

Designing and Piloting an Interdisciplinary Field Experience: Forward With Integrity Project FINAL REPORT May 2016

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What was the Interdisciplinary Field Experience project about?

The project goals revolved around the design and pilot of a 10-day excursion in the Great Lakes region of Ontario for an interdisciplinary group of students. The course will enhance the learning and experiential opportunities available to undergraduate students from a number of disciplinary backgrounds, who will work collaboratively on research projects and examine the complex interactions between the physical and cultural aspects of their local environment. In particular, students will address questions regarding water resources in the Great Lakes, glacial histories, mineral resources, impacts of invasive species and responses to climate change. Recently further emphasis has been placed on the incorporation of experiential learning and community engagement into undergraduate courses. This course will give students the opportunity to spend ten days exploring their local environmental and furthering their knowledge of the region.

How did the activity enhance the competence and effectiveness of individuals (or others) with respect to teaching, research, service and/or leadership?

For all involved it was an opportunity to combine our experience in running field trips with our varied academic backgrounds and interests to produce a single course intended to have wide appeal. This was beneficial as it required in-depth conversations as to how students should best experience the different opportunities available within the course. It was immensely valuable to all involved to listen to the varied strategies and successes stories from past teaching and learning experiences shared while trying to create a cohesive course intentionally covering a wide array of topics. While teaching and learning are often discussed within the faculty setting, having a chance to pull together thoughts from numerous passionate and experienced instructors towards a single project is an opportunity that doesn't often present itself.

Students, both undergraduate and graduate, were heavily involved with the development of the course. While it is common to get the perspective of students in designing a course, it is rare that you get the opportunity to employ students from day one and gather their views and thoughts. This proved to be a valuable experience for all involved and helped shape the course in directions not initially considered.

How has the activity contributed to the goals of a course/Faculty?

One of McMaster's goals has been an improvement of the student experience and this course aims to help fulfill that. With courses such as SCI 3S13:Field trip to Iceland having such success (See McMaster Daily News Article: <http://dailynews.mcmaster.ca/article/12-photos-from-what-might-be-the-coolest-field-trip-ever/>), it was determined that a regional course giving student similar experiential learning opportunities in a setting closer to home would both improve the student experience and emphasize a sense of community engagement.

What have been the results of your evaluation of the quality of the expected development and its potential impact?

The course is yet to run so evaluation of the impact is still something that needs to be done. With the interest in field courses growing in the Faculty of Science, coupled with an increased emphasis placed on Interdisciplinary Sciences with the new School of Interdisciplinary Sciences and the Arts & Science Program, it is expected that this course will be popular with students. There will be careful evaluation of the course after the first iteration based on formal student evaluations, post-course meetings and conversations with students.

How have you communicated and disseminated the insights gained with peers and broader McMaster communities?

Once the course has dates assigned to it, students in the Faculty of Science and the Arts & Sciences Program will be invited to apply to the course in addition to traditional advertisement such as posters and discussion with student leaders. After the course has been run it is expected a formal presentation to the Director of the Arts & Sciences Program and the Dean of Science will be made to inform them of the successes and challenges. As field courses are becoming a popular discussion point at both discipline specific and educational conferences it is assumed this course will be discussed to an audience outside of McMaster.

How will the outcomes of the project be sustained or expanded?

Prior to the course being run it is expected that the McMaster Institute for Innovation and Excellence in Teaching and Learning (MIETL) will assist in organizing proper evaluation techniques for the course. This will be used to inform the successful development of the course to ensure sustained success.

Please outline any barriers or challenges that may have prevented you from achieving some of your project goals?

We initially hoped the course would run in the summer of 2016 but changes to the Faculty of science budget and the implementation of the School of Interdisciplinary Sciences caused for unexpected delays and barriers. The project is ready to implement, just a year behind.

We would like to thank the FWI Funding Program for their support for this initiative.

Sincerely,

Dr. John Maclachlan, Dr. Carolyn Eyles, Dr. Chad Harvey, Dr. Jean Wilson, Mr. Russ Ellis and Dr. Jason Brodeur