

# PUBH 7023 SAFE AND SUSTAINABLE CONSTRUCTION

**Credit Points** 10

**Legacy Code** 301190

**Coordinator** Laura Melo C E De Almeida ([https://directory.westernsydney.edu.au/search/name/Laura Melo C E De Almeida/](https://directory.westernsydney.edu.au/search/name/Laura%20Melo%20C%20E%20De%20Almeida/))

**Description** This subject introduces two important aspects of construction projects: workplace safety and sustainability. Safety and sustainability are crucial issues in the upper echelons of the construction industry. This subject is intended to explore the theoretical frameworks and best practices to support health and safety in construction projects. It introduces various assessment tools and techniques that can be used to measure and improve sustainability in construction projects.

**School** Eng, Design & Built Env

**Discipline** Building Construction Economics

**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** Postgraduate Coursework Level 7 subject

## Restrictions

Students must be enrolled in a postgraduate program.

## Assumed Knowledge

Students are expected to have basic knowledge in building and construction.

## Learning Outcomes

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

1. Analyse legal economic and ethical issues related to Workplace Health and Safety (WHS) in the construction industry;
2. Develop strategies to improve health and safety performance of construction projects;
3. Understand concepts and principles of sustainable development;
4. Analyse appropriate sustainability assessment tools and carbon management approaches for construction projects;
5. Conduct economic assessments such as whole-life cost (WLC), Cost-Benefit Analysis (CBA) and others for construction projects.

## Subject Content

Theories and best practices in Workplace Health & Safety in the construction industry.

Legal, economic and ethical issues related to Workplace Health and Safety.

The concept of sustainability and the sustainable development agenda.

Sustainability assessment method and techniques.

Managing carbon emissions in construction.

Whole life costing.

Cost benefit analysis and other techniques in assessing development projects.

## 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
Case Study	2000 words	20	N	Individual
Quiz	30 minutes	20	N	Individual
Report	4000 words and 15 minutes	60	N	Both (Individual & Group)

Teaching Periods

## Spring (2023)

### Parramatta City - Macquarie St

#### On-site

**Subject Contact** Ali Al-Ashwal ([https://directory.westernsydney.edu.au/search/name/Ali Al-Ashwal/](https://directory.westernsydney.edu.au/search/name/Ali%20Al-Ashwal/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=PUBH7023\\_23-SPR\\_PC\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=PUBH7023_23-SPR_PC_1#subjects))

## Autumn (2024)

### Parramatta City - Macquarie St

#### On-site

**Subject Contact** Laura Melo C E De Almeida ([https://directory.westernsydney.edu.au/search/name/Laura Melo C E De Almeida/](https://directory.westernsydney.edu.au/search/name/Laura%20Melo%20C%20E%20De%20Almeida/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=PUBH7023\\_24-AUT\\_PC\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=PUBH7023_24-AUT_PC_1#subjects))