# AGRI 3007 WATER IN THE LANDSCAPE

**Credit Points 10** 

Legacy Code 300870

Coordinator Basant Maheshwari (https://directory.westernsydney.edu.au/search/name/Basant Maheshwari/)

Description Many land and water use activities in both urban and rural landscape result in hydrologic changes that have environmental, economic and social consequences. These activities require appropriate management strategies for sustainable water use in catchment. In this unit, the hydrologic cycle will be explored at varying spatial scales in urban and rural contexts. Hydrologic, environmental, economic and social perspectives will be used in the examination of the demand and the use of water.

School Science

Discipline Agricultural Science

Student Contribution Band HECS Band 1 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 LGYA 6246 - Water in the Landscape

Restrictions

Successful completion of 120 credit points.

# **Learning Outcomes**

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

- Synthesise and evaluate different concepts and approaches to sound water management in the context of urban and rural catchments
- Analyse and evaluate the nature of demands for water in different landscapes and for different users and the difficulties in matching supply and demand
- Assess different sources of water and uses and analyse the issues related to rainwater harvesting, water conservation and recycling
- 4. Describe how human activities affect the water quality and health of waterways; and differentiate the impacts of factors such as population pressure and climate change on the availability of water for different uses
- 5. Research selected water issue through working on a mini project
- 6. Use social, cultural, economic, policy and institutional perspectives to relate sustainable water supply with demand

# **Subject Content**

- 1. Water issues and hydrologic cycle
- 2. Issues relating to water in the environment. Quantity and quality of groundwater and surface water supplies
- 3. Urban and Rural Irrigation
- 4. Evaporation and transpiration
- 5. Salinity, drought and other environmental issues
- 6. Water management in urban and peri-urban landscape
- 7. Social, economic and policy aspects of water management

#### 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
Report	1000 words and video (5-7 min)	15	N	Individual
Presentation	15 mins	20	N	Individual
Quiz	1 hour	30	N	Individual
Report	3500 words	35	N	Individual

Teaching Periods

# **Autumn (2022)**

## Hawkesbury

#### Composite

Subject Contact Basant Maheshwari (https://directory.westernsydney.edu.au/search/name/Basant Maheshwari/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=AGRI3007\_22-AUT\_HW\_C#subjects)

## **Autumn (2023)**

## **Hawkesbury**

#### On-site

Subject Contact Basant Maheshwari (https://directory.westernsydney.edu.au/search/name/Basant Maheshwari/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=AGRI3007\_23-AUT\_HW\_1#subjects)