

# 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 unit 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/](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.

Item	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