is an important feedback mechanism in helping students to understand why they chose the wrong and right answers on the exam (Ambrose 2010). From these insights, they can then adjust their pre-class and in-class learning strategies and their pre-exam/test review strategies. Often insights about exam/test taking in a course can benefit exam/test performance in other courses. However, the response rate to opportunities for post hoc review tends to be quite low - in my experience less than 10% of enrolled students year after year. There are many reasons for this but there appear to be some factors that might enhance response. For instance, an easy anonymous online process to sign up, optional, not mandatory, interaction with the instructor/TA during the review, and so on.

I (Dr. Frances Tuer) am looking for a student who can review the current literature on this topic, help design online surveys for students who did and did not come for a review in my second year course this term (Fall 2018), and possibly do some follow-up interviews with students. Having a student perspective is essential to brainstorming about possible issues and how to phrase survey and interview questions. Ideally, I would like a Student Partner who has not/does not typically go for post hoc test/exam reviews and who does not typically interact with faculty/Teaching Assistants. A student with a lower GPA, or someone with insight or experience of accessibility in the classroom is particularly encouraged to apply as these are the perspectives that would really benefit this project. I would like a Student Partner who is in Commerce as long as they are not taking a course with me in Winter 2019. If no one from Commerce applies I am quite happy with a student from any discipline where they have formal tests/examinations and students don't typically go to review their exams/tests.

We anticipate that this project will involve approximately 25-45 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Undergraduate students of any level are welcome to apply.

Mapping Visual Literacy in the Life Sciences

Visual literacy, an important skill used in today's world, can be defined as the ability to evaluate, apply, and create conceptual visual representations. The central goal of this project is to better understand to what extent and how is visual literacy currently embedded in the life science program curriculum. Ideally, students should be introduced to the use of visual literacy in the life sciences in a progressive way to ensure this skill is developed properly and effectively. Therefore, developing and carrying out instructor and student surveys, focus groups, and interviews to gather this information and map how visual literacy is being used currently in the program will be a great starting point from which to reflect and build upon. This project has been planned by Dr. Veronica Rodriguez Moncalvo and science librarian Abeer Siddiqui. It is in its planning stages and set to start in Winter 2019. The project is open to all students. An interest in visual literacy is not a requirement but it would be ideal to be part of this project.

We anticipate that this project will involve approximately 45-65 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level

MSU Macademics: Undergraduate Resource Guidebook
This project will invite Student Partners to collaborate with MSU Macademics to create a MacPherson 'Guidebook' similar to the "New Faculty Guide to Teaching & Learning at McMaster" and reflecting the values of Macademics' "Resource Hub." The goal of this project will be to develop a guidebook document to be published on the MacPherson Institute website that will provide academic resources to undergraduate students in the context of teaching and learning at McMaster University. Currently, a MacPherson guidebook does not exist for undergraduate students, so student partners will help develop the guidebook through conducting focus groups/online survey, interviews with McMaster faculty and other experts or stakeholders in Hamilton, and researching areas of interest (e.g. pedagogy, campus resources, learning innovations) to compile a thoughtful and student-centered guidebook to be used by undergraduate McMaster students. The guidebook will present an updated collection of evidence-based research, campus information (e.g. library resources and hours), student testimonials, and strategies for students similar to those of the "Teaching Assistant Guide."

Student Partners will work with the MSU Macademics team, most predominantly with service Coordinator, Angel Huang, and Research and Resources Coordinator, Danny Ma. Student Partners will also work with Dr. Michael Agnew, MacPherson Institute Postdoctoral Research Fellow, to develop and reiterate project aims throughout the process.

We anticipate that this project will involve approximately 25-45 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Undergraduate students of any level are welcome to apply. Experience in research, guide writing, and digital/media design will be of great help, as will an enthusiasm for resource dissemination and an interest in advocacy for undergraduate student success.

Redesigning Level 2 Labs in Chemistry and Chemical Biology
Our Level 2 chemistry and chembio students take identical lectures but have drastically different lab experiences. The purpose of this project is to re-design our level 2 laboratory curriculum so that: (1) the two groups of students are united and their perceived inequality is reduced; (2) both groups have access to research-grade equipment and exposure to problem solving and experimental design.

The project is currently underway as the labs are set to begin in September 2019. We have three main tasks to be completed by September 2019: (A) creating or sourcing videos to highlight laboratory skills; (B) testing and troubleshooting new experiments; (C) developing inquiry or guided-inquiry protocols for students.

The incoming student partners would be working together with the current student partner (Shanu Xavier) and myself (Sharonna Greenberg), and we would be collaborating with the level 2 laboratory departmental committee (Willie Leigh, Phil Britz-McKibbin, Kylie Luska, Jim McNulty, and Igancio Vargas-Baca), and report our progress to the department.

We anticipate that this project will involve approximately 46-65 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

We are seeking two students (in addition to our current student partner) in chemistry or chemical biology. The students could be in Level 3 or 4, they could be graduate students who completed chemistry or chemical biology in their undergrad, or they could have TAed for Chem 2LA3, Chembio 2OA3/2OB3, or Chembio 2AA3.

Student Curriculum Consultant (2019 IQAP)
Several undergraduate and graduate programs are scheduled to undergo a program review over the 2019-20 IQAP cyclical year and would like to form a partnership this term with one student in co-creating the program's self-study. As a student curriculum consultant, the student will work with faculty to ensure student perspectives are included in the self-study document. The goal of this collective self-reflection is to create a self-study document that reflects student experience. It will also give the student partner a valuable professional experience, relevant to all students interested in teaching and learning, Higher Education and administrative positions in academia or government. Amy Gullage (MacPherson) is looking for students who has familiarity with at least one program scheduled to be reviewed (IQAP Cyclical Review Schedule), either as a former student of the program or as a Teaching Assistant. Required skills include: leadership, team-work, good social skills, interest in community involvement, good time management skills, pedagogical interests, analysis skills.

Required application information: Student applicants must specify with what program they would like to partner. **Please refer to schedule link above to see what programs are being reviewed**.

We anticipate that this project will involve approximately 25-45 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Graduate students of any level are welcome to apply.

The McMaster Model of Nursing: Exploring the Verbal & Non-Verbal Dialogue
Central goals:
- To develop a stand alone, interactive, independent learning package to assist junior & intermediate student nurses Levels (1-3) to understand the significance of dialogue within the McMaster Model of Nursing.

- To create a learning enhancement that faculty & students can use in part or in its entirety in the classroom to demonstrate the concept of dialogue within the McMaster Model of Nursing.
- To assist new faculty with understanding key concepts relevant to enacting the dialogue within the McMaster Model of Nursing congruent with the perspective of novice to intermediate BScN students.

Purpose:
To create an engaging educational e-module for BScN students & faculty new to the BScN Program, informed by a student perspective.

Proposed outcome:
The creation of a learning tool that is student friendly with respect to presentation & content; how ideas are sequenced; terminology & frame of reference. As an independent learning package it is essential to have the package roll out in a way that engages the student. Therefore the aim is to have a learning tool informed through the lens of a student who has experienced the initial encounter with the model & can retrospectively reflect on their experience & what might have been more engaging. A senior student (year 4) has had the introduction to the concepts & has tried to generalize this learning to understanding encounters with patients in acute clinical settings. They will have recent recall of what the experience is like to hear these terms for the first time and therefore can provide insight into to present & explain the message so it resonates with the novice BScN student.

Examples of kind of work:
- Student partner process: Student & faculty member will collaborate to determine how to go through with the script development process.
- Specific activities: develop student friendly knowledge related to the model, script & comprehension checks. These will occur after describing the model & after each of the interviews. In consultation with faculty will develop a script for the interviews & debriefs

We anticipate that this project will involve approximately 46-65 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates.

Thesis Writing Toolkit Development
The aim of this project is to create a compilation of thesis writing resources, tips and tricks to be made into a book for use by Master's and PhD students at McMaster. The primary goal is knowledge translation and professional development for graduate students. Successful applicants would work with Katie Steeves (Grad Student Writing Consultant) to develop this resource as a new project set to begin in January 2019. Some possible topics that could be included in the resource are: pre-writing, writing to a schedule, getting past writer's block, organizing large amounts of literature, navigating the thesis defense process at McMaster, etc. Collaborators will share authorship in the teaching and learning resource produced over the semester, and can

expect to be engaged in research and reviewing literature on best practice in graduate writing, as well as writing sections of the resource.

We anticipate that this project will involve approximately 46-65 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

This position is open to Master's or PhD students. Demonstrated experience in research and writing are assets.

Video Assignments for the Digital Age

Digital video is an ever-more-relevant format in the digital age, and increasingly important in innovative teaching and learning contexts, including (but not limited to) course work. Increasingly, instructors express an interest in permitting students to opt for video submissions as an alternative to the traditional essay format, but some barriers remain. First, many students lack the skills or awareness of available resources to confidently pursue a video option. Second, many instructors find it difficult to envision assessment and evaluation criteria for a video format, in order to assure that important learning objectives such as thoughtful engagement with research evidence are met at a sufficient level.

This project, still in the conception and planning stages, creates a space for student partners to help develop a set of resources to support students, instructors, and other community members to make video projects more practicable. Working with Dr. Mark Busser, Academic and Experiential Learning Coordinator in the Faculty of Social Sciences, team members will collaborate in the Winter term of 2019 to: conduct background research into best practices for video assignments; perform an environmental scan of courses with already-effective video assignments in the McMaster community; formulate transferrable sample evaluation criteria; and assemble multimedia resources aimed at encouraging student take-up and stylish, effective productions. The team will comprise one (1) graduate student with some level of teaching, tutorial leadership and/or marking experience, and one (1) undergraduate student with at least basic or intermediate video production skills or experience.

We anticipate that this project will involve approximately 46-65 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or PhD students