- Faculté des sciences économiques
- www.unine.ch/seco

Sustainable Cities (5ER2055)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en développement international des affaires	**Cours: 4 ph**	**Voir ci-dessous**	6
Master en économie appliquée	**Cours: 4 ph**	**Voir ci-dessous**	6
Master en finance	**Cours: 4 ph**	**Voir ci-dessous**	6
Master of Science en innovation	**Cours: 4 ph**	**Voir ci-dessous**	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Automne

Equipe enseignante

Gabriel Loumeau, Professor
University of Neuchâtel
Institute of Economic Research
Rue A.- L. Breguet 2
CH-2000 Neuchâtel

gabriel.loumeau@unine.ch

Monday, 08:15 - 12:00, Room D59, Av. du Premier Mars 26, starting on 14 September, 2026
The lectures will not be recorded. Personal attendance in the course is critical to succeed.

Be warned: we meet early on Monday mornings. To offset this externality, croissants will be provided — consider them the course's first documented welfare improvement.

Office hours: by appointment: gabriel.loumeau@unine.ch

Antoine Grimaud, PhD
University of Neuchâtel
Institute of Economic Research,
Rue A.-L. Breguet 2,
CH-2000 Neuchâtel

antoine.grimaudi@unine.ch

Contenu

The course is organised around concrete policy levers rather than abstract themes. Each block pairs a class of regional policies — green space and land use, transport and accessibility, housing and rent regulation, place-based and local labour-market policy, urban environmental and climate measures, and local public finance — with the empirical tools needed to evaluate it. Throughout, "sustainable" is understood broadly as the search for policies that raise long-term welfare, and the recurring questions are quantitative: how large are the effects, how are they distributed, and how do they persist over time? Instruction follows a lab-based format that integrates lectures with in-class empirical exercises using real urban and regional data, emphasising counterfactual reasoning, replication, interpretation, and policy relevance.

Forme de l'évaluation

In-class presentation and feedback (20%) and a 2-hour written exam during the exam session (80%).

No documents or connected devices are allowed during the exam, except a non-programmable calculator and a non-electronic dictionary (translation of words from your language to English and vice versa). In case of violation of these rules, students are in a situation of fraud and the unauthorized items will be removed; the exam may be deemed failed.
In case of an online exam: 1.5h, open-book.

Modalités de rattrapage

Retake: 2-hour written exam during the exam session (100%).

URLs	1) https://www.sciencedirect.com/handbook/handbook-of-regional-and-urban-economics/vol/5.

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Documentation

The course is based on lectures, slides, and commented Stata, GIS and Matlab code. Optional readings are listed on the slides. The course makes use of the Handbook of Regional and Urban Economics:
https://www.sciencedirect.com/handbook/handbook-of-regional-and-urban-economics/vol/5.

Pré-requis

Basic training in microeconomics and econometrics is a prerequisite. Familiarity with a statistical software, in particular Stata, is an advantage, as is some experience handling spatial or mapped data.

Forme de l'enseignement

This course takes a deliberately concrete view of sustainable cities. Rather than treating sustainability as a slogan, we define it operationally: a policy is sustainable if it delivers lasting improvements in welfare for current and future residents. The course trains students to evaluate specific regional and urban policies on those terms. What happens if a city builds a park on a vacant lot, speeds up a transport connection, rezones a neighbourhood, or caps rents? Who gains, who loses, by how much, and for how long? By the end of the course, students will be able to take a proposed urban policy, design a credible empirical evaluation of it, and reach a defensible judgement about its long-run welfare effects. In terms of hard skills, students will learn to conduct a full analysis from data gathering, via data preparation in GIS and Stata, and to simulation analysis in Matlab.

The course adopts a lab approach, mixing lectures, student presentations, and interactive sessions built around hands-on empirical exercises. Solutions to the exercises are provided after each exercise session.

You will be assigned a paper to present. Each paper is an empirical evaluation of an urban or regional policy. You will present the paper in 20 minutes in class (using slides). Your final grade will be based on both your understanding of the paper and your presentation skills.

Objectifs d'apprentissage

Au terme de la formation l'étudiant-e doit être capable de :

- Relate and transfer theoretical insights to contemporary policy debates
- Assimilate and integrate theoretical and empirical literatures in urban economics
- Define ,describe and distinguish core models of urban economics

Compétences transférables

- Discuss and interpret empirical evidence on urban growth and decline
- Illustrate and interpret spatial data through tables, graphs, and structured argumentation
- Explain and illustrate the walfare, distributional, and political-economy effects of urban policy
- Analyse and compare alternative urban policy instruments and their distributional consequences

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