

# PUBH 3021 AIR POLLUTION & CONTROL

**Credit Points** 10

**Legacy Code** 301276

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

**Description** Air Pollution and Control introduces students with an interest in working in the fields of environmental science, environmental consulting, environmental management and environmental health to the basic principles and practices of air quality assessment and management. Air pollution does not recognise socio-political boundaries, and air pollutants transfer intercontinentally through pathways both close to the Earth's surface and upper atmosphere. Air Quality management represents a major challenge facing humanity because it poses a threat to human health, agriculture and environmental sustainability, as it can penetrate even remote and once pristine environments. As such, air pollution management and control is of International, National, State and Local government and community concern. This subject critically analyses the natural and anthropogenic sources of air pollution, their nature, health and environmental impacts, monitoring, regulation and control.

**School** Science

**Discipline** Environmental Health

**Student Contribution Band** HECS Band 2 10cp

Check your fees 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

**Incompatible Subjects** PUBH 3002 Air Quality and Climate Change

## Restrictions

Successful completion of 120 credit points

## Assumed Knowledge

Basic chemistry, biology and microbiology.

## Learning Outcomes

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

1. Appraise and categorise human and natural sources of air pollution
2. Identify, define and compare tools for regulatory assessment and research of air pollution (ambient, public health and occupational exposures).
3. Interpret the impact of meteorology on air pollution in a local area.
4. Discuss the health effects associated with criteria of National Environmental Pollution measures (NEPMs) defined as air pollutants and air toxics.
5. Evaluate the major sources of air pollution
6. Compare and contrast basic air modelling techniques.
7. Design baseline indoor air quality assessment
8. Prepare a critical literature review of an ambient, public health or occupational air quality issue.

## Subject Content

1. Sources of Air Pollution (natural and human made)

2. Health Impact of Air Pollution
3. Interaction between meteorology and air pollutants
4. Assessing Air Quality (environmental and urban)
5. Introduction to air pollutant modelling
6. Regulation and exposure standards (advisory and mandatory)
7. Assessing the indoor environment
8. Odours, Vaping and Environmental Tobacco Smoke

## 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
Short Answer	500 words max per module	30	N	Individual
Literature Review	1,500 words (+/- 20%)	30	N	Individual
Professional Task	2,000 words (+/-20%)	40	N	Individual

Prescribed Texts

- N/A

Teaching Periods

## Autumn (2024)

### Hawkesbury

#### Hybrid

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View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=PUBH3021\\_24-AUT\\_HW\\_3#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=PUBH3021_24-AUT_HW_3#subjects))