COURSE OUTLINE			
TERM: Fall 2023	**COURSE NO:** GEOG 455		
INSTRUCTOR:	**COURSE TITLE:** Green Infrastructures and Community Networks		
OFFICE: LOCAL: **E-MAIL:** @capilanou.ca	**SECTION NO(S):**		**CREDITS:** 3.0
OFFICE HOURS:			
COURSE WEBSITE:			

Capilano University acknowledges with respect the Lilwat7úl (Lil'wat), xʷməθkʷəyəm (Musqueam), shíshálh (Sechelt), Sḵwx̱wú7mesh (Squamish), and Səlílwətaʔ/Selilwitulh (Tsleil-Waututh) people on whose territories our campuses are located.

COURSE FORMAT
Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

COURSE PREREQUISITES
45 credits of 100-level or higher coursework

CALENDAR DESCRIPTION
This course will examine concepts and practices of green infrastructure development as a key element of sustainable urban planning and climate change adaptation. Students will examine the potential of nature-based design of urban environments through analysis of innovation in water, energy, food, transport, and waste infrastructures from around the world. Geographical aspects of green infrastructure development will be emphasized, including attention to integrated scales of implementation, distributional impacts of resource flows, Indigenous innovation in nature-based design, and community inclusivity in planning and implementation of sustainable urban systems.

COURSE NOTES
GEOG 455 is an approved Science and Technology course for Cap Core requirements.
GEOG 455 is an approved Self and Society course for Cap Core requirements.
GEOG 455 is an approved Science course.

REQUIRED TEXT(S) AND/OR RESOURCES

Sinnett et al. (eds) (2015) Handbook on Green Infrastructure: Planning, Design and Implementation, Edward Elgar (* Suitable for environmental geography, urban studies and planning)
https://www.e-elgar.com/shop/gbp/handbook-on-green-infrastructure-9781783473991.html

Vancouver Greenest City Plan (2020)
https://vancouver.ca/files/cov/greenest-city-action-plan.pdf

Additional readings and resources related to weekly topics will be required.

COURSE STUDENT LEARNING OUTCOMES
On successful completion of this course, students will be able to do the following:
1. Differentiate between concepts of infrastructure and green infrastructure that have evolved over time.
2. Examine how green infrastructure development has contributed to the provision of ecosystem services and socio-cultural well-being in different geographic settings.
3. Analyze the multi-layered technological, environmental, political and social elements of urban spaces and networks.
4. Evaluate diverse approaches to green infrastructure design, planning, implementation and practice, including Indigenous approaches to nature-based design.
5. Assess the distribution of the benefits of green infrastructure projects in relation to their role in supporting inclusive and resilient urban communities.
6. Propose original ideas for how infrastructures can be constructed to support the objectives of inclusive, sustainable and resilient urban communities.
7. Create plans for integrated smart and sustainable infrastructure networks that can support the goals of climate-adapted cities.

Students who complete this Science and Technology course will be able to do the following:
- Assess the cultural, economic, and political effects of technology.
- Assess the impacts of human activity on natural systems and articulate ways in which environmental sustainability may be achieved.
- Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
- Explain how scientific inquiry is based on investigation of evidence and evolves based on new findings.
- Participate in scientific inquiry and communicate the elements of the process, including making careful and systematic observations, developing and testing a hypothesis, analysing evidence, and interpreting results.

Students who complete this Self and Society course will be able to do the following:
- Identify potential root causes of local/global problems and how they affect local/global cultures, economies, politics, and policies.
- Assess and evaluate individual and collective responsibilities within a diverse and interconnected global society.
- Apply concepts of sustainable development to address sustainability challenges in a global context.
- Synthesize a range of differing community perspectives on ethics and justice and explain how these perspectives can inform structural change.
- Explain how contexts (e.g., cultural, historical, colonial, economic, technological) shape identity formation and social structures.

COURSE CONTENT

This course will include lecture components and studio learning activities, including field trips, group activities and collaborative work with local green infrastructure planners and communities. The course will be organized around a selection of the following topics.

Week	Topic
1	Conceptualizing green infrastructures in urban environments
2	Historical evolution of urban space, nature and infrastructures
3	Emerging models of green infrastructure development
4	Adapting green infrastructures to people and place
5	Visualizing and analysing urban space and infrastructure
6	Rethinking water flows in urban environments
7	Adapting urban energy networks for climate change
8	Reorganizing urban waste systems for a circular economy
9	Urban green mobility and transport infrastructures
10	Reimagining urban green space, agriculture and foodscapes
11	Integrating green infrastructures in urban spaces
12	Inclusive green infrastructure and community networks
13	Green infrastructures in design, implementation, and practice
14-15	Final Exam Period

EVALUATION PROFILE

Students will be evaluated through completion of work in the following categories. No individual component will be worth more than 35% of the final course grade.

Quizzes, tests and exams	20-50%
Activities and assignments	20-50%
Term project	20-35%
TOTAL	*100%*

GRADING PROFILE

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments

Assignments for in-person classes are due at the beginning of the class on the due date listed. Assignments for online courses are due by the date and time indicated on eLearn. If you anticipate handing in an assignment late, please consult with your instructor beforehand.

Missed Exams/Quizzes/Labs, etc.
Make-up exams, quizzes and/or tests are given at the discretion of the instructor. They are generally given only in medical emergencies or severe personal crises. Some missed activities may not be able to be accommodated. Please consult with your instructor.

Attendance
Students are expected to attend all scheduled classes and participate in all course activities. If you encounter any issues with attendance, please contact your instructor.

English Usage
Students are expected to proofread all written work for any grammatical, spelling or stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

Electronic Devices
Students will need access to a laptop or other electronic device to participate in the course and an Internet/Wi-Fi connection. Students may use an electronic device during class for note-taking or for other activities approved by the instructor. Students may not use electronic devices during tests or exams. Taking photographs of course materials or recording lectures is not permitted for copyright reasons. If you need information technology support, please contact: AskIT@capilanou.ca

On-line Communication
Outside of the classroom, instructors will communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

UNIVERSITY OPERATIONAL DETAILS

Tools for Success
Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: https://www.capilanou.ca/student-life/

Capilano University Security: download the CapU Mobile Safety App

Policy Statement (S2009-06)
Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)
Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy and procedures S2017-05 Academic Integrity for more information: https://www.capilanou.ca/about-capu/governance/policies/

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:
- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:
- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct
All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page https://www.capilanou.ca/about-capu/governance/policies/)

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.