

**FACULTY OF ENVIRONMENTAL AND URBAN CHANGE  
YORK UNIVERSITY**

**ENVS 6599A (3 credits) Ecological Footprint Applications  
Fall 2024**

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Wednesdays 9 AM – 12 Noon Online on Zoom

### Short Course Description

This course introduces the concept and measurement of Ecological Footprint and Biocapacity, and its application to nations, other geographies, enterprises, and communities. Critiques and limitations are considered, including how Ecological Footprint and Biocapacity align with the international System of Environmental and Economic Accounts and Sustainable Development Goals. The course concludes by introducing basic computational tools and techniques to engage with national and global data.

### Special notes

- Even though the course code's most significant digit is 6, it is designed for MES students in their first term.
- You cannot directly enroll in this course through REM. Enrolment is by permission of the instructor through the dossier system; please contact the course director for instructions to enroll through the dossier.
- This course is held online to enable the participation of students from the University of Iceland

### Expanded Course Description

By the end of this course, you should be able to: 1) demonstrate an understanding of Ecological Footprint and Biocapacity; 2) appraise Ecological Footprint and Biocapacity within the context of other sustainability metrics and measurement systems; 3) communicate the potential for additional applications of Ecological Footprint and Biocapacity. Topic-specific learning objectives are identified in the detailed course outline.

Most sessions will follow the pattern of: a 50-minute discussion of the required readings, a 50-minute discussion with an invited guest, and a 50-minute lecture to introduce the next topic. Topics are:

- Sustainability concepts and measures
- National applications of Ecological Footprint and Biocapacity
- Spatial non-national applications
- Enterprise applications
- Community applications
- Critiques and limitations
- Alignment with economic and ecological accounts including SEEA-EA
- Alignment with goals including SDGs
- National data analysis
- Pitching new applications

Optionally, this course will prepare you for a subsequent course (starting in January) called *Ecological Footprint Informatics*, which will develop your skills in computational techniques that are used to produce the accounts and to communicate their findings, and which are transferable to other applications of environmental data and ecological economics. Success in both courses will prepare you for the option of summertime work producing national accounts, and optional subsequent work on your major research project/paper/thesis/portfolio.

## Anticipated Course Readings or Texts

The detailed course outline identifies two academic readings assigned per each topic, in support of each topic's learning objectives. Readings are hyperlinked on the course website to be routed through the library proxy. No textbook is assigned for this course. You do not need to purchase software but you will need to use Excel and install free MySQL workbench software on your personal laptop.

## Evaluation: Grading and Course Requirements

Four assignments will be equally weighted:

1) Written reflections about each topic, assessed after each meeting

For each meeting I will add concise bullet-point-style notes to a Google Document. My notes will reflect a handful of statements or questions inspired by what I learned.

2) Participation, assessed during each meeting

In each meeting, I will contribute to a thoughtful value-adding discussion.

3) Written profile of an existing application, due after the last class and before the term ends

I will write a brief profile about a government / organization / person who has demonstrated leadership by applying insights from Ecological Footprint and Biocapacity accounting. The brief should be written for a learned but non-specialist audience, such as for hypothetical international readers of a footprint newsletter. With my optional permission, it may be published or circulated to others. I will aim to have the text be under 1200 words, and I may wish to adopt more of a long-form journalism approach than a standard academic essay.

4) Verbal pitch to a policy professional, due in the last class

I will deliver a brief (maximum 5-minute) presentation that aims to convince a hypothetical policy professional to newly incorporate insights from Ecological Footprint (and Biocapacity) accounting into a program or project or reporting system. The policy professional could be someone in governmental department or agency/tribunal, or a non-governmental organization.

## Important Course information

All students are expected to familiarize themselves with the following information, available on the [Senate Committee on Academic Standards, Curriculum & Pedagogy webpage](#)

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

## [Intellectual Property Notice](#)

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