

Educators Resource Guide



Environmental & Urban Educational Studies in the Ontario Curriculum (Grade 9-12)

environmental &
urban change

YORK
UNIVERSITÉ
UNIVERSITY





We recognize that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes Region.

Table of Contents

4	A Message from the Dean
5	Framework for Environmental High School Outreach
7	Program Structure
8	Curriculum Development & Resources
11	Field Trip to York U
12	Special Events
13	Participant Testimonials
14	Map to a Green Career: From High School to the Faculty of EUC
16	EUC Programs: Choose Your Major
19	Las Nubes EcoCampus
20	Specialist High Skills Majors (SHSM) Make Impact
21	Summer Programs
22	Additional Resources
23	Acknowledgement



Framework for Environmental High School Outreach

What is Environmental, Geographic & Urban Education?

Environmental, geographic, and urban education is a crucial aspect of modern education that emphasizes understanding the environment and the interconnection between ecological, social, political, and economic systems. The goal is to develop informed, engaged, environmentally responsible global citizens who can take action to protect and sustain the natural world.

A Message from the Dean



Alice J. Hovorka
Dean & Professor

It is with great enthusiasm that I connect with you today, as partners in our shared mission to empower our students, the future leaders of environmental and urban change. As the world faces pressing challenges such as biodiversity loss, increased urbanization, climate change, and social inequity, we at York University are dedicated to equipping the next generation of changemakers with the essential knowledge, critical thinking skills, hands-on learning experiences, and global perspectives required to create positive change for both people and the planet.

This comprehensive guide is designed to support educators in integrating environmental and urban studies into the Ontario secondary school curriculum for grades 9 through 12. It offers detailed insights, practical teaching strategies, and a wealth of resources to deepen students' understanding of environmental and urban issues. By emphasizing the critical connections between human activities and the environment, this guide aims to foster a more informed, engaged, and responsible generation of students.

We warmly invite you and your learners to explore how we are mobilizing knowledge to foster a just and sustainable future through our diverse high school engagement opportunities.

Sincerely,

Importance of Environmental, Geographic & Urban Education in Secondary Schools

It is crucial to educate young people about the environment. The world we live in depends on our natural ecosystems, and it is our responsibility to take care of it and sustain it for future generations. Humanity can make a positive change toward a better world through innovative solutions, scientific discovery, critical thinking and community education.

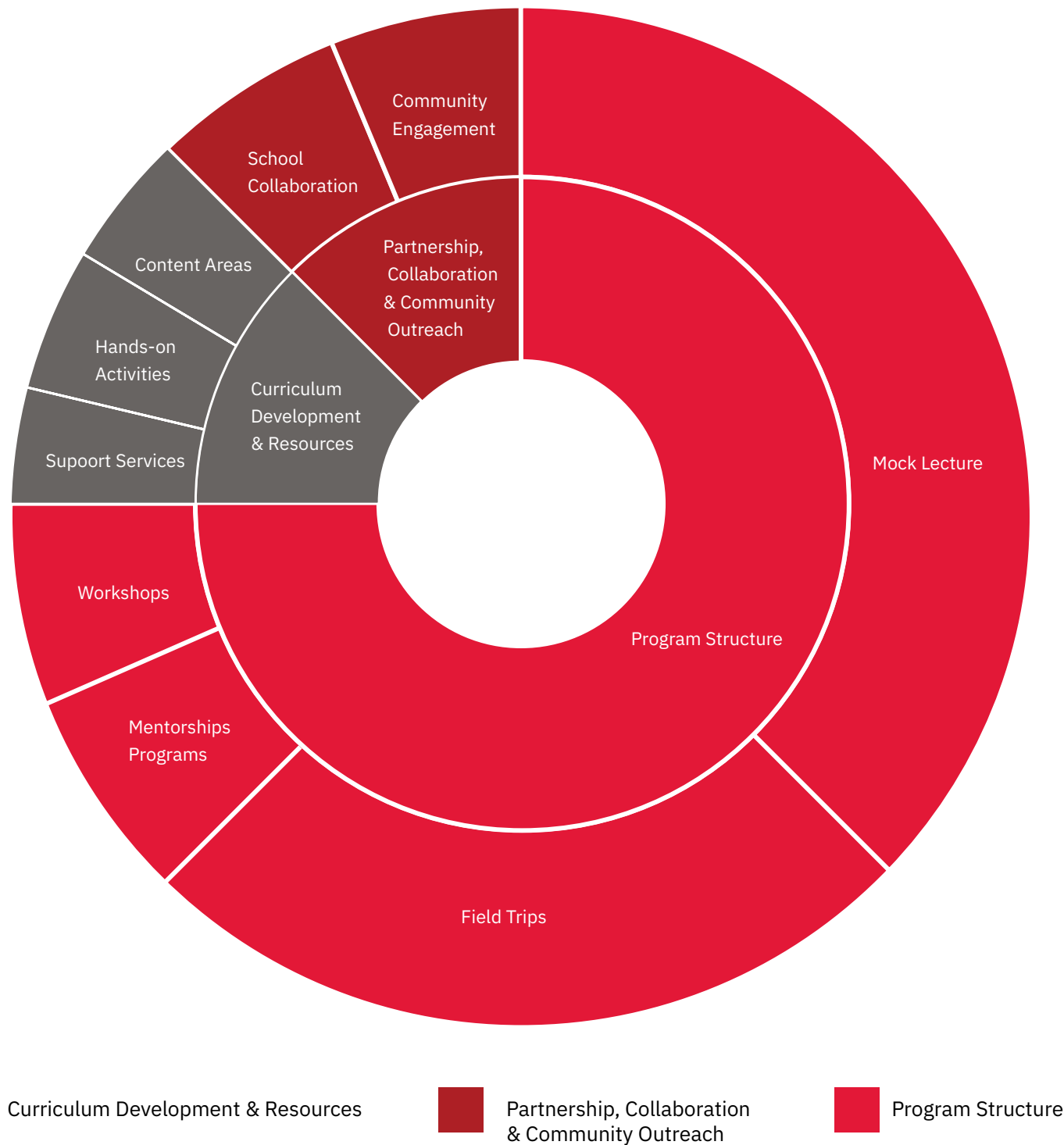
The Faculty of Environmental & Urban Change (EUC) was created as a call to action to respond to the pressing challenges facing the world today. Examining issues of biodiversity, urbanization, inequity, and sustainability, EUC's mission is to mobilize knowledge that will benefit people and the planet. As part of its goals, EUC is dedicated to inspiring and empowering youth to be the future changemakers and leaders primed to right the future. The educational materials provided in this package aim to help educators teach young minds on how to become agents of change in creating a more just and sustainable future with resources for in and outside of the classroom. Together, we can change the world.

Commitment to Decolonizing, Equity, Diversity, and Inclusion (DEDI)

EUC's Secondary School Outreach Framework strongly emphasizes decolonization, equity, diversity, and inclusion (DEDI). Each component aims to create an environment where all students can thrive and achieve their full potential. We strive to ensure that every student has the resources and support they need to succeed, especially those from historically marginalized communities. Through these efforts, our commitment helps to build a more equitable educational landscape where diversity is celebrated, inclusion is a priority, and every student is empowered to reach their full potential.

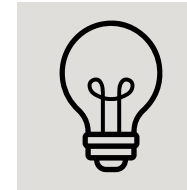
What is our Framework?

The Faculty of EUC's Secondary School Outreach Framework is designed to foster a comprehensive and collaborative approach to education by integrating various program structures, curriculum development resources, and community engagement initiatives. The framework is divided into three primary categories, each contributing to a holistic learning experience for secondary school students.

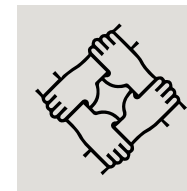


Program Structure

Program Planning Approach & Considerations



Interdisciplinary Approach: Drawing knowledge from multiple fields, such as biology, ecology, geology, sociology, economics, and others, this approach helps learners comprehend the complexities of environmental issues and promotes a comprehensive understanding.



Experiential Learning: Incorporating hands-on and outdoor learning experiences, environmental and urban education aims to immerse students in real-world environmental situations. These experiences foster a deeper connection with nature and instill a sense of responsibility for protecting the environment.



Critical Thinking: Encourage critical thinking and problem-solving skills, enabling individuals to analyze complex environmental challenges, evaluate various solutions, and make informed decisions.



Awareness of Environmental Issues: By exploring both the scientific and human dimensions of environmental challenges, Environmental, Geographic & Urban Education increases awareness of environmental issues such as climate change, pollution, loss of biodiversity, deforestation, and resource depletion.



Citizenship and Activism: Aim to empower individuals to become active and responsible global citizens. It encourages participation in environmental and conservation efforts, sustainable practices, and advocacy for environmental policies resource depletion.

Curriculum Development & Resources

Curriculum Design & Planning for Instruction Considerations

EUC offers several lesson plans to support Ontario 9-12 curriculum. Educators are encouraged to utilize the provided plans as they are or tailor them to align with classroom planning and the unique needs of students. These plans are designed to stay relevant to current events and include sections for opinion responses, fostering critical thinking and personal reflection among learners.

Guidelines for incorporating Lessons Plans into the Curriculum

- **Promote Interdisciplinary Approaches:** Integrate multiple disciplines to provide a richer, more holistic understanding of the subject matter.
- **Incorporate indigenous Perspectives:** Ensure that Indigenous viewpoints and knowledge are recognized and respected within the learning environment.
- **Take Proactive Measures:** Address issues proactively and encourage students to engage in actions that make a positive impact.
- **Consider Local and Global Contexts:** Explore issues from both a local and global standpoint to cultivate a comprehensive awareness of their significance and implications.

Cross-Curricular & Integrated Learning

Curriculum resources are designed to be cross-curricular and adaptable, enabling students to meet the learning objectives of multiple subjects within a single unit, lesson, or activity. These plans offer numerous opportunities for students to strengthen and demonstrate their knowledge and skills across various disciplines.

Curriculum-link Resources – Ready to Use

These resources are designed to be cross-curricular and integrated learning to bridge classroom research with the undergraduate programs offered by the Faculty of Environmental & Urban Change. Tailored lesson plans align with the Ontario Curriculum’s expectations for various subjects and grade levels, explicitly targeting secondary schools. Each lesson plan is accompanied by comprehensive answer keys for educators, with electronic versions available for students to access on PDF-compatible devices. Additionally, assessment tools are integrated with each lesson plan to ensure adequate student understanding and progress evaluation.

Lesson Plan Title	Grade Level	Related to Course Code	Course Name
Walking in a Cars World	9	CGC1D	Issues in Canadian Geography, Academic
Lakes and Climate Change	9	SNC1W	Science, De-streamed
Waste and Circular Economy	10	BB120	Business, Academic
Indigenous Knowledge Systems and Great Lakes Governance	10	ENG2D	English, Academic
Indigenous Sovereignty in Settler Colonial Food Bureaucracies	10	HFN20	Food and Nutrition
Impacts of Urban Beehives on Wild Bees	10	SNC2D	Science
Natural Disasters	11	CGF3M	Forces of Nature: Physical Processes and Disasters
Wheelchair User's Perspectives on Transportation Services in Uber and Lyft	11	CPC30	Canadian Politics and Citizenship
The Cost of Fast Fashion	12	CGW4U	Canadian and World Issues
Indigenous Influence on Environmental Justice	12	CLN4U	Canadian and International Law

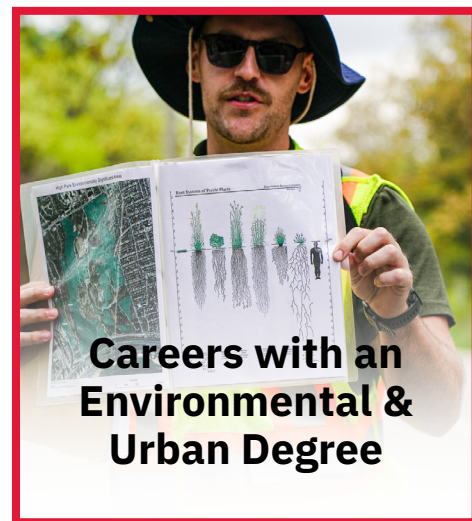
[Click here](#) to download a lesson plan

Partnerships, Collaboration, & Community Outreach

The Faculty of EUC's Secondary School Outreach Framework is committed to building strong partnerships and engaging in community outreach to create a supportive and inclusive educational environment. This commitment is manifested through various initiatives that aim to bridge gaps, promote collaboration, and enrich the learning experience for students from diverse backgrounds.

Changemaker Workshops

EUC has created a series of dynamic, hands-on workshops lead by current EUC students. These workshops were developed from course learning in their current degree program at York University. These interactive and engaging workshops are offered virtually and in person.



[Click here](#) to book a workshop

Field Trips to York U

Visit York University's Keele Campus for a full day immersive experience hosted by our EUC experts and students. We specialize in hands-on, real world experiences for grade 9 to 12 students.

SHSM/SPE Event – Design Thinking Challenge on Sustainable Schools: Bring your SHSM students for a full day case competition challenge at York University.

Maloca Garden Clean-up: Come get to know Maloca Community Garden, part of EUC's living labs! Support our clean-up so we can get plants in the ground. Supplies will be provided.

Sustainable Campus Tour: Discover the sustainable features of York University Keele Campus with a 60-minute tour led by our current undergraduate students.

Become an EUC student for a Day: Attend a first—and/or second-year course lecture by faculty members from the Faculty of Environmental & Urban Change. Sit in as a guest to observe and listen to the research and material taught to our students.



Email EUCApply@yorku.ca to book a field trip

Special Events



Celebrate GIS Day with EUC

Join us as we mark GIS Day, a global event celebrating the transformative power of Geographic Information Systems (GIS) and geomatics. Every year, institutions and enthusiasts worldwide recognize the profound impact these technologies have on our daily lives, from urban planning and environmental conservation to disaster management and beyond.

[Click here](#) to register for GIS Day at EUC

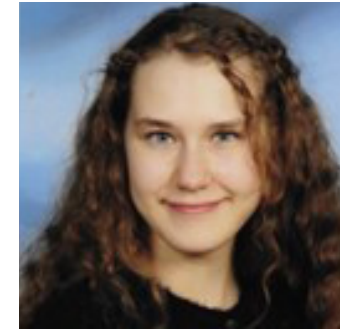


Change Your World | April 30, 2025

Attend the annual conference to motivate Ontario's young people to become environmentally responsible citizens. High school students and their teachers are invited to attend this exciting one-day event, which brings together youth and community organizations from all over Ontario to explore, work together, and learn how to create sustainable and fair change in our world.

[Click here](#) to learn more about our Change Your World Conference

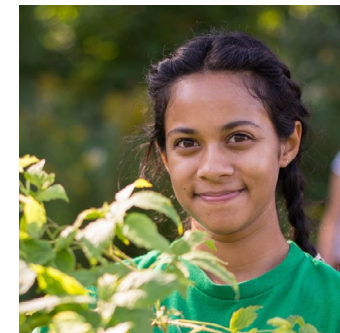
Participant Testimonials



Amy Lawson

**Sustainable Environmental Management 1st year
Markham District High School**

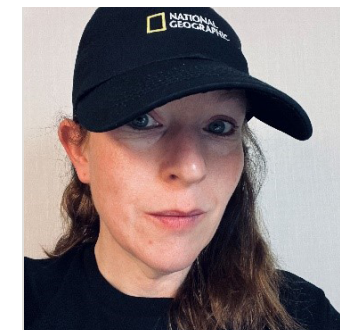
Prior to accepting my offer, I went to an open house at the Keele campus, which was a great chance to meet future professors. I also attended the Change Your World Conference, which I found to be very informative and inspiring. This conference helped me learn about the values of the faculty of EUC and the kinds of opportunities that a future in the field of environmental studies might hold.



Aliya Din

**BES '20
Emily Carr Secondary School**

The CYW conference was a pivotal experience for me as a high school student. It inspired me to want to be a changemaker in my community and to protect the natural environment. I knew that by pursuing a degree in environmental studies, I would learn the necessary skills needed to succeed. Focusing on environmental management, I then graduated and found a career in forestry, and now I return every year to the CYW conference to deliver hands-on workshops. I am grateful for the experiences I had in my undergrad as it has led me to work for the City of Toronto and make a positive impact on the natural environments in which we live.



Joanna Thompson-Anselm

**BA in Geography & Urban Studies '04
Huron Heights Secondary School**

Working with the Faculty of Environmental and Urban Change has been an empowering experience for OAGEE and also for students. EUC has been instrumental in supporting the inaugural program Urban Solutions, a design thinking program that provides students with an opportunity to explore global problems and develop thoughtful geographic solutions. EUC was pivotal in providing an appropriate space for our event, a panel of experts and mentors to work with our students and a leadership team interested in true collaboration to fulfill our shared goals. Thank you to EUC for the opportunity to work together to support the community of young geographers in Ontario!

Map to a Green Career: From High School to the Faculty of EUC

START

Grade 9: Explore & Learn

Courses: Focus on science and social studies (geography).

Activities: Develop foundational skills in critical thinking and problem-solving.

Grade 10: Deepen Engagement

Courses: Continue with science, geography, and social studies. Take an introductory environmental science course if available.

Activities: Take a class trip to EUC for workshops and a mock lecture conducted by a Faculty member at EUC.

Grade 11: Specialized Learning

Courses: Enroll in any environmental-based courses offered at your school. For example*: CGF3M, SVN3M, SBI3U, HLS30, CGD3M, CPC30, TDJ30, HSE3E, AEA40, CGT30

Extracurriculars: Assume leadership roles in environmental clubs and pursue relevant internships.

Research: Attend the Ontario University Fair (OUF) to meet Faculty members, staff, and current students from EUC.

Grade 12: Focus & Apply

Courses: Take any remaining required courses. EUC eligibility for undergraduate programs is the top 6 4U/M level courses, including ENG4U and any other prerequisites specific to your program. For example*: CGR4M, SES4U, SBI4U, IDC4U, HSB4U, THJ4M, NDW4M, CG04M

Activities: Complete a capstone project or internship, environmental SHSM (if available) related to environmental issues.


University Applications: Apply to the Faculty of Environmental & Urban Change at York University through Ontario University Application Centre (OUAC).

***Courses Legend**


GRADE 11: Physical Processes and Disasters (CGF3M), Environmental Science (SVN3M), Biology (SBI3U), Housing and Home Design (HLS30), Regional Geography (CGD3M), Canadian Politics and Citizenship (CPC30), Communications & Technology (TDJ30), Equity and Social Justice (HSE3E), Media Arts (AEA40), Canadian and World Studies (CGT30)

GRADE 12: The Environment and Resource Management (CRG4M), Earth and Space Science (SES4U), Biology (SBI4U), Interdisciplinary Studies (IDC4U), Challenge and Change in Society (HSB4U), Communications Technology (THJ4M), Indigenous Issues (NDW4M), Environmental Resource Management (CG04M)


Entry & Early Years at the Faculty of EUC – York University




Global Learning Opportunities
Las Nubes EcoCampus




Co-op
(Cooperative Education)



Cross-Campus
Capstone Classroom (C4)



Green Career Fair



Career Peer Coaching

EUC Programs: Choose Your Major

Cities, Regions, Planning (BES)

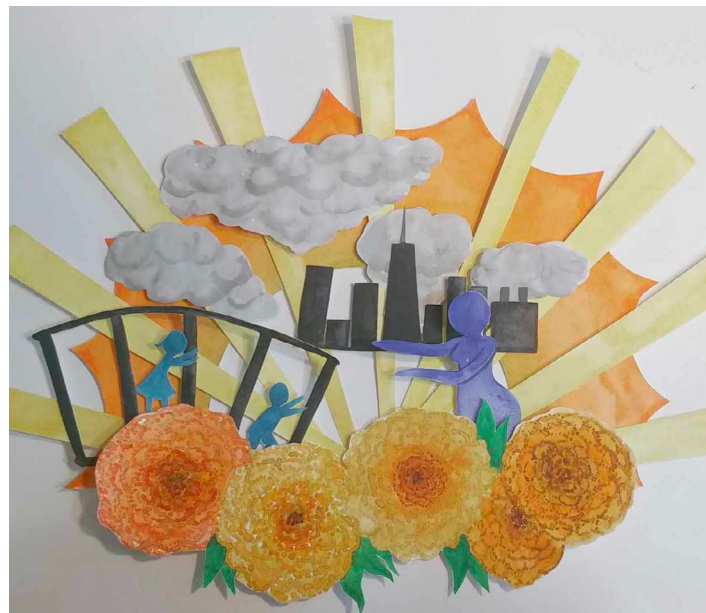


We live in an urban world. Learn how inclusive and sustainable planning can help cities and regions around the globe face and manage the pressing social and environmental challenges caused by increased urbanization.

CAREER PATHS:

- Urban, Land Use or Transportation Planner
- Policy Advisor and Consultant
- LEED Technical Coordinator
- Transit Supervisor or Manager
- Planning and Space Assessor

Environmental Arts & Justice (BES)



Create solutions toward a just and equitable world. Address our local and global environmental challenges through various ways of knowing, thinking and creating, by exploring policy and legal possibilities, and by developing hands-on and professional artistic practices.

CAREER PATHS:

- Environmental Lawyer
- Policy Developer
- Diversity and Equity Professional
- Outreach Educator
- Artist and Designer
- Environmental Organizer

"At What Cost?", Nicoletta Martin (BES '21)

Global Geography (BA)



Global Geography explores how human societies and physical environments are deeply connected and constantly changing. Students learn how to analyze global processes including urbanization, uneven development and inequality, migration and identity formation, and environmental change.

CAREER PATHS:

- GIS and Remote Sensing Analyst
- Global Geography and Environmental Educator,
- Conservation Planner
- Climatologist
- Meteorologist

Environmental Science (BSc)



Create solutions toward a just and equitable world. Address our local and global environmental challenges through various ways of knowing, thinking and creating, by exploring policy and legal possibilities, and by developing hands-on and professional artistic practices.

CAREER PATHS:

- Aquatic Scientist
- Conservationist,
- Environmental Control Specialist
- Laboratory Technician,
- Climate Change Scientist
- Hydrologist
- Wildlife Biologist

Students have the flexibility to choose your major and even explore minors that complement your interests. Whether you're passionate about one subject or eager to combine disciplines, EUC allows you to tailor your academic journey to suit your unique goals.

Sustainable Environmental Management (BES)



Global Geography explores how human societies and physical environments are deeply connected and constantly changing. Students learn how to analyze global processes including urbanization, uneven development and inequality, migration and identity formation, and environmental change.

CAREER PATHS:

- Environmental Outreach and Stewardship Coordinator,
- Energy Assessor
- Environmental Educator,
- Green Entrepreneur
- Policy Analyst
- Project Coordinator

Undeclared (BA/BES)



The Undeclared major option offers you an open first year experience where you can take foundation courses in four majors offered by the Faculty of Environmental and Urban Change (EUC) at York University.

PLEASE NOTE: The Undeclared major option is available for first time university students only and does not include the option to transfer to Environmental Science (BSc) major in EUC.

[Click here](#) to learn more about our programs

Las Nubes EcoCampus



For nearly 20 years, the Las Nubes Project has provided York University students with immersive summer field courses. Now, we're bringing this incredible opportunity to high school students! This 7-day program offers a unique chance to explore and learn in the vibrant, tropical landscapes of Southern Costa Rica during March Break.

When it's offered: March 8 to 16, 2025 OR March 15-23, 2025

[Click here](#) to learn more about our EcoCampus

Specialist High Skills Majors (SHSM) Make Impact



Looking for hands-on, reach ahead activities for your classes or Specialist High Skills Major (SHSM) programs? Consider a class trip to York U for a day with experts and current students in the Faculty of Environmental & Urban Change. Your day can include one of our dynamic workshops or a guest lecture, exploring the Keele Campus on a Sustainable Campus Tour and much more!



Kymary Magpuyo | Cities, Regions, Planning 1st year
Loretto Abbey

The SHSM program has provided me valuable experience, training and certifications, which has strengthened my resume and developed skills related to my field of study. Through SHSM, I was able to feel more aligned with my ambitions and commitment to succeed. Furthermore, the program's benefits have made me a stronger candidate for financing opportunities by showcasing my dedication and preparation for university-level work.

[Click here](#) to learn more about class field trips and SHSM Reach-Ahead days at EUC

Summer Programs

Future Changemakers Summer Program: Join us for a week of learning, growing, and fun. Learn about and create solutions to the grand challenges facing people and the planet each day. We explore issues such as climate change, indigenous justice, urbanization and cities, and how to build just and sustainable communities. Our camp is packed with exciting activities, workshops, and guest speakers to inspire and empower the next generation of changemakers.

Catalysts for Change: Professional Development for Dynamic Educators:

The Faculty of Environmental & Urban Change recognizes the importance of ongoing learning to support educators to lead the next generation of changemakers. Numerous partnerships and collaboration of events through funding, faculty as key-note speakers and event spaces.

TD Eco-source Partnership: Ecosource is an innovative Ontario-based organization that inspires the community to become more environmentally responsible through creative public education. Join the free professional development collaboration between Ecosource and EUC.

Ontario Association for Geographic and Environmental Education Conference: The Ontario Association of Geographic and Environmental Education is a leading subject association for teachers in Ontario. EUC mandate is to support teachers in implementing the Ontario Ministry of Education's curriculum policy. EUC hosts the annual Spring Conference for secondary school educators.



Additional Resources

PASSOC Phillippine Arts & Social Studies in the Ontario Curriculum Elementary and Secondary Panel. Visit, passocproject.com/learning-activities/ for more information

Become a Sustainable Living Ambassador: Encourage your learners to become a Sustainable Living Ambassador through the online training module. York University's free Micro Lecture Series in Sustainable Living is an innovative and interdisciplinary open-access program that allows participants to learn from six of York's world-renowned academic experts on a diverse range of topics related to sustainability. Earn a first-of-its-kind Digital Badge in Sustainable Living to share on social media. Visit, yorku.ca/sustainableliving/ for more information.

Learning for a Sustainable Future (LSF): A free collective of over, 1800 high-quality teacher-reviewed classroom resources fully searchable by language, jurisdiction, grade, subject, SDG's and more. Visit, lsf-lst.ca/resources/ for more information.



Acknowledgment

This guide is a supplement to the Ontario curriculum materials developed by the Ministry of Education, enriched by the curriculum guides from various undergraduate programs at the Faculty of Environmental & Urban Change. These programs include Sustainable Environmental Management (BES), Environmental Science (BSc), Cities, Regions, Planning (BES), Global Geography (BA), and Environmental Arts & Justice (BES).

This document was created collaboratively by experts, including Brittany Giglio (OCT, MEd) and Faculty members Jennifer Korosi, Joshua Thienpont, Adeyemi Olusola, Calvin Klein, Mahtot Gebresselassie, Sarah Flicker, Martha Stiegman, and Associate Dean Philip Kelly from York University. We are also grateful for the valuable feedback provided by Ontario Certified Teachers throughout the process. For further inquiries, please contact us at EUCApply@yorku.ca.

We extend our sincere gratitude to Sofia Colalillo and Daniel Horawski, both current Faculty of Environmental & Urban Change and Faculty of Education students and alumni, for their innovative approach and exemplary efforts in advancing our high school outreach initiatives across schools in the GTA, significantly contributing to the field of environmental education as teacher candidates.

To learn more about our high school outreach, visit euc.yorku.ca/connecting/high-school-outreach/.

Note: This document is a living entity, evolving alongside our changing perspectives (updated August 2024).

CONTACT US

 (416) 736-5252

 yorku.ca/euc

 EUCApply@yorku.ca

FACULTY OF ENVIRONMENTAL & URBAN CHANGE

Keele Campus, York University

Health, Nursing, and Environmental Studies (HNES) Building

4700 Keele Street

Toronto ON, Canada M3J 1P3

@YORKUEUC

