

ENVL 3009 AIR QUALITY AND CLIMATE CHANGE

Credit Points 10

Legacy Code 301391

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

Description Deteriorating air quality and climate change are two major challenges facing humanity and threatening environmental sustainability and human health. As such, air quality and climate change are of International, National, State and local community concern. This subject critically analyses the many issues that relate to air pollution, including its nature, extent, impacts and monitoring. Students will examine an air pollution issue of their choice.

School Science

Discipline Environmental Studies, Not Elsewhere Classified.

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 3 subject

Equivalent Subjects PUBH 3001 - Air Quality and Climate Change LGYA 6192 - Air Quality Management

Restrictions

Successful completion of 60 credit points at Level 1 and 40 credit points at Level 2.

Learning Outcomes

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

1. Evaluate the major sources of air pollution and critically analyse associated impacts on human health and environmental sustainability.
2. Describe the impact of meteorology on air pollution in a local area.
3. Critically analyse the health effects of air pollution.
4. Evaluate and analyse the monitoring and assessment of air pollution.
5. Critically analyse the causes and the main methods of controlling point sources of air pollution.
6. Apply and evaluate basic air modelling techniques.
7. Evaluate indoor air problems.

Subject Content

Introduction to Air Pollution

Impact of legislation on Ambient Air Pollution

Sources of Air Pollution

Motor Vehicles and their impact on air pollution

Sources and human health effects of air pollution

Climatology

Air quality assessment and air modelling

What is a critical literature review relating to air pollution

Indoor Air Quality Odour Assessment

Global Issues - Climate Change

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.

Type	Length	Percent	Threshold	Individual/ Group Task
Annotated Bibliography	1000 words	20	N	Individual
Report	1000 words	30	N	Individual
Literature Review	2000 words	50	N	Individual

Prescribed Texts

- Vallero, D. (2014). Fundamentals of air pollution (5th ed.). Amsterdam, Netherlands : Elsevier

Teaching Periods