

# YSS3272: Urban Ecological Systems

Welcome to Urban Ecological Systems. A provisional outline for the module is given below (although final delivery of the module may include changes to this tentative format):

## Provisional Learning Outcomes:

Upon successful completion of this module you should be able to:

- Identify the major threats to biodiversity and ecological systems posed by urbanisation
- Explain how urban ecosystems develop, with particular reference to pests and introduced species
- Understand the processes for evaluation and management of urban ecosystems
- Critically assess future developments and the rise of megacities as ecological entities
- Recognise the impact of urbanisation on human health and wellbeing
- Engage in informed discussion on societal and planning considerations for urban ecosystems

## Provisional Pedagogy:

Each week begins with a free-flow lecture aimed at **interactive knowledge building**. This is followed by **directed learning** through an assigned reading or out of class activity. The second class is a ‘flipped’ classroom tutorial where **deep learning** occurs based upon analysis of the assigned reading/activity. Each week concludes with students completing a **reflective exercise** in their learning diary.

## Provisional Syllabus:

*Week 1:* Urbanisation and urban ecology as the ‘new normal’

*Week 2:* Urban environments as an ecological niche

*Week 3:* Urban biodiversity, pests and aliens

*Week 4:* Methodological approaches to urban ecology

*Week 5:* Urban ecology field trip

*Week 6:* Urban ecosystem services

*Recess Week*

*Week 7: Socio-ecological perspectives in urban ecology*

*Week 8: Urban ecology and human social organisation*

*Week 9: Urban ecology and human health and wellbeing*

*Week 10: Metrics for a healthy urban environment*

*Week 11: Ecology in urban development and planning green buildings*

*Week 12: Green infrastructure and the concept of 'ecopolis'*

*Week 13: Student 'press pitch' presentations*

**Provisional Assessment Items:**

*Week 6 mid-term: Learning diary/participation self-assessment week 1-6 (20%)*

*Week 10 final: Case study in urban ecology written assignment (40%)*

*Week 12 final: Learning diary/participation self-assessment week 7-12 (20%)*

*Week 13 final: Press pitch on current urban ecology issue (20%)*