

# Indigenous Environmental

Studies/Sciences



2017/2018



*Before all other words are spoken, we extend greetings to all of creation...*

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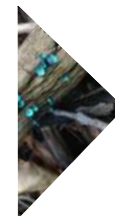
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# Greetings from the Director

Shé:kon Sewakwé:kon Greetings everyone,

*It's a privilege to be able to provide the Indigenous Environmental Studies and Sciences Annual Report for 2017-2018. We have had another extraordinary year with the privilege of teaching and learning with extraordinary students. This year we graduated 15 students; many in the IESS Bachelor of Arts degree and we continue to see a significant increase in those choosing to major in IESS as a Bachelor of Science degree. Students, whether majoring in the studies, sciences, or with a joint-major, have had the opportunity to build a stronger background within the social and natural sciences; creating momentum within the job market and providing recognition for students with a multiplicity of skillsets when they graduate.*

*We have been able to host several interesting events throughout the year. Our welcome feast in October embraced new students into the program and facilitated the opportunity to develop mentorship relationships with upper year students. This event is an opportunity for students to create a stronger network that help and support one another.*

*We have had some outstanding guest speakers this year, providing excellent lectures with our students. Joe Pitawanakwat provided lectures around traditional medicines and foods, Caleb Musgrave on traditional skills, Brigitte Evering on Knowledge Constellations and learning, and Marcelino Entzin Lopez on Indigenous resistance and community capacity. We also hosted Algonquin Elder and Environmental advocate Larry McDermott and Mi'kmaw Elder Albert Marshall from Cape Breton, Nova Scotia to share with the students, as well as a number of other interesting lecturers and guest speakers.*

*We are most pleased to announce the creation of the Indigenous Environmental Institute (IEI)- a new non-profit dedicated to public education, professional development and training, and community-based research. The Centre will be located in Bata Library alongside the IESS Resource and Tutoring Centre which will be moved from the KWIC Office and will include a new IESS student research space with a lounge for students to gather and engage with each other and leaders in the field of IESS. We look forward to this all-encompassing space to generate even more collaborative work and community between students, guests and faculty.*

*We are very happy to provide the 2017/18 report that brings together the different activities, projects and initiatives we have undertaken throughout the year. This report celebrates the achievement of the program and, more specifically, our students. We also wish to recognize our teaching faculty and teachings assistants for their help and dedication. The collection of these reports shows the continuing emergence of the discipline of IESS.*

*I am very happy to provide this to you and am looking forward to the exciting journey ahead. Thank you for reading and hopefully continuing your support for IESS.*

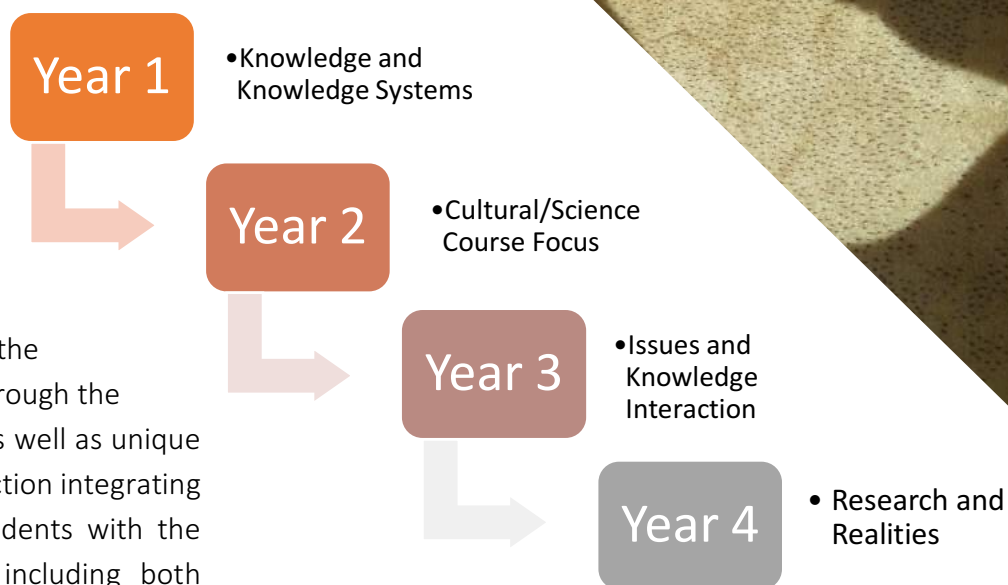
*– Dan Roronhiakewen Longboat*



# The Program: Indigenous Environmental Studies/Sciences

Indigenous Environmental Science/Studies at Trent University is an innovative and multidisciplinary program. It brings together principles of both Indigenous Knowledge and Western science through courses offered in the Indigenous Studies Program and through the Trent School of the Environment as well as unique courses within the program. Instruction integrating these approaches will provide students with the necessary knowledge and skills, including both critical and integrative thinking abilities, to begin to address the complex environmental problems facing Indigenous communities, governments, business, industry, research, and society in general.

Students may complete a B.A. in Indigenous Environmental Studies or a B.Sc. in Indigenous Environmental Science. The program also offers a Diploma in Indigenous Environmental Studies/Science which is intended for students of Indigenous ancestry who may be interested in specific education opportunities or a pathway to a university degree. In addition to the program requirements listed for each respective option, students must also satisfy the University degree requirements.



Indigenous Environmental Science/Studies offers a variety of courses for students interested in bringing together Indigenous and Western science to address complex environmental issues. The foundation upon which the program is based recognizes both the strengths and limitations of any single perspective, and seeks to develop interactive and integrative thinking to address environmental, health, and social issues. Learning and problem solving are focused on benefiting both Indigenous and non-Indigenous communities.

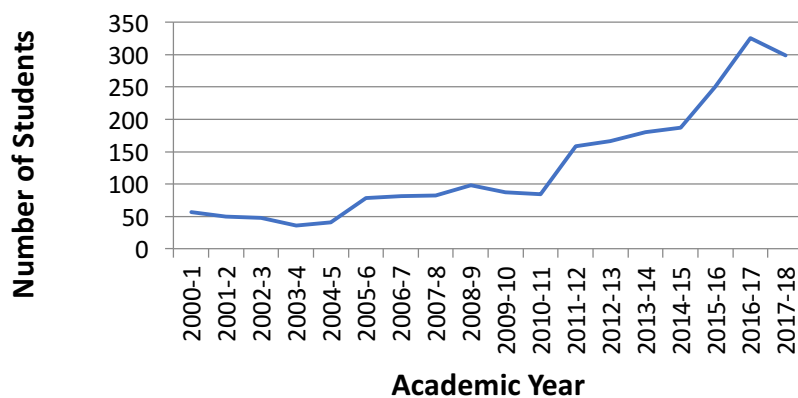
# Program Growth

The IESS program is expanding its courses and enrollment remains high. We also have the highest number of IESS majors we've had so far with 46 students plus two students in the diploma program.

## IESS Majors

2011-12	18
2012-13	24
2013-14	29
2014-15	29
2015-16	27
2016-17	36
2017-18	46

**Total number of students in IES courses  
2000-2017**



## Faculty and Staff Biographies

### *Dan Longboat*

IESS Founding Director and Associate Professor  
IEI Acting Director



Dr. Dan Longboat Roronhiakewen (He Clears the Sky) is Mohawk from the Six Nations of the Grand River. Dan is an alumnus of Indigenous Studies at Trent U and completed both his Masters and PhD in Environmental Studies at York University. He is an Associate Professor and the founding Director of the Indigenous Environmental Science/Studies Program and the acting director of the Indigenous Environmental Institute (IEI) at Trent U. Dan is celebrated for his Traditional Haudenosaunee (People of the Longhouse) knowledge and embeds cultural knowledge into his developmental work and teaching in Indigenous Environmental Studies/Science. He is invited to share his knowledge across the country lecturing on Indigenous environmental issues, cultural education and Indigenous environmental knowledge.

### *Chris Furgal*

IESS Associate Professor

Chris Furgal is cross-appointed to the Trent School of the Environment and the Chanie Wenjack School for Indigenous Studies and is Director of the Health, Environment and Indigenous Communities Research Group (<http://heicresearch.com/>) and Co-Director of the Nasivvik Centre for Inuit health and changing environments (<http://www.nasivvik.ca/>). His teaching and research interests are in the areas of Indigenous environmental health and Science-Indigenous Knowledge interaction. He has been working with Arctic Indigenous communities and organizations on issues of environmental health for over 25 years.



# Faculty

IESS Associate Professor

Barbara Moktthewenkwe is a Bodwewaadmii Anishinaabekwe of the Citizen Potawatomi Nation in Shawnee, Oklahoma and traditional knowledge holder. She currently holds Limited Term Appointment in the Chanie Wenjack School for Indigenous Studies as a lecturer, and is a PhD Candidate. In addition to IESS1001H, Barbara is the course instructor for the Foundations of Indigenous Learning first year courses. In past years, she has co-instructed INDG3500 Indigenous Women, and instructed the on-line course INDG4205 Indigenous Women and Settler History. Barbara was the lead TA for Introduction to Indigenous Environmental Studies (INDG2601) for three years, and was nominated for the Trent Award for Excellence in Teaching Assistance. She is a Professional Engineer with over ten years' experience in consulting engineering. Barbara's PhD research focuses on the reclaiming, restoring and revitalization of Bodwewaadmii women's water knowledges and practices.



## James Wilkes

IESS Associate Professor



James Wilkes is a cultural ecologist and educator who is dedicated to social and environmental justice, Indigenous and Canadian rights, land protection and biodiversity, as well as decolonization, rehumanization and knowledge revitalization. James has been fortunate to live and work in several remote communities, traveling extensively throughout the Americas and East Asia. His educational and experiential background is rooted in diverse understandings of the environment, coupled with interests in revolution and resurgence, Indigenous law, spirituality, sciences and knowledge system interaction. James's courses at Trent University highlight the need for improved environmental policy that: respects the relationships,

responsibilities and knowledges of Indigenous peoples; recognizes the rights, laws and autonomy of Indigenous communities; and involves Indigenous people in fair, open and meaningful ways. James works to support the continuation of ecological and cultural diversity through action, teaching and research, including land use studies and map biographies. James is an instructor in the Indigenous Environmental Science/Studies Program (IESS) at Trent University, and he is currently undertaking a PhD in Environmental Studies at Queen's University.



Teaching Assistants

Nikki Auten



TA: Introduction to Indigenous Environment Studies (IESS2601Y)

Nikki Auten (Tayohseron:tye) is Kanyen'keha:ka (Mohawk), turtle clan and a mother of three. She is currently a Master of Arts candidate in the Sustainability Studies program at Trent University, focusing on regaining health through active engagement in relationship with various Beings within Creation. She has received her Honours Bachelor of Arts in Indigenous Studies at Trent and as well as her teacher's certificate through the Aboriginal Teacher's Education Program at Queen's. She is actively involved in seed and food sovereignty efforts both here and in her home community of Tyendingaga. She prides herself in sharing knowledge around growing and preparing some of the traditional foods of her people, the three sisters: corn beans and squash. Nikki has done some filmmaking about her language learning journey, which was shown at the Reframe Film Festival in 2018. Language continues to be the driving force behind her education and her understanding about the world in which we live.

Shirin Nuesslein

TA: Indigenous Peoples, Health and the Environment (IESS 3730)  
Tutor for the IESS Resource Centre  
Research Assistant for the Health, Environment and Indigenous Communities Research Group

Shirin Nuesslein is a MA student in the Sustainability Studies program. Her thesis is supervised by IESS Program Co-director Dr. Chris Furgal and explores factors that influence health vulnerabilities in Indigenous populations. Specifically, she looks at the key factors influencing the food security status of Inuit Elders in Nunatsiavut, the Inuit Settlement Region of Northern Labrador. Findings will provide a more nuanced understanding of the vulnerabilities to food insecurity experienced by groups within the Inuit population and the conditions required to promote food security, and ultimately health, for all residents, including vulnerable groups within an already food insecure population. Shirin has a BA in Environmental and International Development Studies from Trent University, and enjoys working at the intersection of society and the environment in an Indigenous context.



Paula Anderson

Co-Instructor for IESS 3634H



Paula Anderson is the co-instructor for Introduction to Indigenous Food Systems in the IESS Program and is an instructor in Trent's Sustainable Agriculture and Food Systems Program. She is an organic vegetable grower, community food-system developer, avid seed saver, urban maple tree tapper and manomiin (wild rice) harvester. She has an MSc in sustainable systems design, with a focus on sustainable agriculture and permaculture and is presently working on her PhD in Indigenous Studies. Her focus is on identifying, in conjunction with community Elders, Knowledge holders and practitioners, the essential knowledge(s), skills and pedagogies required within post-secondary programming to support the revitalization of Indigenous food systems and Indigenous food sovereignty.

# Teaching Assistants

## Gillian Austin

RA/TA for IESS

Gillian is a settler of Scottish, Irish and British ancestry, was born in Anishinaabeg homelands in Toronto and is a singer-songwriter. She was a TA for 2601Y for one year and in 2017/18 coordinated visiting Elders as well as the Indigenous Perspectives on Protected Areas Gathering (more info on p. 34). Gillian is a PhD candidate in Indigenous Studies and has a MA in Environmental Studies from York U. As part of her life-long learning journey, she seeks to work in alignment and collaboration with Indigenous peoples, to resist systemic, colonial practices and to reciprocate for knowledges shared with her by many Mi'kmaw, Wolastoqey, Anishinaabeg and Rotinoshón:ni Elders and Knowledge holders. For her dissertation research, *Centering Indigenous Autonomy of Indigenous Knowledge Systems at Canadian Universities*, she is collaborating with Indigenous Knowledge Holders engaged at Trent and universities in Atlantic Canada to guide a co-learning process that explores what practices center Indigenous Knowledge Holders' autonomy of their knowledge systems and considers how to operationalize and enact these practices. Her approach is based on maintaining relational accountability and involves learning how to enact settlers' Treaty responsibilities.



## Stephen McGovarin

TA: IESS 1001H

Stephen graduated from the IESS Program in 2016 and is currently a Masters Student in the Environmental Life Sciences Program. His research interests are in aquatic environmental contaminants, Indigenous Environmental Health, bioaccumulation of contaminants in country foods, Western Science and Indigenous Knowledge. Currently he is working towards obtaining his Masters in the Environmental Life Sciences Program at Trent University while focusing on identifying sources of mercury along the Wabigoon/English River System, using bioindicator organisms to track the persistence and accumulation of mercury in the aquatic environment. By working collaboratively with local First Nations within the watershed, this project will provide support to the ongoing effort now in place to remediate the currently high mercury contamination within the Wabigoon/English River System.



## Brittany Curry-Sharples

TA: IESS 4740Y

Research Assistant for the Health, Environmental and Indigenous Communities Research Group

Brittany is currently a MA candidate in Sustainability Studies at Trent U. To her, living sustainability is a continuous work-in-progress of being mindful of our actions and making choices that allow both people living today and future generations to have a good quality of life. Her research interests include understanding what factors facilitate or prevent people from obtaining enough, nutritious, culturally appropriate food in remote and rural areas. Her MA research will focus on the region of Inuit Nunangat. In her free time, you can find her climbing at Rock & Rope, spending time with friends and practicing Spanish.



## Katie Rosa

Tutor for the IESS Resource Centre

Katie Rosa is an MA Candidate in Sustainability Studies at Trent, studying the role of Indigenous Knowledge and values in wildlife management under conditions of change. Specifically, she has partnered with the Nunatsiavut Government and the Torngat Wildlife, Plants and Fisheries Secretariat in northern Labrador to explore Inuit knowledge of moose, a species whose presence in the region only began in the last few decades. Katie has a BSc in Wildlife Biology from the University of Guelph and an Advanced Diploma in Ecosystem Management from Fleming College. While completing her thesis, she is currently a tutor with the IESS Resource Centre where she helps students find and access materials for their studies, gives advice on coursework, and offers a listening ear.

# Teaching Assistants

## Bill Moes



William (Bill) Moes has a degree in Native, which is now Indigenous, Studies at Trent University (97-01) and went on to complete a Masters in Environmental Studies at York University. One of his supervisors was Dan Longboat, who had also taught him in his undergraduate degree. Bill was born in Nova Scotia and grew up in Toronto. He has been studying traditional skills since 1987, which began at Tom Brown's Tracking Nature, and Wilderness Survival School. Bill met his wife, Elizabeth, at Trackers school and his son is a recent graduate here at Trent. He is undertaking his second Masters in Sustainability Studies with Dan Longboat and is working on creating a new IESS summer field course that teaches traditional skills.

TA: IESS 4730Y

Jane has a background in sustainability policy work including as a senior analyst for the Cabinet Policy Secretariat in Manitoba, an Executive Director for Manitoba's Climate and Green Initiatives Branch and as a Director for the International NGO, The Climate Group. Her work has included co-creating traditional land planning protocols with First Nations communities and programs to help protect climate, water and land as well as programs that promote healthy early childhood development. She joined the first year of the MASS program in 2010 and teaches sustainability courses at Fleming College. She is part of a group that achieved a UNU designation for the region as a Regional Centre of Expertise in Sustainability Education and is a volunteer with the Sacred Water Circle. She is currently in the PhD program in Indigenous Studies at Trent. She is a mother of three outstanding young people. Jane is TAing Sustainable Indigenous Communities.

## Jane Gray



## Rosanna Zerafa

TA: IESS 1001H



Rosanna has an unquenchable passion for learning and entered the Master of Arts in Sustainability Studies at Trent for the diversity that this program offers. Despite an interruption in Midwifery education at Ryerson, she continues to pursue the call through promoting two-eyed seeing in the profession. Rosanna graduated with a Diploma in Nursing in 1987 and with a Bachelor of Science in Nursing degree at Indiana Wesleyan University in Cincinnati, Ohio. She has been a Therapeutic Touch Practitioner during her nursing career and has witnessed remarkable recoveries and greater relief from emotional and physical suffering. In the future, she will be launching a practice to help mothers heal from traumatic labour and delivery experiences as well as conducting naming/blessing ceremonies for the newborn. Current community volunteer work includes being a member of Transition Town and singing with Peterborough Singers. Rosanna is very proud of the fact that she has ridden her motorcycle across Canada and always has a tale of adventure to share. She is a mother of five and grandmother to five.

# Staff

## Dorothy Howard

Support Staff

Dorothy is involved in supporting all IESS courses. She provides lab and scientific support, as well as the coordination of events and advises academic planning for IESS students. Her environmental interests include the chemistry of aquatic environments and potable groundwater supplies. Her main passion in life is animal rights.



## Juliana LeSage

IESS Student Group Coordinator/Research Assistant

Juliana is entering her graduating year of the IESS honours program next term. She is always looking to expand her IESS experience through various opportunities.



She is an Anishinaabe student and has been actively involved in her home community, Batchewana First Nation. She has been working within the Ontario First People's Young People's Council over the year. She has her goals set on bringing the values, knowledge and teaching from Nogojiwanong to her home community.

## Lauren Roberts

IESS Research Assistant/Student Group Coordinators

Lauren supported the IESS department by creating this year's IESS report and supporting Juliana's role as event coordinator.



She previously graduated IESS with a general degree but returned this year to complete her honours. Within her years away, she rode her bicycle to Mexico to study Indigenous resistance at *La Universidad de la Tierra*, to learn Spanish, and to study Zapatism in Oventik, Chiapas. Her commitments lie in decolonizing ideologies and grassroots community-building. Next year, she is headed to UBC for an MA in Indigenous Community Planning.

# IESS Institute

This year Taylor was welcomed back to IESS to drive forward the vision for an Institute by identifying program opportunities and building capacity to support them.

Taylor graduated from Trent in 2009 with an Enviro. Science degree, having completed the ecosystem management and IES specializations. She worked as an environmental consultant in BC and completed a MA of Environmental Studies at the U of Waterloo focusing on the intersection of water governance, individuals' knowledge management, and environmental psychology. Her research explored how Israeli women water professionals think about water and how it influences their professional decision-making. Integrating emotional and spiritual connection into Canadian environmental discourse is Taylor's priority. She focuses on the space between sectors to affect this change, drawing on her experience in outdoor education, environmental auditing, and multi-stakeholder facilitation.

## Taylor Wilkes



# Courses Offered

Indigenous Environmental Science/Studies offers a variety of courses for students interested in bringing together Indigenous and Western science to address complex environmental issues. Students interested in exploring these issues are recommended to take the new Foundations in Indigenous Environmental Studies and Science course IESS 1001H.

IESS core courses are discussed here, however students can take a wide range of courses that are cross-listed with other programs, or from an enriched interdisciplinary educational offering of subjects. Faculties including Indigenous Studies, Environmental Resource and Studies/Science program, International Development Studies, Sustainable Agriculture and Food Systems, Biology, Chemistry, and Business can contribute to the completion of an IESS degree.

Course Title	Course Code	Instructor
Foundations in Indigenous Environmental Studies and Sciences	IESS-1001H	Barbara Wall
Introduction to Indigenous Environmental Studies	IESS 2601Y	Dan Longboat
Issues in Indigenous Environmental Studies	IESS 3631H	James Wilkes
Global Issues in Indigenous Environmental Studies	IESS 3632H	James Wilkes
Introduction to Indigenous Food Systems	IESS 3634H	Dan Longboat
Indigenous Peoples Health and the Environment	IESS 3730Y	Chris Furgal
IESS Practicum Field Placements	INDG 3860Y	Faculty
IESS Reading Course	INDG 3900Y, 3901H, 3902H	Faculty
Thesis	ERSC/ERST – INDG 4020D	Faculty
Sustainable Indigenous Communities	IESS 4730Y	Dan Longboat
Critical Investigations in Indigenous Peoples' Health and the Environment	IESS 4740Y	Chris Furgal

Below are descriptions of all core IESS courses, including an overview of some of the key highlights from each. Descriptions contain notable guest speakers and events that enhanced the interdisciplinary and experiential learning experience that students received. For more detailed information on IESS courses please see our website at [www.trentu.ca/ies](http://www.trentu.ca/ies).



# Foundations in Indigenous Environmental Studies/Sciences

**Course Instructor:** Barbara Wall-Potter

**Teaching Assistant(s):** Stephen McGovarin, Rosanna Zerafa

**Course Enrollment:** 71 students

**Description:** The focus of this course was examining the evolving relationship between Indigenous and Western Knowledges in exploring thinking and collaborative approaches to environmental issues. Over sixty students were introduced to the foundational approaches, philosophies, values and practices commonly used in the academic discipline of IESS through lectures, guest speakers, and bi-monthly seminars.

**Highlights:** A forestry lab on the Lady Eaton drumlin, dedicated to the identification of sugar maple trees and estimation of their population, provided hands-on experience with scientific data collection and application of creative and integrative thinking bringing together both Indigenous Knowledge and Western Scientific Knowledge. Students also participated in the KAIROS Blanket exercise to gain understanding of settler colonialism and the impacts on Indigenous peoples and land. Assignments included reflective writing, knowledge mapping, the sugar maple lab report, creation of a learning portfolio and a short presentation with seminar groups.



# Introduction to Indigenous Environmental Studies/Sciences

Course Instructor: Dan Longboat

Teaching Assistant(s): Nikki Auten

Course Enrollment: 71 students

**Description:** This course explores Indigenous world views, environmental philosophies, protocols, and values through exposure to various perspectives of Indigenous Elders, knowledge holders, community members, political leaders, academics, activists and scholars. Students are introduced to Indigenous Knowledge as it pertains to the environment with guest speakers who focus on knowledge system interactions.

**Highlights:** With high enrolment in this course, the professor seeks to engage the students in a variety of ways, blending Haudenosaunee environmental philosophy, as embodied within the Creation Story, Cycle of Ceremonies, the Peacemaker's journey, and the teachings of Handsome Lake, along with perspectives of Mushkegowak, Anishnaabek and various other Indigenous peoples.

These Indigenous perspectives are intertwined throughout the year with an exploration of western environmental sciences and the beliefs, values, and practices embedded in western knowledge systems, with a focus on how they can work together to perpetuate life for all Beings on the Earth. Using a weekly lecture and seminar format, including time in the tipi and on the land, students' learning focuses on the concepts of relationship with the land and beings of Creation, reciprocity, respect, responsibility, and restoration.

Guest lecturers enrich the student's experience by bringing their expertise into the classroom. Knowledge holders such as Algonquin Anishnaabe Larry McDermott of Plenty Canada was able to shed light on policy and law within Ontario and Canada, as well as share some of the amazing projects Plenty Canada is involved with. Potawatomi Anishnaabe kwe Barbara Wall joined us to share water teachings and ceremony. Anishnaabe nini Caleb Musgrave also came to share with the students some of the land knowledge he carries, including medicine plant use, survival skills, and more. Mushkegowak student Kris Morrison also came by to share some fire teachings, circle teachings and men's teachings which were delicately balanced in relation to one another.

The Teaching Assistant, Nikki Auten, has contributed by bringing Indigenous pedagogies into the classroom, weekly check in circles which were crucial to the well-being of students, introducing smudging and offering it for people to use, ensuring calcite in the tipi around a fire.

Nikki was also able to share some teachings from the Ohen:ton Karihwatehkwen in class to help students understand the importance of giving thanks and developing their own thanksgiving address and creating or further developing, relationships with the many Beings of Creation. Students were able to engage in active listening opportunities in class and outside of class in order to prepare an oral source assignment and become familiar with the oral tradition of Indigenous peoples. Students were also able to develop a digital story to journal their learning experience during the course of the year. This video reflects what the student has learned, what challenges they faced, how they overcame any challenges, or what they already knew and what was reinforced in the class. This project is as much about learning the skills needed to make the digital story as it is about the story itself. Each offers the student an insight into themselves.

# Issues In Indigenous Environmental Studies/Sciences

**Course Instructor:** James Wilkes

**Course Enrolment:** 30 students

**Description:** The Issues course provides students the opportunity to examine a wide range of contemporary environmental issues, conflicts and solutions in the context of Indigenous Peoples and territories. Studies examine issues at local, provincial and national levels, and the class atmosphere encourages active participation in lively discussions surrounding current environmental issues and Indigenous responses.

The course begins by deepening students' understanding of the context of environmental issues within Indigenous territories by discussing colonization, resistance, decolonization, Indigenous Knowledge, and renewal. Throughout the term, attention was drawn to various issues confronting Indigenous nations, including land dispossession, resource extraction and industrial contamination. Indigenous ways of understanding these issues were explored, including Indigenous worldviews, governance, participation, mobilization, resurgence, restoration and revitalization.

**Highlights:** Guest speaker Brigitte Evering (Indigenous Studies PhD graduate and IESS alum) presented a workshop which was delivered at the *Challenging Canada 150: Settler Colonialism and Critical Environmental Geographies symposium* at Nipissing University in North Bay, October 2017. Together with James Wilkes, Evering shared their presentation "Beyond Interdisciplinarity: Constellating Indigenous and Eurocentric Knowledges/Sciences" to help students map their skills and capacities for engaging in IESS work. Fellow IESS instructor Barbara Wall (Citizen Potawatomi Nation) also returned to the 3631 classroom to give a guest lecture based on her PhD research, with a focus on the Catholic Church's Papal bulls in the history of North American colonization, as well as her Bodwewadmii Anishinaabekwe understanding of women's water teachings and responsibilities.

As always, this year's 3631H course highlighted the perspectives of Indigenous scholars, Elders, Knowledge Holders, and activists, to address particular issues and responses in Indigenous Environmental Studies. Through individual research projects and seminar presentations, students engaged in current, relevant and meaningful research with a focus on taking action.



# Global Issues In Indigenous Environmental Studies/Sciences

**Course Instructor:** James Wilkes

**Course Enrollment:** 34 students

**Description:** The global issues course highlights environmental and social movements around the world, with a focus on Indigenous rights protection and Indigenous responses worldwide. The premise of the course acknowledges that Indigenous ways of knowing and responding are the norm everywhere on Earth and have much insight regarding issues facing all human beings. Global issues include war, globalization and corporatization, water privatization, biopiracy, ongoing land dispossession and neo-colonialism, to name just a few. Indigenous peoples live at the frontlines of these conflicts and have much to offer to protect lands, waters, and humanity's future alike.

Students engage in individual research projects and group-led seminar presentations to understand current issues facing Indigenous peoples everywhere. These issues and Indigenous responses are studied through various multimedia, including book chapters, documentaries, music and poetry, and perspective papers. Through reading, reflection and synthesis, some students learn about these issues for the very first time.

3632H is a course that provides knowledge and insights from multiple worldviews, and brings together students from many different disciplines, to engage in environmental and social justice issues affecting Indigenous peoples around the world. Further to the topics discussed in class, students are encouraged to research an Indigenous environmental issue beyond Canada, since North America is already the focus of the 3631H course. Students continue to develop their own individual learning in preparation for a final essay and group-led seminar presentations, based on their research topics. These seminars are helpful to keep students on track for their final essays and to inform the class on a broad range of issues and Indigenous responses throughout the world. Despite the complexity of the topics and the weight of many global issues discussed during the semester, students leave class with a renewed responsibility to get involved.

**Highlights:** Guest speakers also provide firsthand knowledge with the students and share personal and experiential accounts of ongoing issues. This year, Marcelino Entzin Lopez from Chiapas Mexico, a Mayan Tseltal social anthropologist, visited the 3632 class once again to share his experience about the Zapatista liberation movement, its resistance to neoliberal capitalism in Mexico, and the reestablishment of Indigenous autonomy. For the final class, guest speakers Kelly Morrissey, a Nunatsiavummiuk spokesperson, and Matthew Behrens, a settler advocate for environmental justice, together shared their thoughts on the international dimensions of the Muskrat Falls hydro-colonialism project as well as the role of the United Nations Declaration on the Rights of Indigenous Peoples. We were also privileged to have Mi'kmaw Elder Albert Marshall and Leanne Betasamosake Simpson enlighten the class with their life-works and worldviews.

# Introduction to Indigenous Food Systems

**Course Instructors:** Dan Longboat and Paula Anderson

**Teaching Assistant(s):** Stephen McGovarin with help from Anne Sylvie Dasné

**Course Enrollment:** 76 students

**Description:** In this course students have the opportunity to explore a wide range of historical and contemporary Indigenous food systems and food system practices. The course introduces the issues that impact Indigenous communities and their connections to the ecosystems that support them. We also look at restoration and revitalization efforts being undertaken by Indigenous communities to reclaim their food sovereignty.

Students are encouraged to do self-directed research that examines their own participation in food systems and their relationship to these foods and the lands and peoples that provide them.

**Highlights:** Once again this year our Introduction to Indigenous Food Systems course was a huge success. With a large class of 76 students, we still managed to introduce students to Indigenous food systems in quite engaging ways, including a wide range of guest speakers and hands on workshops. Dan Longboat helped students re-consider their understanding of our relationship with food through the sharing of the Haudenosaunee Creation Teachings and Origin Stories. Nikki Auten came in to speak about traditional Haudenosaunee growing systems and the Flint Corn Project that she is involved with, which focuses on the recovery and growing out of traditional flint corn varieties and the importance of re-matriating these seeds back to communities of origin.

We also had Joe Pitiwanakwat come in and shared his knowledge of traditional medicinal plants that has been passed down to him through his grandmother, mother, aunties and other Elders in his community. James Whetung joined us to share his knowledge about revitalizing the manomiin (wild rice)-based food system in this region. Larry McDermott came and spoke to the revitalization of aquatic food systems including wild rice and the American Eel. While Chris Furgal came in to share his knowledge and research regarding Northern food systems. Within these place-based food systems we looked at the issues that are impacting Indigenous communities' ability to access and sustain their relationships with their traditional food and the steps being taken within communities to regain food security and food sovereignty.

We had an amazing evening of engaging with our food with Gary Williams who visited to share with the class how to prepare wild rice, regional fish and berry dishes in the kitchen. With such a large class, we rotate through different stations each engaging with different aspects of the food we are preparing to eat. Barbara Wall came and shared her berry teachings and knowledge with our class, while Dan Longboat and Stephen McGovarin taught students how to clean and fillet fish, while Gary Williams is busy in the kitchen cooking with the students. Together we enjoyed the fruits of our collective learning and doing by participating in an end of class feast!

All the while students were researching the origins, culture, ecology, and health aspects of a specific food from their own cultural tradition. Their research culminates in a series of presentations about the foods they are researching where they can share with one another their (k)new information and insights about the foods that are culturally significant to them. To finish things off we hold an amazing final feast to celebrate the foods where students prepare and share the food (and the recipes on how to make it) that they researched with their classmates and special guests. This year the feast was held in the Gathering Space and the food was delicious!

# Indigenous Peoples, Health, and the Environment

**Course Instructor:** Chris Furgal

**Teaching Assistant:** Shirin Nuesslein

**Course Enrolment:** 26 students

**Description:** The course critically examines historical and contemporary issues in Indigenous Peoples' health with a particular emphasis on the relation to land and other dynamic environments as a determinant of health status. The course provides the development of a foundation in understanding the key determinants of health for Indigenous Peoples in Canada and around the world. It broadens perspectives of Indigenous Peoples health and the environment further through the incorporation of guest speakers.

**Highlights:** This course provides students with an introduction to the multidisciplinary field of environmental health, and its relationship to understanding health and changing health status among Indigenous peoples. It consists of one weekly two-hour lecture followed immediately by a one-hour seminar. During the lecture, students are taught basic concepts, theories and methods used in environmental health, and during seminars they apply this knowledge to investigate the role of environment in the changing health status of Indigenous populations around the world.

During the winter semester, students conduct a mock environmental health management and communication group assignment over several weeks. They are given a hypothetical situation of an Indigenous community approaching them with specific environmental health concern. They must investigate and manage the issue using the skills obtained in the course. This is an immersive and intensive assignment meant to give students experience with community environmental health management.

A few guest speakers also visit this class throughout the year. During the 2017/2018 academic year, students were fortunate to learn from Joe Pitawankwat, who taught about traditional plants and benefits, as well as Elders Shirley Williams and Solomon Wawatie, who shared about Anishnaabe perspectives on Indigenous health and well-being.

Following each guest speaker, students practice reflective and reflexive writing, which is a capacity that the IESS Program encourages students to develop and strengthen. Reflective writing brings together careful observation and listening with critical thinking about an experience; and in reflexive writing students are asked to also consider how their own feelings, attitudes and worldviews shape and change their observations and interpretations of what they experienced.

As this is a comprehensive course exploring knowledge from various disciplines, it is open to students from a variety of academic backgrounds, including Environmental science/studies, Indigenous studies, and nursing. Students may choose to complete this full-year as a science or as a studies credit, with different assignment requirements depending on which option is chosen.



INDG 3860Y

INDG 3900Y,

3901H, 3902H

ERSC/ERST-

INDG 4020D

## IESS Practicum Field Placements

**Description:**

An opportunity for students to apply learning in a field setting, reflecting student interests and the availability of agencies willing to take students. Learning about development and culture was dialectical, through experience (action) and reflection on experience. It was formal and informal, and at many levels (personal, interpersonal and community).

## IESS Reading Course

**Description:**

Intended for third-year majors and for second-year students who wish to carry out independent research on a specific topic outside the scope of currently offered courses. Reading courses, supervised by a faculty member, allow students to learn more about a topic they are passionate about and perhaps have not been exposed to previously. Details must be arranged with the Chair of the Department before the end of the preceding academic year. Student reading courses in IESS typically cover topics such as land claims, resource management, Indigenous plants and medicines, climate change, Indigenous health and well-being, and community sustainability.

## Thesis

INDG 3860Y  
INDG 3900Y, 3901H, 3902H  
ERSC/ERST-INDG 4020D

**Description:**

This is a double credit research course in which students produce a thesis at the year end. An in-depth study in library or field-oriented research supervised by a Research Project Committee, for which a double fee is charged. Details must be arranged with the Chair of the Department before the end of the preceding academic year. In many cases students enrolled in the course use their undergraduate thesis as a foundation for their advanced study at the Master's Degree level.

JESS 4730Y

# Sustainable Indigenous Communities

**Course Instructor:** Dan Longboat

**Teaching Assistant(s):** Jane Gray

**Course Enrollment:** 29 students

**Description:** A research colloquium course that gives students the opportunity to examine concepts of sustainability in a way that is grounded in Indigenous Knowledge. Having explored initial concepts and identifying the key values that will guide their work, they begin to develop a model of a Sustainable Indigenous Community each choosing a specific area of research that is collaboratively integrated with the work of other students in the class. Overall, the course provides deep insight into Indigenous understandings in the context of addressing contemporary sustainability issues and encourages the use of multiple knowledge systems in addressing these issues.

**Highlights:** This is a challenging, but highly rewarding course of study. Students learned from guest speakers, films, Elders, class presentations and group sharing. Every year students are inspired to learn, create and develop innovative ways to understand community sustainability, what does it mean and how do we do it? Students provided a major research paper and class presentation on their individual area of focus to. Many students have used this work as a basis for career development or on to graduate school.



# Critical Investigations in Indigenous Peoples' Health and the Environment

**Course Instructor:** Chris Furgal

**Teaching Assistant(s):** Brittany Curry- Sharples

**Course Enrolment:** 14 students

**Description:** A critical examination of historical and contemporary issues in Indigenous Peoples' health with a particular emphasis on the relation to land and other dynamic environments as a determinant of health status. The course provides a basic foundation in understanding the key determinants of health for Indigenous People in Canada and around the world.

**Highlights:** This course is designed to allow students to independently explore contemporary topics of importance to Indigenous Peoples around the globe and their health. Once again, this year the small class size allowed for engagement in thought-provoking discussions during the seminar style lectures. These discussions were enriched by the various disciplines from which the students came from (environmental science, indigenous studies, and nursing).

Students were guided and supported through an independent research process where they studied a variety of interesting topics such as contaminants in traditional foods and the associated health risks, the impacts of climate change on mental health, Indigenous culturally-based approaches to substance abuse treatment programs, and the shift away from consuming traditional foods and towards processed market foods in relation to diabetes rates. Throughout the course, students learned about a variety of contemporary issues facing Indigenous communities from their peers, and how to engage and critically discuss these issues with students of diverse academic backgrounds. Students have expressed that the course helped them develop their time management and planning skills and taught them how to apply these to a step-wise research process. Students appreciated the opportunity to look at one topic in an in-depth way, and to learn how to undertake a thorough research process, tailor it to their working styles, and produce a comprehensive research paper.



# TRACKS

## Trent Aboriginal Cultural Knowledge and Science

In 2017, TRACKS enjoyed a busy spring and summer with a new cohort of Oshkwazin youth leaders, hired through partnerships with both Kawartha Pine Ridge and Peterborough Victoria Northumberland Clarington Catholic school boards. In the spring, we co-hosted a free day of programming at the Alderville Black Oak Savanna for grade 7/8 students from Roseneath Centennial Public School and North Shore Public School thanks to funding from the Biodiversity Education & Awareness Network. We also celebrated Science Odyssey Week with students from Lakefield District Intermediate School, who enjoyed a day of lectures and hands-on activities here at Trent University, funded through NSERC's PromoScience fund. We delivered over 50 workshops in local schools and at community events, reaching a large number of Indigenous and non-Indigenous youth.

In April, we were ecstatic to learn that TRACKS had been chosen as one of the 2017 winners of the new Youth Opportunities Fund through the Ontario Trillium Foundation, receiving close to \$400,000 over four years to continue funding the Oshkwazin youth leadership program. Through this initiative we'll continue engaging high school aged youth in meaningful work and volunteer experiences that will have them develop relevant work skills while also engaging in culturally-based character building activities.

Together, our summer staff and our seven youth leaders delivered a summer full of fun activities to over 200 youth, including seven weeks of camp, a field trip to the Unimin Mine, and two jam-packed days of tech-based coding activities with Actua's Maker Mobile. Annual favourites were supplemented by new programming including a brand-new workshop on bats, one on music (featuring special guest Joanne Argue) and one on the northern lights. We enjoyed community camps in Hiawatha and Curve Lake First Nations and learned a lot from interesting workshops by guests including Hilary Wear, Beedahbin Peltier and Joseph Pitawanakwat. Our seven youth leaders, all Indigenous youth between the ages of 14-18, participated in training, team building and leadership activities and worked to support instructors in camp, including developing and leading their own program activities. We are grateful to all of our staff and youth leaders for all their hard work this summer, and to the community partners who worked closely with us to ensure that the summer was a roaring success.

In September we wrapped up our summer program and embarked on a program pause and review. After six years of fairly constant activity and accomplishing more than we'd thought possible, we took some time off to look at some restructuring of staff and programming, taking some much-deserved time to evaluate our delivery model, curriculum, and leadership structure. During that time we have been hard at work on visioning and evaluation, and have managed to keep up with our responsibilities as a member of the TEACH Outside the Box social justice education committee as well as participating in the Community Flint Corn Project's fall fundraiser, a feast and film screening organized by Nikki Auten. We are also happy to announce our new membership in the Actua network, an organization of university-based science educators, which will open us up to new partnerships and funding opportunities.

As always, we are grateful for the support of everyone who helps us along the way and in particular our organizational partners, KWIC and Trent University, and specifically our friends in Indigenous Studies and Indigenous Environmental Studies/Sciences.

For more information on TRACKS please contact us via email at [info@trackscamp.ca](mailto:info@trackscamp.ca)





## Health, Environment, and Indigenous Communities Research Group



The Health, Environment and Indigenous Communities Research Group (HEIC-RG) is a research group affiliated with the IESS Program. It is supervised by Prof. Chris Furgal, and brings together students and researchers from diverse academic backgrounds including social sciences, natural and health sciences, and the humanities. All research projects are situated at the intersection of social and ecological relationships, and seek to learn about environmental and health issues of importance to Indigenous communities across Canada – primarily of the North.

Research topics are diverse, and emphasis is placed on coming together collaboratively to critically explore and apply progressive and responsible approaches to research methodologies, ethics, and innovation to all research projects. Some themes include:

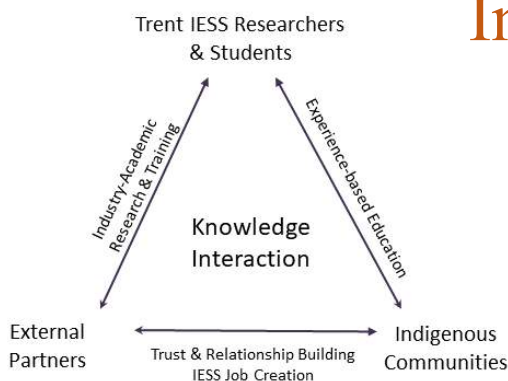
- Understanding critical aspects of Arctic species ecology using both Indigenous Knowledges and scientific methods
- Knowledge interaction and integration for policy development and decision making
- Health and environment communication and knowledge translation
- Health and environment interactions and relationships
- Community sustainability, health and well-being

Community partnerships in research projects are based on shared values and a sense of shared responsibility. These are informed by:

- A commitment to think critically about ethical research, particularly in response to community interests and needs
- The value and importance of bringing together multiple knowledges, perspectives, and ways of understanding
- An effort to include issues important to and identified by communities within our projects, and respond to emerging areas of thought, policy and research

For more information about the research group, please the website – [www.heicresearch.com](http://www.heicresearch.com) - or email Dr. Chris Furgal at [chrisfurgal@trentu.ca](mailto:chrisfurgal@trentu.ca).

# Indigenous Environmental Studies/Sciences Institute



**Figure 1: An operational model for the Indigenous Environmental Institute.** Facilitating partnerships for knowledge interaction is the Institute’s value proposition and the identified need between its audience groups. Action areas to fulfill this need are defined for each partnership pathway. (Adapted from the Impact Centre at University of Toronto).

After considering developing an institute for several years, the IESS team and its allies manifested its collective vision. In March 2018, an Indigenous Environmental Institute was established with full support from Trent’s administration and the Schools of Environment and Indigenous Studies.

The ‘Rekindling the Sacred Fire’ gathering in 2016 highlighted the urgent demand from public, private, and community professionals for guidance and training in IESS. This Institute will make the two-eyed seeing, IESS approach accessible beyond Trent by facilitating partnerships and projects with external actors. A 5-year goal being to establish an Indigenous environmental professional network in Canada. Although the entity is nascent, the work has already begun. In 2017, the Institute began fostering new inter-faculty relationships, exploring project opportunities with environmental NGO’s and consulting firms, and seeking guidance from related institutes. Stay tuned for our new website!

One professional training program is in the works. The Beyond Duty to Consult and Accommodate Program brings practitioners from the energy industry together with Indigenous economic and environmental managers to improve consultation practices. It is a partnership between Trent Sustainability Studies, Indigenous Studies, Cambium Environmental Inc. and the IESO [beyondd2c.com]. The first cohort gathered in August 2017; four additional modules will be designed and delivered in 2018.



In return, the professional community generated by this work will bolster student programming, experiential opportunities, and help ease the transition from education to employment. Ultimately, the Institute wants to provide a foundation to support existing IESS programs, like TRACKS and the Flint Corn Project.

Students can get involved in helping this initiative grow. Credits for either a practicum or reading course can be arranged through the Trent Community Research Centre to build communications, research, and coordination skills.

Let’s see what the next year brings!

## First Peoples House of Learning

IESS is pleased to have a strong working relationship with the First Peoples House of Learning (FPHL). FPHL is the home of Indigenous student services and Indigenous campus and community initiatives at Trent University. Their services are for all Trent University students, faculty and staff at both the Peterborough campus and Durham campus.

Located on the Traditional Territories of the Anishinaabeg and Algonquin Peoples, FPHL offices are on the 3rd floor of Gzowski College within the building called "Enweying", which means "the way we speak together," in Anishnaabemowin.

In the spirit of working and speaking together, First Peoples House of Learning works closely with local First Nation communities through the Aboriginal Education Council and local community service agencies. They also work with all Trent University student supports, administrative and academic departments to support students in their academic success.

The core of FPHL is about supporting student success through academic and personal services. They achieve this by creating a community that is knowledgeable, welcoming and supportive for all students, staff, and faculty at both Trent University campuses. FPHL hosts monthly Traditional Teachings, Pine Tree lectures and cultural events, and also provides counseling and cultural advising, academic support, peer mentoring and tutoring, workshops, and Peer ambassadors. We urge all IESS students to connect and become involved with FPHL.

<https://www.trentu.ca/fphl/>





# IESS Annual Events



The Indigenous Environmental Science/Studies Program hosts and supports a number of events throughout the year to encourage student learning and community-building. Students are encouraged to get to know each other and the greater IESS community during term feasts, events in the tipi, on the land, and in the Gathering Space. This year, our student event co-ordinators hosted events such as *Nogojiwanong in the Winter*, *IESS Movie Night*, and *IESS Career Day*. Other annual events in which IESS participates or supports are the Trent-Temagami Colloquium, the Elder's Gathering, the Indigenous Women's Symposium, and the Northern Studies Colloquium.



# 45<sup>th</sup> Annual Trent Temagami Colloquium



For 45 years a healthy array of activists, cultural workers, environmentalists and Trent students gather at Sandy Inlet on the North end of Lake Temagami. This year, the colloquium continued its tradition of offering participants important and exciting content, outdoor activity, and cultural experiences.

Trent School of the Environment professor Stephen Hill and his Carleton University colleague Peter Andrée curated the range of screenings, talks, and group discussions. IESS professor James Wilkes and graduate students Carla Johnstone and Amanda Shankland led an enticing panel and group discussion titled Action Research with Communities focusing on Indigenous reconciliation and environmental crises. Two films were screened, the first *Deep Water, Deep Roots*, with discussion facilitated by Robin Potts (Temagami Nation), and the second *the Pass System*, a film about segregation directed at Indigenous Peoples, discussion lead by John Milloy (Trent U) and James Cullingham (Seneca Nation).

Other discussions were also had, such as *Connected by canoe/Adventures in Understanding*, reflections and discussion led by Glen Caradus & Chris Cunningham, and *You can see the world in this place*, led by Stephen Hill. The weekend also included full days of hiking and canoeing, poetry and music, a portage challenge, and a sacred fire facilitated by Brendan Campbell.

**A huge thanks to our special guests:**

- James Wilkes,
- Wayne Potts, (TFN)
- Gary Potts
- Marvyn Morrison (TFN)
- Robin Potts (TFN)
- Jeremy Ward (Canoe Museum)
- Peter Andree
- Kevin Alstrup
- Glen Caradus
- David Welch
- John Milloy
- Tom Miller
- Alex Williams (The Pass System)
- Chris Cunningham
- Chris Welter!
- Sarah Cullingham
- James Cullingham
- Guy Hanchet (For our Grandchildren)
- Ben Wolfe (square dance caller)

# 8<sup>th</sup> Annual Trent Northern Studies Colloquium

The Trent Northern Studies Colloquium (NSC) is an annual one-day event dedicated to showcasing, discussing and celebrating the University's excellence in northern research. This year's Colloquium took place on Wednesday, April 4<sup>th</sup>. Throughout the day, graduate students presented the diverse research they are currently embarking on at Trent. Coffee, snacks and lunch were catered by the Seasoned Spoon. At the Canadian Canoe Museum in the evening, there was a panel discussion on the topic of "[The Role of Northern Research in Reconciliation.](#)" Panelists spoke to the changing nature of northern research and its role in reconciliation and Indigenous self-determination. Moderated by Dr. Chris Furgal, the panel featured Bill Albany (Kitchenuhmaykoosib Inninuwug First Nation), Dr. Kaitlin Breton-Honeyman (Nunavik Marine Region Wildlife Board) and Dr. Jim Schaefer (Trent University). A delicious dinner was feasted on, catered by the notable Gary Williams from Curve Lake.



## Nogojiwanong in the Winter

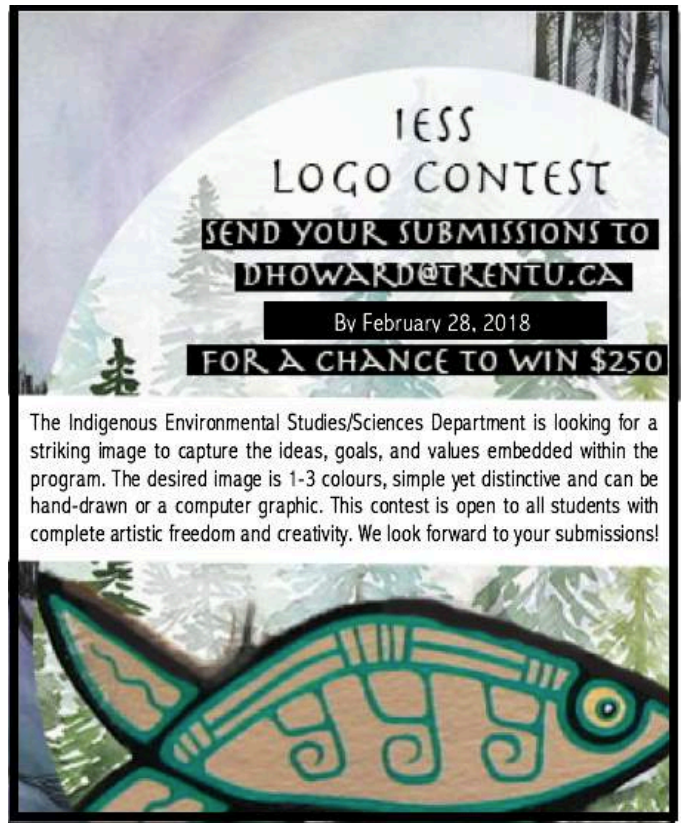


Caleb Musgrave of Hiawatha First Nation joined IESS students in the heart of winter to provide a full day of stories and teachings in the tipi and a traditional skill-building walk out on the land surrounding Trent. From on-the-spot rabbit snares to materials for effective bow drills to survival tactics to wild edibles to tree ID, Caleb is an excellent mentor and bush-crafter. IESS was delighted to be able to provide students with the opportunity for out of the classroom learning and honouring the importance of land-based knowledge within the IESS philosophies. Miigwech to Caleb for sharing his knowledge with us!

# IESS Logo Contest

This year IESS put forth a contest for its logo. The winners received a grand prize of \$250!

Congratulations to both the winners!



The Indigenous Environmental Studies/Sciences Department is looking for a striking image to capture the ideas, goals, and values embedded within the program. The desired image is 1-3 colours, simple yet distinctive and can be hand-drawn or a computer graphic. This contest is open to all students with complete artistic freedom and creativity. We look forward to your submissions!



**INDIGENOUS**  
ENVIRONMENTAL STUDIES & SCIENCES



Indigenous Environmental  
Institute (IEI)

By Kristin Phasey



**INDIGENOUS ENVIRONMENTAL  
STUDIES/SCIENCE**

Indigenous Environmental  
Science/Studies

By Paige Lowe





## Indigenous Perspectives on Protected Areas Gathering



On October 24-26, 2017, a three day gathering concerning Indigenous perspectives on protected areas was hosted by Ontario Nature, Plenty Canada, Walpole Island Land Trust and the IESS program at Trent in Nogojiwanong, from October 24 to 26, 2017. Seventy people participated including 22 Indigenous community members from Moose Cree First Nation, Wikwemikong First Nation, Curve Lake and Alderville First Nation and Six Nations of the Grand River, 14 representatives of non-Indigenous/settler/newcomer environmental organizations, six government agencies and nine other organizations. They shared information, insights and experiences and discussed approaches to establishing protected areas that honour Indigenous responsibilities, rights and interests. The gathering provided a forum for trans-cultural dialogue about commitments under the United Nations Convention on Biological Diversity to conserve biodiversity and enhance its benefits to all by 2020. Participants also learned about the Indigenous Circle of Experts (ICE) which is advising on how to achieve the Ontario government's commitment to protect at least 17 percent of lands and inland waters by 2020. Dr. Dan Longboat, Rorohiakewen (He Clears the Sky), director of IESS, member of Six Nations of the Grand River and Larry McDermott, Oomsee (Big Night Owl), executive director of Plenty Canada and member of Shabot Obaadjiwan First Nation, co-facilitated the gathering. It was supported by the Ontario Ministry of Natural Resources and Forestry (MNRF), the Ontario Biodiversity Council and IESS. Traditional Anishinaabeg foods were catered by Grandfather's Kitchen from Curve Lake First Nation.

Based on Aichi targets 11 and 18 for preserving biodiversity, participants explored the potential to work together toward the common goals of protecting the natural world and advancing reconciliation between Indigenous and non-Indigenous settlers and newcomers. Speakers raised awareness of the accomplishments, opportunities and challenges relating to establishing protected areas, with a focus on Indigenous Protected and Conserved Areas (IPCAs). During her presentation, Michi Saugig Anishinaabe Elder Dorothy Taylor, of Curve Lake First Nation, emphasized, "Indigenous people are leading the way on how to bring balance back to the world." Chris Craig of South Nation Conservation added, "It's not difficult to hit 17 percent – we just have to do it. There is no economic return for destroying our world. We have to stand up. We are humans, we are all part of this world."

A report on the gathering, *Indigenous Perspectives on Protected Areas*, is available here: <https://view.publitas.com/on-nature/indigenousperspectives/page/1>

There is video with highlights from the gathering: <https://www.youtube.com/watch?v=U21jR5zblBs&t=1s>

The Indigenous Circle of Experts' (ICE) latest report is here:

<https://static1.squarespace.com/static/57e007452e69cf9a7af0a033/t/5ab94aca6d2a7338ecb1d05e/1522092766605/PA234-ICE Report 2018 Mar 22 web.pdf>

By Gillian Austin

Photos – Craig Buckley



## IESS Career Day

On the last day of classes, IESS hosted an opportunity for students to explore potential career paths. The student coordinators invited IESS alumnus, Holly Poell, who is now working in Bella Coola within the field of Indigenous education, Larry Dermott from Plenty Canada, TRACKS staff Heathyr Francis, Brittany Young from MOECC, the Career Centre, Leora Berman from the Land Between, and other notable persons in relative fields of work. Each guest spoke for 10 to 20 minutes about their own journeys and their current fields of work, while also taking the time to ask questions posed by students in the audience. Themes addressed were about the benefits and disadvantages of working within the “system” as opposed to more grassroots approaches for similar goals, the importance of applying IESS knowledge within governmental institutions, and following one’s inner compass and staying authentic to one’s chosen path. The nearly 3-hour event was followed by the end of term feast, once again catered by Gary Williams, and gave students an opportunity to speak with invited guests, faculty, and amongst each other.



**IESS CAREER DAY:  
PRESENTATION SCHEDULE  
APRIL 6TH 2018**

<b>1:30 SNACKS AND REFRESHMENTS AVAILABLE</b>
<b>1:45 OPENING ADDRESS</b>
<b>2:00 TRACKS (HEATHYR FRANCIS)</b>
<b>2:20 THE LAND BETWEEN (LEORA BERMAN)</b>
<b>2:40 MOECC (BRITTANY YOUNG)</b>
<b>3:00 ALTERNATIVE EDUCATION (HOLLY POELL)</b>
<b>3:20 PLENTY CANADA (LARRY DERMOTT)</b>
<b>3:40 NORTHERN STUDIES RESEARCH</b>
<b>4:00 YORK U MASTERS PROGRAM (DEBORAH MCGREGOR)</b>
<b>4:20 GREEN COMMUNITIES CANADA (ALIX TAYLOR)</b>



# Visiting Mi'kmaw Elder Albert Marshall

Elder Albert attended the Trent Elders and Traditional Peoples Gathering, through a partnership with IESS and the First Peoples House of Learning, presenting on the challenges of moving forward in a co-learning journey. He then stayed in Nogojiwanong as a visiting Elder for four days (March 4-8, 2018) of learning experiences in collaboration with IESS, the Master of Sustainability Studies Program and the School of Business. Albert and Gillian Austin went to four IESS classes and worked with Professor Asaf Zohar and the Master of Sustainability Studies students and with one class in the School of Business. Albert complimented those in IESS for their ongoing work and for providing an inspiring model for working with diverse knowledges across Turtle Island. Albert felt very much revitalized and inspired by his exchanges with Indigenous and non-Indigenous /settler/newcomer youth and their energies over the course of his visit. He enjoyed the many meals with students, TAs, faculty and staff.

Albert started off his class visits by facilitating a sharing circle for third year students in **Global Issues in Environmental Studies** (3632H). He asked everyone, "who are you and why are you here?" Afterwards Albert spoke about etuaptmunk, the Mi'kmaw gift of multiple perspectives or two-eyed seeing, in terms of bringing together knowledge systems globally.

In **Indigenous People's Health & Environment** (4740) Albert asked the students to share their interests and insights on Indigenous health. Albert connected with this small group of twelve students concerning Indigenous understandings of wellness and found the students' research and hopes for the future of Indigenous communities very inspiring.

In **Sustainable Indigenous Communities** (IESS 4730) Albert's visit coincided with a collaborative discussion on the co-creation of a sustainable Indigenous community. The students explained their project and how they worked together to Albert. He in turn shared his understandings of netukulimk – a Mi'kmaw understanding of sustainability. TA Jane Gray found that Albert provided the group with "deep insight on governance and decision making based on the land and water, putting community planning based on Indigenous Knowledges in a contemporary context, reminding the students of the importance of being Whole including having a healthy spirit and taking their learning and applying it directly in the real world and much more." On his last day at Trent, Dan and TA Nikki Auten welcomed Albert into **Introduction to Indigenous Environmental Studies** (2601) to speak about two-eyed seeing. Albert stressed that we must not take any actions that would further eradicate the integrity of our ecosystems and our Mother Earth – a critical take away message that is at the heart of the IESS program. Albert is now Dr. Dr. Albert Marshall! He received his second honorary doctorate from Acadia University in May, 2018. Wela'lin, Thank you for visiting, Elder Albert.

Professor Chris Furgal remarked:

*"It was truly an honour to finally meet Albert and welcome him into our class. I am truly humbled of the contributions he has made and impact he has had and spirit with which he approaches this often challenging interface. I now understand well why he is so highly regarded by so many (not that I doubted it before). More than anything, the spirit, respect and kindness with which he approaches this dialogue is something I will take away from getting the chance to meet with him today. All of our senior admin need to spend time with Albert."*

Course instructor James Wilkes reflected:

*"Albert, I'm always impressed by your clarity and your ability to hear everyone's voices in a room, and the way you're able to provide insight and suggestions to those who are struggling, and bring the conversation to an all-encompassing solution. For me, many lessons were gained that evening. I was reminded of the importance of the collective beyond the individual, and you asked us all how we can become instruments of revolutionary change, to the best of our abilities. You also taught us that Nature has rights, while human beings have responsibilities. Perhaps the greatest lesson I learned from your teachings is that "Knowledge is alive" and has the power to transform us. Along these lines, you also reminded us that the Earth is alive, and the Earth can be transformed by our collective energies!"*



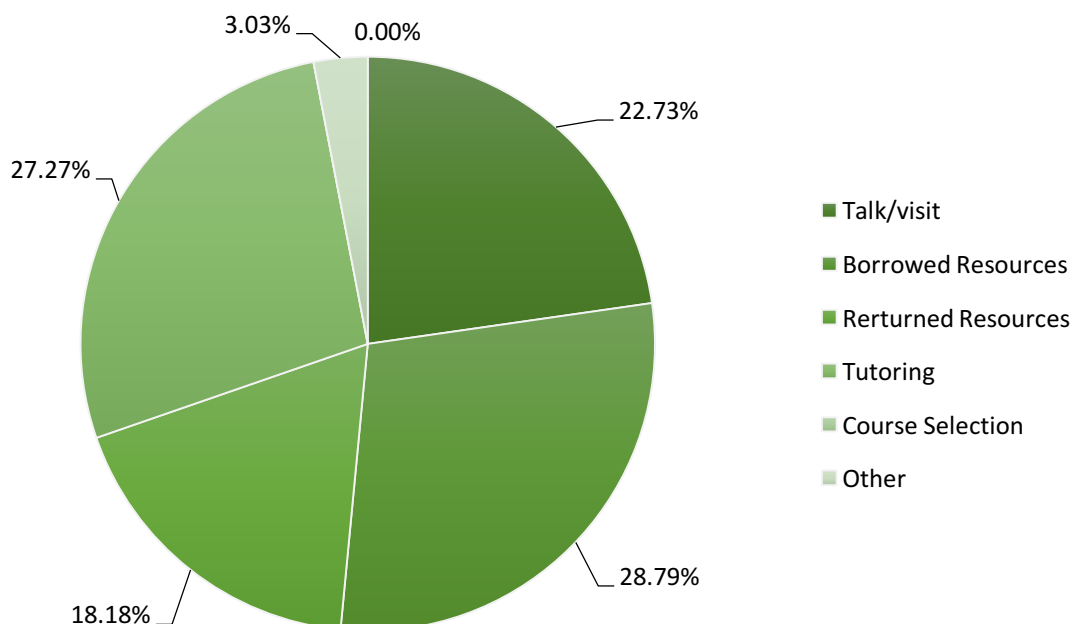
# IESS Resource and Tutoring Centre

The IESS Resource Centre, open six hours per week on a drop-in basis and serves students enrolled in IESS courses by providing IESS-specific resources and tutoring. Tutoring and access to resources is also available by appointment. Graduate students involved in IESS-related research staff the Centre. It was formerly located in the Kawartha World Issues Center (ESB B101), but will be moving to a dedicated space within the newly renovated Bata Library for the 2018-19 year.

The Centre's unique resources are reserved for IESS students and thus are not available from the University Library catalogue. The IESS library cabinet includes DVDs, journals, textbooks, field guides, and a multitude of books. The resources include a growing collection of primary source Haudenosaunee, Anishinaabeg, Cree, and Inuit Indigenous Knowledge books (amongst other Nations, too); Indigenous research methodologies texts; healing- and health-related sources; and sources focused on environmental issues impacting Indigenous communities in in the state of Canada and throughout the world.

This year (2017-18) the centre was used by a diversity of students. Students visited the centre to seek out useful resources, to get help on material and assignments for their courses, and to get advice on courses and programs.

Percentages of Types of Visits during the 2017-18 Academic Year



# Student Survey Highlights

## Student Demographics

<b>Identifies as:</b>	<b>Gender:</b>	<b>Aged:</b>
17% Indigenous	65% Female	18-21 48%
83% non-Indigenous	35% Male	22-25 29%
	.02% Other	26-29 .05%
		30-39 .05%
		40-49 .03%
		50+ .03%

## Student Responses

### I would like to use the knowledge I am learning in this program to:

- "Help bridge the gaps between Western and Indigenous communities, decrease the inequalities in health, food security, and communities overall"
- "Enhance/better Indigenous and non-Indigenous relations"
- "Decolonize settler culture"
- "Furthering career potential in hopes to find employment working alongside Indigenous communities"
- "To compliment my Western knowledge/apply to other disciplines"

### In what ways have courses in this program influenced or changed you?

- "They have made me a better ally"
- "I am learning to decolonize settler history"
- "Opened my eyes to a lot of new issues and expanded my perspective"
- "Made me aware of Canada's colonial presence and what we need to do to help"
- "Opened my mind but now I can't close it and I have no one to discuss it with"
- "They changed the ways in which I conduct research; I am now more respectful and ethical in my approach"
- "Self-growth"
- "Helped enrich my community involvement, and helped me to educate my family. I was able to participate in local food systems and arts that support Indigenous communities, and to integrate this knowledge into other school disciplines. I also learned how to heal myself and others with plant knowledge."
- "IESS helped broaden my worldview at multiple levels and taught me about Indigenous Peoples throughout the world and ways in which I can help with both local and global Indigenous Issues."
- "The programs and the teachings I am being exposed to are providing me with a deeper, more meaningful connection with, and around my pre-existing relationships with the natural world. In addition, it is providing me with new ways of living and viewing the world."

# IESS

## Graduating Student Spotlights

### *Ryan Wheatley*

I am a transfer student who spent the last 2 years completing my undergraduate degree in Indigenous Environmental Science. This unique discipline has been more about personal growth rather than career advancement. I have learned so much from the faculty at Trent U and the knowledgeable guest speakers. I have a strong desire to share with my family how to engage with different knowledge systems and ways of knowing. By taking IESS I have taken some major steps to decolonizing my life and reconnecting with the natural world in a meaningful way.

I have been shaped into a more open-minded individual with the tools to engage with interdisciplinary research and diverse situations. I consider the knowledge I have gained from oral tradition and the sharing of knowledge through spoken word to be extremely valuable. I believe the opportunities and the extensive network of peers will help shape my life going forward.

I expect to work in my career to include holistic and interconnected ways of thinking into my pursuits as a builder of sustainable technology. Once I graduate I will be attaining a small business license and begin to develop a specialized company focusing on sustainable design and low impact techniques. I intend to weave the values of IESS into the fabric of my life and continue as a lifelong learner.



### *Laura Kersey*

As a Canadian of settler descent, this program has allowed me the opportunity to begin learning and understanding a different knowledge system from the one I was raised in. A particular teaching that has stood out for me is the concept of Two-Eyed Seeing that was presented by Mi'kmaq Elder Albert Marshall at Trent's 42<sup>nd</sup> Annual Elders Gathering. At this gathering, Elder Albert Marshall stated that Two-Eyed Seeing is "learning to see from one eye with the best in the Indigenous ways of knowing, and from the other eye with the best in Western ways of knowing, and to use both of these eyes together for the benefit of all". For me, this teaching clearly expresses the need for multiple knowledge systems to be used to address a variety of current issues. As I graduate from this program, I will take this and many other teachings with me to incorporate into my future.

# IESS Graduating Student Spotlights



*Melanie*

I enrolled in IESS for two main reasons; 1) to learn more about the conditions and environmental destruction that threatens our environment and 2) to gain an Indigenous Knowledge base to expand upon my ways of knowing and seeing the world around me. This program has surpassed what I initially intended on gaining from this degree, as not only did I gain an outstanding education from both Indigenous and Western Worldviews, but a better understanding of the person I want to be. I've had the privilege to hear from many Indigenous Elders and Knowledge Holders each of them bringing new insight to how I want to live my life. One in particular that stands out to me was from Professor Dan Longboat, when he relates aspects of life and knowledge to a tool belt, specifically your own. Everything we learn, experience and do (good or bad) can be added to our tool belt to help us in the future. The tool belt in our endless supply of skills and knowledge that can be added to throughout our life. I've also had the opportunity to learn from extremely intellectual professors under Environmental Science and Biology fields.

As a graduate in Spring 2018, I've come to truly understand and appreciate what it means by bridging cultures and I hope the rest of the world will soon come to realize the benefits of doing so. For my future, my ultimate goal would be to work with the Ministry of Natural Resources and Forest, Ministry of Environment and Climate Change and/or Indigenous and Northern Affairs Canada. I hope to bring what I've learnt through the IESS program and begin to encourage change within the Provincial Government to strengthen Indigenous and non-Indigenous relations.

I am eternally grateful for the experiences, professors and friendships I've made with both students and faculty at Trent. I wish nothing but the best for future IESS graduate students as together we are going to make the changes needed in this world.

*MacGregor*

*Brendan Campbell*

"The most influential statement I carry with me as an IESS student comes from Dan Longboat, and goes something like "You can know a lot about people, if you know their Creation Story." This statement made me reflect on where I come from as a Cree student from out west (Regina, Treaty 4 territory). It made me reflect on my mother as my Creation story, as well as her mother before her. I think this statement is very reflective of IESS not only because it speaks to Dan's captivating lecture-style (as this statement was shared in my first year and still forms my basis of understanding myself and everyone around me), but it also speaks to how IESS can transform students. For me, IESS has been a program of so much unlearning and moving beyond the classroom to consider real world implications. IESS has helped me consider more sustainable ways to live with the Earth, and respectful ways of acknowledging the original people of the lands we occupy."



*Lauren Roberts*

During my years in IESS I would go to class and receive words, medicine, that continuously reminded me of my purpose, responsibility, and gift of being human and alive on this earth. IESS is a program that runs deep. The community is strong and the opportunities are endless. I have been filled with tools, stories, wisdom, awareness, friendship, mentors, diversity, respect, and gratitude.

After attending two other universities in attempting to complete my degree, I nearly left the world of academia, feeling that the institution wasn't quite for me. Someone suggested to give Trent a try and later that night I searched online and found the IESS program. I applied right away. Later that year I found myself in a classroom that inspired me, faculty that supported me, classmates that engaged with me, and an ideology that honoured me.

During the years between my general degree and my honours, I have found that employers are intrigued by the uniqueness of the program and always make a point to ask about it. It is a growing field that can take you many places if you choose to be creative within it. I am headed to Vancouver next year to work on a MA in Indigenous Community Planning at UBC. A huge thank you to everyone involved in IESS who continues to support me along my journey and fulfilling a responsibility as a settler-Canadian that seems to be laid out before me.



# If there is a constant

IESS student Olivia Mater

why am I here?

i ask this to the space around me  
the cedars  
the sky  
the glowing sun  
the singing birds  
the river

why am I here?

as I sit by the river  
i feel my heart beating  
an echo of the rhythm of her rapids  
i watch as the cool ebb and flow of her waters  
dance over rock  
weaving around meanders  
carving out her path home

and it is here that I feel most alive.

by the water I breathe again  
in her rushing current lies power  
and compassion  
forces of strength and humility  
coursing  
pulsing  
breathing life into this world

this is her gift  
a profound act of love.

water has shown me that in this life

I will sink low  
to the dark silence of deep blue  
and I will rise  
like waves  
like the tide  
to see the sun again.

I will be pulled by the moon  
and shaped by winds of change  
I will hold rage like rapids in spring  
and calm  
like the stillness of a lake  
on a starlit night.

nothing in this life will ever be static  
but if there is a constant  
let it be love.

as I move through this world, i want to reflect a  
rivers' capacity to love. to carry life forward, create  
space  
hold up hearts and  
bolster the momentum of change.

As Dan says

"We are here for a limited amount of time.  
a certain number of breaths.  
what will you do while you are here?  
how will you work for the continuation of all life?  
find your purpose."

As a settler

i feel an inherent responsibility  
to form a deep understanding of the space I  
occupy  
the space I take away  
and the space I am willing to give up.  
My ancestors did enough

said enough

took enough

that's

enough.

It is my job to forge a path towards a  
different story.

to stop the degradation  
the destruction  
the depletion  
extraction

and violent theft of the legacy they left  
and use everything I have

to work towards the restoration

revitalization

and

strengthening

of land

water

beings

hearts

bodies

pirits.

i see a new path

and it's going to take a force of unrelenting  
love to get us there.

it's going to take the building capacity  
of relationship  
and deep understanding  
of accountability reciprocity and balance

I am an offering and a taking  
a gift and a weight  
i am strength and I am permeable.

I am words

I am song

I am a painting

I am vision

I am laughter

I am hands outstretched

Here

take this

i call it love.

For a final assignment for IESS 2601Y :

<https://www.youtube.com/watch?v=1fWSAS0Rnj4>





# Looking Ahead... The Future of IESS

We are very excited about the accomplishments made in the Indigenous Environmental Science/Studies program this year and we look forward with eager anticipation and excitement to the future growth of IESS with the Indigenous Environmental Institute, the new resource centre space in Bata Library, and developing courses to get students out on the land.

The vision for IESS is grand and we continue to accomplish more and more every year.

# Funders, Supporters, and Partners

We would like to acknowledge and send our sincere gratitude to all the individuals and organizations who have been involved in making IESS a success, through partnerships and financial support.

Niá:wen! Miigwetch! Thank you!



