CIVL 2002 ENVIRONMENTAL ENGINEERING

Credit Points 10

Legacy Code 300737

Coordinator Mariam Darestani (https://directory.westernsydney.edu.au/ search/name/Mariam Darestani/)

Description This subject 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

Discipline Civil Engineering

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;
- 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

1. General principal of ecologically sustainable development, Climate change and Environmental issues

- 2. Drinking water treatment
- 3. Wastewater treatment
- 4. Water quality management
- 5. Solid and hazardous waste collection and disposal
- 6. Environmental impact assessment and life cycle assessment
- 7. Air and noise pollution
- 8. Climate change issues related to civil and environmental engineering
- 9. Water chemistry
- 10. Emerging water and water treatment and desalination technologies

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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Quiz	30 minutes	15	Ν	Individual
Quiz	30 minutes	15	Ν	Individual
Quiz	30 minutes	15	Ν	Individual
Applied Project	2 hours	30	Ν	Group
Reflection	500 words	15	Ν	Individual
Report	1,000 words	10	Ν	Individual

Teaching Periods

Sydney City Campus - Term 1 (2022) Sydney City

Day

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

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

Spring (2022) Penrith (Kingswood)

Day

Subject Contact Mariam Darestani (https:// directory.westernsydney.edu.au/search/name/Mariam Darestani/)

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

Parramatta - Victoria Rd Dav

Subject Contact Mariam Darestani (https:// directory.westernsydney.edu.au/search/name/Mariam Darestani/)

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

Sydney City Campus - Term 3 (2022) Sydney City

Day

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

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

Sydney City Campus - Term 2 (2023) Sydney City

On-site

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

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject_code=CIVL2002_23-SC2_SC_1#subjects)

Spring (2023) Penrith (Kingswood) On-site

Subject Contact Mariam Darestani (https:// directory.westernsydney.edu.au/search/name/Mariam Darestani/) View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject_code=CIVL2002_23-SPR_KW_1#subjects)

Parramatta City - Macquarie St

On-site

Subject Contact Mariam Darestani (https:// directory.westernsydney.edu.au/search/name/Mariam Darestani/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject_code=CIVL2002_23-SPR_PC_1#subjects)