Algoma UNIVERSITY

Department of Geography, Geology and Land Stewardship

in partnership with

National Aboriginal Lands Managers Association

LEVEL I

PROFESSIONAL LANDS MANAGEMENT CERTIFICATION PROGRAM (PLMCP)

Algoma UNIVERSITY

COURSE OVERVIEW

Algoma University (AU) and its Department of Geography & Geology signed an MOU with the National Aboriginal Lands Managers Association (NALMA) to provide Level I of the Professional Lands Management Certification Program (PLMCP).

There are 6 courses (18 credits) to be completed in Level I at Algoma University. Required courses are offered in the Spring /Summer annually: GEOG 2196, GEOG 3307 and one in the Fall (GEOG 2017). Alternate years, GEOG 4407 and GEOG 3796 are offered in the Fall; GEOG 3036 and GEOG 4296 in the Winter, and GEOG 3596 and GEOG 3196 in the Spring. An optional practicum is also available.

GEOG 2196 (Required - Offered Annually in May)	**GEOG 3307** (Offered Annually - in Late August)	**GEOG 2017** (Required - Offered Annually)	**GEOG 4407** Offered alternate years in the Fall	**GEOG 3796** Offered alternate years in the Fall
Introduction to Land Stewardship in First Nation Contexts	Indigenous Knowledge in Environmental Stewardship	Introduction to Geographic Information Systems (GIS)	Environmental Stewardship: Policy and Practice	Stewarding Community Food Systems
Comprehensive, Geographical Overview of First Nation Land Stewardship	Indigenous Knowledge Systems & Role in Environmental Stewardship	Introduction to GIS with an Indigenous Focus to Understand GIS Applications in Land Stewardship	Environmental Stewardship on Reserve & in Indigenous Traditional Territories	Introduction to Community Food Systems within a Geographical Context
Key Topics: Land regimes in First Nations & relevant sections of the Indian Act Responsibilities of a land manager in a First Nation Role of Traditional Knowledge in managing lands Environmental & natural resource legislation Role of GIS in land management	**Key Topics:** Differences between Indigenous Knowledge (IK) & other knowledge systems over time & space Natural resources in homelands & potential for development & associated risks Implications of Duty to Consult, FPIC & UNDRIP Process for getting involved in environmental stewardship in home territories	**Key Topics:** GIS concepts & capabilities & ethics Georeferencing Attribute queries & GIS databases Basic spatial analysis & research questions Create symbolized maps using software Use of a GPS GIS in First Nation land stewardship GIS and Traditional Ecological Knowledge (TEK)	**Key Topics:** Environmental stewardship, monitoring & compliance Federal & provincial environmental assessments Environmental legislation Species at Risk in home territories Contaminants & waste management in home territories	**Key Topics:** Food systems examined through local and global perspectives Indigenous food systems and food sovereignty Local food community gardens, food access and food deserts

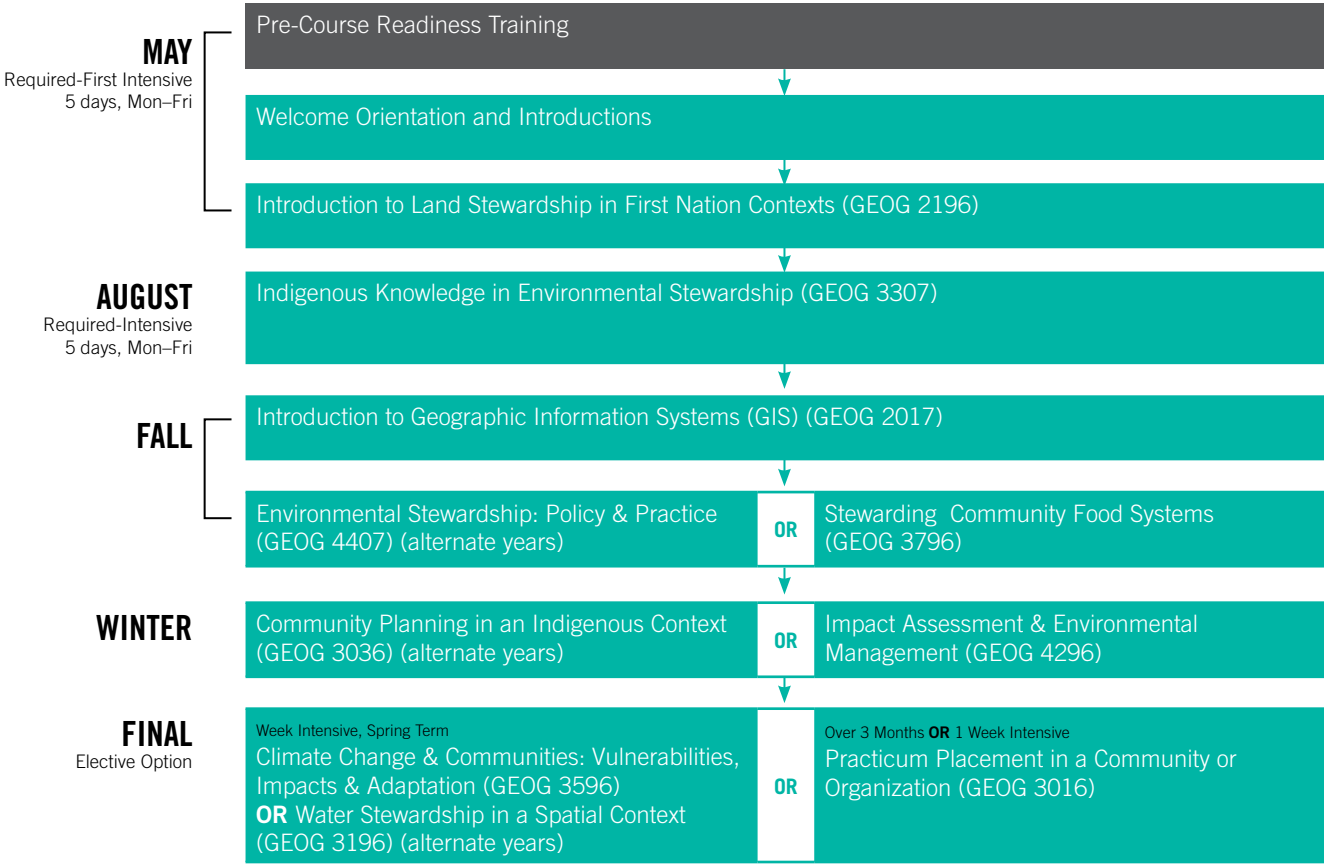
* All courses are 3 credits and are taught within a Geographical Context and include Indigenous Learning Outcomes.

GEOG 3036 Offered alternate years in the Winter	**GEOG 4296** Offered alternate years in the Winter	**GEOG 3596** Offered alternate years in the Spring	**GEOG 3196** Offered alternate years in the Spring	**GEOG 3016** Optional
Community Planning in an Indigenous Context	Impact Assessment and Environmental Management	Climate Change & Communities: Vulnerabilities, Impacts and Adaptations	Water Stewardship in Spatial Context	Geography Practicum
Overview of the Theories, Methods & Practice of Land Use Planning in Canadian and Indigenous, On-Reserve Contexts	Context and Practice of Environmental Impact Assessment	Introduction to Climate Change within a Geographical Context	Introduction to Water Stewardship in a Spatial Context	Experiential and Work Integrated Learning
Key Topics: Theoretical premises of planning approaches Land-use planning processes, methods & techniques Planning specific to Canadian & on-reserve Indigenous communities Environmental plans	**Key Topics:** Environmental impact assessment practices Strategic environmental assessment Cumulative effects assessment Indigenous consultation and engagement	**Key Topics:** What is Climate Change? Climate impacts such as forest fires, flooding, fisheries and water resources Vulnerability assessments Adaptation planning Climate action	**Key Topics:** Human impacts on water cycle including agriculture and climate change Freshwater sources, water quality and water treatment in First Nation and remote communities Students focus on a water body of interest	**Practicum (GEOG 3016):** Work in a First Nation community in Lands Department or in an organization government office related to Indigenous Land Stewardship Work with a mentor and an instructor at Algoma University to participate in hands-on learning

CERTIFICATION

Students who complete the 18 credits of Level I with an overall average of 65% can receive confirmation of completion through a letter from Algoma University. Students can then proceed, if they wish to Level II offered through NALMA.

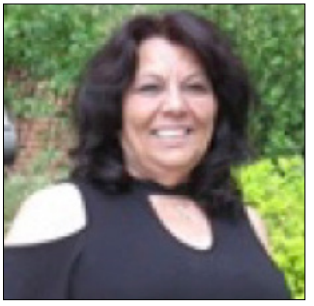
The following flow chart shows the cycle of courses offered for Level I at Algoma University.



ZHII TAADAA ("LET'S GET READY")

Two Day Pre-Course University Readiness Session

Dates: Held prior to the introduction to Land Stewardship course.



"Since I had not been back to school for many years, I was getting very nervous and stressed as the first day of school was approaching... I strongly suggest to anyone going back to school to take the Pre-course Readiness Session... [Zhii Taadaa]. I guarantee you your transition will be so much smoother." **– CATHY YANDEAU, STUDENT**

Aki & Environmental Stewardship Certificate (30 credits)

This certificate is awarded by Algoma University and is comprised of 30 credits made up of Level 1 (18 credits) plus 12 credits from electives from the Geography program and optionally Indigenous Archaeology (ANTR 2096).

PATHWAYS TO A CERTIFICATE OR DEGREE

OPTION 1: Professional Lands Management Certification Program (PLMCP) – NALMA*

Level I - 18 credits offered through Algoma University	**Level II** - 18 credits offered through National Aboriginal Land Managers Association (NALMA)	Completion of Level I and II lead to the Professional Lands Management Certification Program awarded through NALMA

OPTION 2: Certificate in Aki & Environmental Stewardship – Algoma University

Level I - 18 credits offered through Algoma University	**Electives** - 12 additional credits offered through Geography or Indigenous Archaeology course (ANTR 2096 -3 credit)	Completion of the Certificate in Aki & Environmental Stewardship (30 credits) awarded through Algoma University

OPTION 3: Admission to a Degree Program – Algoma University

Level I - 18 credits offered through Algoma University	**Level II** - 18 credits from NALMA granted as Block Transfer credits	Completion of Level I and II (36 credits) will be offered Admission to Degree program at Algoma University

OPTION 4: Continue to a Degree Program (3 or 4 year program) – Algoma University

Certificate in Aki & Environmental Stewardship completed at Algoma University		Completion of Certificate (30 credits) students can continue in a Degree program at Algoma University

** Students who successfully complete the 6 courses (Level I) with an overall average of 65% can receive a letter from Algoma University. Students who complete Level I can proceed to Level II offered through NALMA.*

FACULTY

Paulette Steeves

Paulette Steeves, Ph.D. (Cree- Metis) is an Indigenous archaeologist. She is an Associate Professor in Sociology at Algoma and the Chair of Geography, Geology and Land Stewardship, and a Canada Research Chair in Indigenous History Healing and Reconciliation. She has published numerous articles, book chapters and a book on the deep history of Indigenous people in the Americas, *The Indigenous Paleolithic of the Western Hemisphere,* University of Nebraska Press 2021.

Dr. Steeves trains and hires students to do research and work in her Indigenous History, Healing and Reconciliation lab. She teaches a course on Indigenous Archaeology which earned the honor of being named a cool course in Macleans University Guide 2022. Dr. Steeves teaches from an Indigenous perspective centering all teaching on the land and Indigenous ways of being, knowing, and doing. In her book she argues that Indigenous people have been in the Western Hemisphere for over 130,000 years, she reclaims and rewrites Indigenous histories, linking Indigenous people to the lands of the Americas and to ancestors in deep time.

Nairne Cameron

Nairne Cameron, Ph.D. is a broadly trained geographer and geologist and Associate Professor in the Department of Geography, Geology & Land Stewardship at Algoma University. Her teaching and research interests include: food access geography, spatial analysis, urban and regional development, and land stewardship. Since 2015, in conjunction with a Community Advisory Circle, Nairne assisted in organizing the 2015, 2017, and 2019 *Taking Care of Our Land Symposium (Gdo Akiiminaan Ganawendanaan)*. Dr. Cameron helped launch the land stewardship certification curriculum including the Aki and Environmental Stewardship Certificate in partnership with the National Aboriginal Lands Managers Association (NALMA). She is a former chair of the American Association of Geographers Applied Geography Specialty Group. For several years, she has worked with students on the People's Garden, a community garden on campus. As the Algoma University hub leader for the Social Sciences and Humanities Research Council (SSHRC) Lake Superior Living Labs Network (LSLLN) project, she is collaborating with University faculty and staff and community partners in the Algoma region mainly on food-related projects, and coordinating with hubs based at Lakehead University, University of Minnesota at Duluth, and Michigan Technological University. In August 2021, Nairne led an inaugural LSLLN *Climate Action Field School* based at Algoma University.

Climate Action Field School, Algoma Hub, August 2021

Cheryl Recollet

Cheryl is an Anishinaabekwe who comes from Point Grondine in Ontario. She started instructing with Algoma University in 2016 where she delivered the Eco-Based Approach to Land Use Planning: A Community Perspective. She has since developed and delivered the Indigenous Knowledge in Environmental Stewardship Course and she also teaches the Legal Issues in Community Development: Case Studies in Treaty Rights, Landuse and Enterprise Relations in the Community Economic and Social Development program. In addition to her work with our Algoma Family, Cheryl works for Robinson Huron Waawiindamaagewin as the Director of Research and Communications in which she leads the Use and Occupancy Research program for 21 Anishinaabe communities. Cheryl is starting her Ph.D. studies in September 2022 in Indigenous Governance at the University of Victoria.

William Osei

Dr. William Osei is Professor Emeritus (Full Professor). His academic qualifications include: Ph.D. (The University of Western Ontario, London Ontario), M.A. (Carleton University, Ottawa, Ontario), and B.A. Hons. (University of Ghana, Legon-Accra). He received the Distinguished Faculty Award (Senate of Algoma University, 1996). Dr. Osei's life-long research and professional interests include: energy systems, environment and development, agriculture and agroecosystems, community-based approaches to natural resources management, risks, hazards, and disaster management, and sustainable development (concepts, approaches, and practices in time and space). He has participated in local, national, and international conferences and workshops on resources, energy, environment, and sustainable development.

Dr. Osei was a long-term member of recognized professional associations and various academic specialty groups.

Michael Doyle

Dr. Michael Feehan Doyle, Adjunct Research Professor, is a broadly trained plant biologist with wide-ranging interests including physical geography, island bio-geography, conservation ecology, environmental impacts (including climate change), and food systems. Dr. Doyle has served in academic and research consultancies world–wide (over 30 countries). He was awarded the International Honor Award, from the USDA in 2006, and became a Kellogg/APLU Food Systems Leadership Fellow (FSLI) in 2008. In 2019, Dr. Doyle and his wife, Debra, acquired a pristine island north of Algoma University and are engaged in developing a small scientific field station (training, research, and environmental monitoring) on it, as well as establishing the island as a conservation area.

COMMUNITY ADVISORY CIRCLE

A Community Advisory Circle has guided the development of the land stewardship curriculum and the *Taking Care of Our Land Symposiums (Gdo Akiiminaan Ganawendanaan)*. The Community Advisory includes members from Garden River and Batchewana First Nations.

FACULTY OF CROSS-CULTURAL STUDIES

The Department of Geography, Geology and Land Stewardship is part of the newly formed Faculty of Cross-Cultural Studies at Algoma University, as of July 1, 2022. The Faculty also includes the Departments of Sociology and Community Economic and Social Development.

GEOGRAPHY DEGREE PROGRAM & CERTIFICATES

The Department of Geography, Geology and Land Stewardship offers the following academic programming:

- Bachelor of Arts in Geography (3 year - General)
- Bachelor of Arts in Geography (4 year - Honours)
- Specialization in Geomatics
- Geomatics Certificate
- Aki & Environmental Stewardship Certificate
- Minor in Geomatics
- Minor in Geography

Three awards are offered annually to geography students.

Dr. Robert Ewing Geography Award

The Dr. Robert Ewing Geography award will provide a scholarship valued at $500 to a 2nd – 4th year student studying geography.

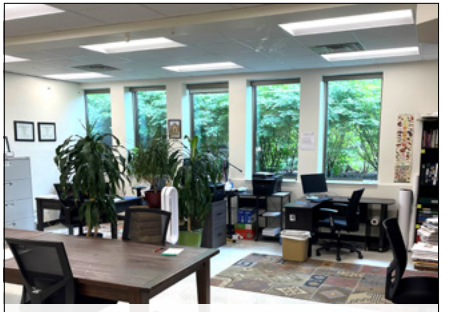
Dr. Ken McLarty Research Award

The Dr. Ken McLarty Research Award was created to assist students undertaking valuable research in the human services field of study. It is awarded annually to a student conducting research for an undergraduate thesis.

Award of Excellence in Geography

Awarded annually to a geography graduate selected by the department.

Geology



Indigenous History, Healing and Reconciliation Lab

Dr. Robert Ewing Geography Lab & Aki Stewardship Centre

GEOLOGY

The department also offers foundational courses in geological science.

INDIGENOUS HISTORY, HEALING AND RECONCILIATION LAB

Dr. Paulette Steeves leads the Indigenous History, Healing and Reconciliation Lab at Algoma University.

DR. ROBERT EWING GEOGRAPHY LAB & AKI STEWARDSHIP CENTRE

The department's lab has been named in honour of Dr. Robert Ewing. as a geography professor and the academic dean of Algoma University College from 1977 to 1984. The lab, also known as the Aki Stewardship Centre, serves all our students, including being a home for our Level 1 Professional Lands Management Certificate Program students when they are on campus. Our Level 1 education partner, the National Aboriginal Lands Managers Association (NALMA) generously funded a major update of the space creating a digital classroom and lab which will support a variety of learning pathways. The lab also holds an expansive mineral collection and map library.

POTENTIAL CAREERS*

Land Manager
GIS Specialist
Geospatial Analyst
Cartographer
Geographer
Land Developer
Climate Specialist
Teacher
Environmental Specialist/ Consultant

**Some options may require additional education.*

FINANCIAL ASSISTANCE

Land Stewardship Fund Scholarship

The Land Stewardship Fund will be used to provide financial assistance to students enrolled in Level 1 of the **Professional Lands Management Certification Program (PLMCP)** or the **Aki & Environmental Stewardship Certificate.**

Financial assistance of $250 will be available to four students with a demonstrated financial need. Preference will be given to First Nations, Métis or Inuit students.

"I have learned so much from Level 1 of the Professional Lands Management Certification Program already. The courses have shown me detailed material about aboriginal lands. I am blessed to be a part of the 'lands family' we have created during our studies at Algoma University. As a First Nation community member it's important to gain this knowledge. Mother Earth is our one and only home, we have no other choice - we must take care of it."

– JENILEE NEVEAU, GEOGRAPHY DEGREE & LEVEL 1 ALUMNA

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