# syllabus ENVIRONMENTAL STUDIES – AN

ENVIRONMENTAL STUDIES – AN INTERDISCIPLINARY OVERVIEW



blog.nus.edu.sg/env1101/

4 CREDITS

# the basics

#### RATIONALE

**Environmental studies**. A field that brings together diverse disciplines. Biology. Chemistry. Ecology. Economics. Engineering. Ethics. Geography. Law. Public health. Sociology. But at heart, it studies human-environment interactions. And with so many of humanity's biggest challenges linked to environmental issues, the field is strongly problem-oriented. ENV1101 introduces you to the scope of the environmental crisis and of environmental studies, giving you a solid foundation for the BES programme's higher-level ENV-coded courses.

#### AIMS

- Expose you to the breadth, interdisciplinary nature and some key foundational principles of environmental studies
- 2 Arm you with **basic knowledge & skills** that are key to this field of study
- **3** Instill in you an **environmental ethic**, especially that we must all take individual and collective action toward sustainability.

You will acquire a **broad understanding** of the main **issues of the environmental crisis**. You will come to **appreciate** why, given their **complexity** (just look at all the stakeholders & drivers!), it takes interdisciplinarity to solve them. ENV1101 will initiate you to **good academic practices** and **diverse assessments**. And, via the guiding **theme of sustainability**, you will come away with a spirit of belonging to a group of individuals united by the **mission to care for Earth**. Note, the **EMPHASIS** (as in any 101 course) is **ON BREADTH**, not depth!

Joanna Coleman, PhD

**COORDINATOR & LECTURER** 

# learning outcomes

#### By the end of ENV1101, you will be able to...

- articulate the interdisciplinary nature of environmental studies,
- list & explain the main drivers of the environmental crisis,
- describe the environmental impacts of human activities,
- analyse mindset- & practice-based solutions to the crisis,
- form informed opinions based on critical evaluation of the evidence, thus demonstrating environmental literacy,
- think critically & creatively about approaches to problems,
- work effectively on your own and in a group,
- demonstrate evidence of observation and research skills,
- design a project,
- communicate effectively in oral and written form,
- critique & receive criticism from your peers.

### assessments

Assessment	Due	Value (weightage)
Environmental blog	End of instruction period (13-Nov)	30 %
Group project	Last tutorial (week 12)	30 %
Participation	None (assessed continuously)	10 %
Final exam	ТВА	30 %

I see some similarities between educators and company leaders. They rely on their employees' productivity, so they must provide an environment that promotes it and support their employees as they do the work.

Likewise, I'm not responsible for your learning. You being competent young adults, I can count on you to discover things for yourselves and share this knowledge with the class. **My job**: facilitate this by creating a conducive learning environment. By holding you accountable and implicating you in acquiring knowledge, I promote deep learning (the kind that sticks). By holding you to high standards, I show my faith in your ability to shine.

As an incoming BES student, the only must-have is a commitment to learning, to being open to unorthodox views and, above all, to tackling the environmental crisis. Plus, to prepare you for what lies ahead, your participation is essential, so please come with an open mind and ready to: engage with our community respectfully, to think critically and to challenge your own views and those of others. your

## We're in it together



# the framework

ENV1101 presents environmental studies in a framework that uses a medical analogy for the environmental crisis. Our planet is Patient Earth, and it's afflicted by a disease. Humanity.

The course is divided into four sections. First, we see the rise of our species to a position of dominion over all others (disease etiology). In section 2, we examine the observable signs that our activities have quantifiable and durable impacts on the environment (symptoms of the disease). In section 3, we examine possible solutions to the crisis - indeed humanity is both the disease and the caregiver (the cure). Finally, we see the environmental story in Singapore.

# week by week

We'll use our sessions in various ways, i.e., lectures, discussions, activities (unfortunately, the post-CB measures make learning journeys untenable). Be ready for an interactive environment - I ask lots of questions.

Each class starts with a set of learning outcomes (things you should be able to do) and ends with a set of "what now" questions. These questions aren't graded or even submitted. Instead, they help you hone your abilities to think critically, synthesise info and apply knowledge to novel problems. As in, prepare for the exam.

The weekly breakdown is in a separate document on LumiNUS. It also lists the readings. As for a textbook, I tend to think university is the time to make the leap from textbooks to primary literature. But in 2017, I got a copy of the one below and found it quite good (albeit US-focused) - it might be useful throughout your degree. So I endorse it, but it's not mandatory and I don't teach from it.

Cunningham & Cunningham (2017) Principles of Environmental Science – Inquiry and Application. 8th Edition. McGraw Hill Education, New York, NY.

Be ready to read and consult widely. Stay updated on the news (use reliable sources). It's part of university life and, well, adulthood.

### POLICIES

Violate this policy, and your participation grade will suffer. Violations include doing any of the following during our time together (non-exhaustive list):

- Using electronic devices to do anything besides class-related work
- Please put mobiles in silent mode
- Sleeping (SRSLY!)
- Arriving late / leaving early (without a good and agreed-upon reason)
- Working on material for another course

In short, anything that prevents you from participating fully

#### time commitment

Lectures are two hours long. We'll start right on time and end 10 minutes before the hour. I take attendance. There will always be one break during lectures and two during tutorials.

### academic integrity

You must abide by the NUS code of conduct. Throughout ENV 1101, please do collaborate and discuss your knowledge with your peers. But, collaboration must never involve one student possessing a copy of someone else's work (in part or in full). If copying occurs, all students involved will at least receive a zero grade on the assignment. Penalties may be extended to include failure of ENV 1101 and disciplinary action by NUS. Plagiarism will be treated just as severely. You must attend the anti-plagiarism workshop in ENV1202.

Students and faculty bring a rich variety of backgrounds and perspectives. I commit to providing a learning atmosphere that not only respects, but also celebrates diversity. One where we all agree to...

- share our unique experiences, values and beliefs,
- be open to and value others' opinions/viewpoints,
- honour each person's uniqueness,
- communicate respectfully,
- keep confidential discussions that the community has of a personal nature,
- communicate in English only,
- learn to use inclusive (e.g., gender-neutral) language,
- use this opportunity to discuss how to promote inclusivity more widely.

#### about me

**Background**. BSc in Agriculture (Environmental Biology, McGill University), MSc (Wildlife Biology, McGill), PhD (Urban Wildlife Ecology, University of Calgary). I'm an ecologist and conservation biologist.

Research. I'm most interested in how cities impact organisms, human-Nature relationships, conservation attitudes and behaviours and ecosystem services.
Teaching. I'm a huge fan of active learning, especially experiential learning.
Things I love. Family & friends, students, my parrot, music, dance, Nature, kids, travel, skiing, hiking, SCUBA diving, photography, maple syrup, cherries, tattoos, the smell of pine and BATS.

**Things I hate.** Bigotry, violence, injustice, smoking, going to the dentist, strong perfume, mushrooms and bananas.

### Feedback

I continuously strive to offer you the best possible learning experience. So, I want to hear from you. No need to wait until the end of the semester. Give me feedback whenever you like, so I can make changes (where possible). To do so, please use the anonymous feedback forum on LumiNUS or just talk with me. I am open to your thoughts and won't hold what you say against you (even criticisms of my teaching or the content). Also, please remind me if I forget to post promised material on.

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