

CIVL 2002 ENVIRONMENTAL ENGINEERING

Credit Points 10

Legacy Code 300737

Coordinator Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

Description This unit teaches the fundamental theory and methods required for a civil engineer to solve environmental issues they would face in their professional life.

School Eng, Design & Built Env

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Equivalent Subjects CIVL 4006 - Environmental Engineering

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Apply basic principles of ecology and environmental processes to achieve sustainable water quantity and quality management;
2. Apply appropriate drinking water and wastewater treatment techniques;
3. Examine basic air and noise pollution control techniques;
4. Apply solid and hazardous waste management techniques in urban and rural environments;
5. Explain climate change issues and its implication to civil and environmental engineering projects;
6. Apply environmental impact assessment and life cycle assessment methods for simple civil and environmental engineering problems.
7. Explain legislative requirements and ethical issues related to civil and environmental engineering projects.

Subject Content

The Australian Environment
 Ecology and its role in Civil and Environmental Engineering
 Drinking water treatment
 Wastewater treatment
 Water quality management including modelling
 Solid and hazardous waste collection and disposal
 Environmental impact assessment and life cycle assessment
 Air and noise pollution control and modelling
 Climate change issues related to civil and environmental engineering
 Environmental ethics and legislation

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

| Item | Length | Percent | Threshold | Individual/ Group Task |
|---|-----------------------------------|---------|-----------|---------------------------|
| Quizzes x 3 | 30 minutes each (10% each) | 30 | N | Individual |
| Lab Report (on line video based) | Report of approximately 500 words | 5 | N | Individual |
| Video wastewater treatment plant - questions | 1000 words | 10 | N | Individual |
| Final exam: open book, short answer and problem solving questions | 2 hours | 55 | Y | Individual |

Teaching Periods

2022 Trimester 1 Sydney City

Day

Subject Contact Ankit Agarwal ([https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/](https://directory.westernsydney.edu.au/search/name/Ankit%20Agarwal/)) Ankit Agarwal ([https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/](https://directory.westernsydney.edu.au/search/name/Ankit%20Agarwal/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SC1_SC_D#subjects)

2022 Semester 2 Penrith (Kingswood)

Day

Subject Contact Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SPR_KW_D#subjects)

Parramatta - Victoria Rd

Day

Subject Contact Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

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2022 Trimester 3 Sydney City

Day

Subject Contact Ankit Agarwal ([https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/](https://directory.westernsydney.edu.au/search/name/Ankit%20Agarwal/)) Ankit Agarwal ([https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/](https://directory.westernsydney.edu.au/search/name/Ankit%20Agarwal/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL2002_22-SC3_SC_D#subjects)