

Urban Environmental Systems 2414ENV - Tri 2 2021 - Nathan Campus - Blended

1. General Course Information

1.1 Course Details

Course code	2414ENV
Course title	Urban Environmental Systems
Academic organisation	ESC School of Environment and Science
Trimester	Trimester 2 2021
Mode	Blended
Level	Undergraduate
Location	Nathan, On Campus
Credit point value	10

Course Description:

This course introduces urban areas as an environment, and explores aspects such as heat islands and urban hydrology, urban environmental pollution and waste and the impact of climate change on urban areas.

Assumed Background:

Students would be expected to have a basic Level 1 environmental science background.

1.2 Course Introduction

Urban Environmental Systems provides the physical context of urban systems as environments in their own right. With a global increase in the extent of urbanisation, urban areas are not only becoming the dominant 'habitat' inhabited by humans, they are also the home of a diverse range of plants and animals. Urban environments, however, are unique among global environments; they are made from hard surfaces which have an overriding influence on their character. Urban systems create their own microclimates and hydrology and the nature of their physical structure makes them highly disconnected in space. This course introduces you to these concepts and explores how urban systems function as a discrete environment.

Previous Student Feedback

Students have had an extremely positive experience with this relatively new course and are very satisfied with the structure and quality of the course.

1.3 Course Staff

Primary Convenor **Dr Guy Castley**

Phone	555 28918
Email	g.castley@griffith.edu.au
Campus	Gold Coast Campus
Building	Science 1 (G24)
Room	3.08
Consultation	Consultation times may be dynamic for T2 2021 due to other L&T, research and administrative commitments. If there are queries please raise these at workshops in person or contact Dr Castley to arrange an appointment. Please use email in the first instance if you have any questions outside other contact times such as lectures and workshops. Make sure to include your student number and course code in the email subject line.

1.4 Timetable

Timetables are available on [the Programs and Courses website](#).

NB: Details contained in this Section of the course profile and Section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the above link.

Additional Timetable Information

This course will be offered in a blended mode in Trimester 2, 2021. This means that lectures will be offered online but workshops will be held in person on campus. There is an expectation that students will attend these on-campus sessions to remain abreast of course content and assessment requirements. Make sure to check the Learning@Griffith course site for specific details of classes, changes and announcements.

1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's [Lecture Capture Policy](#).

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

1.6 Technical Specifications

This course requires only the standard minimum computing requirements.

2. Aims, Outcomes & Graduate Attributes

2.1 Course Aims

The aims of this course are to:

1. Introduce students to the concept of urban systems as environments in their own right
2. Introduce students to the concepts of heat islands and urban environment microclimates
3. Introduce students to the concepts of urban hydrology and stormwater management
4. Introduce students to concepts around urban pollution and waste management
5. Encourage students to apply the knowledge gained to complete an environmental research project to help understand impacts of urban structures
6. Provide an opportunity for students to gain experience in exploring the scientific literature

2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1 Articulate what constitutes an urban environment.
- 2 Demonstrate knowledge of principles and concepts relating to urban environmental systems
- 3 Apply this knowledge to undertake a basic scientific research project to demonstrate some impacts of urban structures
- 4 Demonstrate scientific writing through the completion of a literature review.
- 5 Apply knowledge gained to generate possible solutions to set problems.

2.3. Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)

- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.

For further details on the Griffith Graduate Attributes please refer to [The Griffith Graduate policy](#).

University wide attributes

Graduate Attribute	Taught	Practised	Assessed
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Innovative, creative and entrepreneurial		•	•
Socially responsible and engaged in their communities	•	•	•
Culturally capable when working with First Australians	•		

3. Learning Resources

3.1 Required Resources

Details of your Required Learning Resources are available from the [Reading List](#).

3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the [Reading List](#).

3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students are included below for easy reference.

[Readings](#) - New online service enabling students to access Required and Recommended Learning resources. It connects to the library catalogue to assist with quickly locating material held in Griffith libraries and enables students to manage and prioritise their readings, add personal study notes and export citations.

[Learning@Griffith](#) - there is a dedicated website for this course via the Learning@Griffith at myGriffith.

[Academic Integrity Tutorial](#) - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

[Student Support](#) - provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

The [Careers and Employment Team](#) provides: Career Wellbeing, Career Planning and Decision Making, Finding Jobs, Skills Identification and Development, Graduate Employment Information, LinkedIn Profile Review, Interview Preparation, Online Psychometric and Aptitude Test Preparation, International Student Support, Disability Disclosure Strategies and Higher Degree Research (HDR) Career Consultations.

[Library and Learning Services](#): Library and Learning Services provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. Library and Learning Services works in collaboration with the academic community to achieve academic and research outcomes.

[Support for learning](#) - the University provides access to common use computing facilities for educational purposes.

[Code of Practice](#) - Griffith Information Technology Resources.

3.5 Other Learning Resources & Information

A series of relevant articles from the peer reviewed and non-peer reviewed literature will be made available on the Learning@Griffith course site.

4. Teaching & Learning Activities

4.1 Learning Activities

Week Commencing	Activity	Learning Outcomes
19 Jul 21	Urbanisation in the Anthropocene (Lecture Series):	1, 2
26 Jul 21	Literature Review Assignment (Workshop): This workshop will introduce the assignment and requirements and get students started on the essentials of completing a literature review.	4
26 Jul 21	Urban environments as physical spaces (Lecture Series):	1, 2
2 Aug 21	Your campus as an urban system (Workshop): Introduce the research-based assessment for the course. This activity will run over multiple weeks	2, 3, 4
2 Aug 21	Roads and disconnection in urban environments (Lecture Series):	1, 2
16 Aug 21	Your campus as an urban system (Workshop): Research study design	2, 3
16 Aug 21	Heat islands and microclimates (Lecture Series):	1, 2
23 Aug 21	Urban systems, water supply and vulnerability (Lecture Series):	1, 2
23 Aug 21	Your campus as an urban system (Workshop): Data collection (self-directed learning)	
30 Aug 21	Urban hydrology - I (Lecture Series):	1, 2
30 Aug 21	Your campus as an urban system (Workshop): Data collection continued	
6 Sep 21	Urban Hydrology - II (Lecture Series):	1, 2
6 Sep 21	Your campus as an urban system (Workshop): Data collation and analysis	
13 Sep 21	Urban Ecological Systems (Lecture Series):	1, 2
13 Sep 21	Your campus as an urban system (Workshop): Data collation and analysis	3, 4, 5
20 Sep 21	Urban systems - Spatial Planning (Lecture Series):	1, 2
20 Sep 21	Your campus as an urban system (Workshop): Report writing	3, 4, 5
27 Sep 21	Your campus as an urban system (Workshop): Report writing	
27 Sep 21	Urban Systems - waste management (Lecture Series):	1, 2
4 Oct 21	Urban systems and pollution I (Lecture Series):	1, 2
4 Oct 21	Content review (Workshop):	1, 2, 5
11 Oct 21	Urban systems and pollution II (Lecture):	1, 2

4.2 Other Teaching and Learning Activities Information

The concepts and principles presented as part of the lecture series will follow the structure as outlined here but may include guest lecture series from industry and academic experts in this field. As such there may be some variation to the specific focus and order of the lecture series content.