

ENVIRONMENTAL STUDIES (ENVL)

ENVL 1001 Understanding Landscape (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1001/>) **Legacy Code:** 300812

This unit explores the historical and cultural perceptions and perspectives of the term 'landscape' and the sustainability and management of landscapes. Students become familiar with the terminology and concepts surrounding the natural landscape experientially through a series of field trips and develop an awareness and appreciation of both of the conceptual and actual landscape issues. Skills in mapping and spatial awareness skills and technologies will be developed through field trips and workshop sessions including GIS. Such skills will assist in developing a capacity to comprehensively describe and analyse the landscape.

Level: Undergraduate Level 1 subject

Equivalent Subjects: LGYA 6199 - Understanding Landscape LGYB 9526 - Understanding Landscape

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1002 Environmental Issues and Solutions (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1002/>) **Legacy Code:** 301271

This unit explores a variety of environmental issues with a focus on emerging environmental issues. The relationships between human health and environmental health are explored through a number of case studies. Concepts explored include 21st Century contaminants, noise, energy and water. Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to develop solutions to a variety of environmental issues. Students enrolled in the Undergraduate Certificate in Environmental Sustainability will not complete the practical field experience component of this unit, as they will be studying online.

Level: Undergraduate Level 1 subject

Equivalent Subjects: PUBH 1002 Environment and Health

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1003 Environmental Issues and Solutions (WSTC) (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1003/>) **Legacy Code:** 700296

This unit explores a variety of environmental issues with a focus on emerging environmental issues. The relationships between human health and environmental health are explored through a number of case studies. Concepts explored include 21st Century contaminants, noise, energy and water. Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to develop solutions to a variety of environmental issues.

Level: Undergraduate Level 1 subject

Equivalent Subjects: PUBH 1002 Environment and Health
ENVL 1002 Environmental Issues and Solutions

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1004 Introduction to Environmental Science (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1004/>) **Legacy Code:** 301407

Students learn how biology, chemistry and the physical sciences interact to regulate environmental processes in natural and built environments. They will evaluate concepts of sustainability and resilience and apply these perspectives to understand how human actions can alter the natural world. Students will use interdisciplinary approaches, including field studies, to investigate environmental processes and evaluate specific environmental challenges. Local and global environmental issues, sustainability, resilience and stewardship will be explored across diverse social and ecological contexts.

Level: Undergraduate Level 1 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1005 Environmental Issues and Solutions (UG Cert) (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1005/>) **Legacy Code:** 500053

This unit explores a variety of environmental issues with a focus on emerging environmental issues. The relationships between human health and environmental health are explored through a number of case studies. Concepts explored include 21st Century contaminants, noise, energy and water. Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to develop solutions to a variety of environmental issues.

Level: Undergraduate Level 1 subject

Equivalent Subjects: PUBH 1002 Environment and Health
ENVL 1003 Environmental Issues and Solutions
ENVL 1002 Environmental Issues and Solutions

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1006 Environmental Health Issues and Solutions (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1006/>)

This subject explores the interdependent nature of human health and that of the environment, both natural and urban. Concepts explored include 21st Century contaminants, noise, energy and water. Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to develop solutions to a variety of environmental health issues.

Level: Undergraduate Level 1 subject

Equivalent Subjects: PUBH 1002 - Environment and Health
ENVL 1002 - Environmental Issues and Solutions

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 1007 Environmental Health Issues and Solutions (WSTC) (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl1007/>)

This subject explores the interdependent nature of human health and that of the environment, both natural and urban. Concepts explored include 21st Century contaminants, noise, energy and water. Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to develop solutions to a variety of environmental health issues.

Level: Undergraduate Level 1 subject

Equivalent Subjects: PUBH 1002 Environment and Health
ENVL 1002 Environmental Issues and Solutions

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2001 Analysis of Spatial Data (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2001/>) **Legacy Code:** 101646

The making and the use of maps. This unit involves the critical examination of the way geographical data is produced, analysed, mapped and used to inform both private and public decisions. Natural environment, health, accessibility and residential amenity are examples of phenomena that have an important geographical dimension. Policy responses to these phenomena need to be specific with regard to locations and places. Geographic information systems software and census will be used to produce maps based on the analysis and interpretation of data relating to the student's field of interest.

Level: Undergraduate Level 2 subject

Equivalent Subjects: LGYA 7235 - Analysis of Spatial Data

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2002 Environmental Regulation and Policy (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2002/>) **Legacy Code:** 300841

This unit aims to provide students with a broad understanding of the current environmental regulations available to environment protection and planning authorities at the State and Local Government level to protect and manage the natural and built environments. This unit will also consider environmental policy introduced by the State and Commonwealth governments to manage land use activities so as to encourage sustainable development practices. It is a suitable unit for students entering government or industry in environmental management, health and planning roles. There is a particular focus on the use of legislation and preparation of policy to address environmental and health risks to the community.

Level: Undergraduate Level 2 subject

Equivalent Subjects: ENVL 3001 - Environmental Regulations and Policy

ENVL 3002 - Environmental Regulations

ENVL 3010 - Environmental Planning Policy Regulation

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2003 Landuse and the Environment (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2003/>) **Legacy Code:** 300875

This unit will assist students develop a sound framework for the analysis of land use and its interactions with the environment. The skills gained will assist in the evaluation of land use at various levels from household to international level. Particular emphasis will be placed on students gaining a sound conceptual framework from which to examine sustainability at the environmental, economic, social, and production levels. Emphasis will be placed on the use of ecological footprinting as a tool.

Level: Undergraduate Level 2 subject

Equivalent Subjects: LGYA 6188 - Landuse and the Environment

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2005 Internet of Things for the Environment (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2005/>) **Legacy Code:** 301275

Internet of things (IoT) is about connecting platforms to internet for monitoring, managing and controlling them. Simply put, IoT can make 'dumb' things 'smart' by connecting them to the Internet and sensors. This results in improved efficiency of data collection, accuracy and decision making. The applications of IoT is rapidly expanding in environmental science and management, and the topics in this unit will cover aspects of IoT for water, air and noise pollution monitoring, extreme weather warning, river water flow monitoring, water quality management, irrigation management, flora and fauna monitoring, broadacre agriculture, protected cropping, biodiversity, ecosystems health, wildlife and more.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2006 Environmental Planning and Climate Change (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2006/>) **Legacy Code:** 301390

This unit is an introduction to environmental planning in local and state government and in particular the role of planning in protecting the natural environment, enhancing population health and/or encouraging sustainable development practices. Students focus on goal-setting for environmental protection and then explore how planning policy can assist with achieving these goals. Current metropolitan planning and strategy is examined using the Metropolitan Strategy for Sydney as the primary case study. The unit scopes environmental planning policies introduced by state, local and Commonwealth governments to adapt to climate induced impacts on the environment and on community health and well being.

Level: Undergraduate Level 2 subject

Equivalent Subjects: PUBH 3009 - Environmental Planning PUBH 2008 - Environmental Planning Climate Change

Incompatible Subjects: NATS 2020 - Healthy Built Environments

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2007 Environmental Monitoring and Assessment (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2007/>) **Legacy Code:** 301408

In this unit, you will develop the practical skills and underlying scientific knowledge required to address environmental questions across natural and built environments. Through practicals, workshops, and an independent research project you will learn how to design a monitoring and assessment program to characterise different environment situations, interpret data and propose management solutions to contemporary environmental challenges. The unit will introduce a range of topics, including the application of geographic information systems (GIS), remote sensing methodologies, environmental sensors, the internet of things and citizen science approaches to understand and improve environmental situations, and provides opportunities to research a chosen, real-world topic to assess an aspect of environmental sustainability.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2008 Australian Ecosystems: Threats and Solutions (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2008/>)

Australian ecosystems are home to a unique and diverse set of plants and animals. This diversity underpins healthy functioning and resilience of our ecosystems, yet is under threat from habitat degradation, pollution, invasive species and climate change. In this subject you will be introduced to different Australian vegetation communities and explore interactions with soil, animals and climate. You will learn how environmental threats and disturbances affect Australian ecosystems and be introduced to the principles of ecosystem conservation and policy. Practicals include a mix of field- and lab-based activities to develop job-ready skills such as surveying and identifying ecological communities.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2009 Ecosystem Restoration (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2009/>)

Ecosystem Restoration will cover the most widely used and successful management strategies employed to conserve and restore native species and communities facing land degradation and major threats. This subject will cover policy requirements and active management strategies involved in rewilding, ecological restoration, reintroductions, translocations, and their implementation at local, national and global levels. You will explore the full range of concepts and tools for conservation management. This subject will focus on restoration and conservation from individuals to landscapes. Indigenous and industry groups will guide workshop discussions. Its focus is ecological, although consideration is also given to socio-economic factors that influence restoration programs.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 2010 Conservation Priorities and Process (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl2010/>)

Conservation Priorities and Practice examines the procedures involved in real world conservation interventions and their impact on biodiversity. You will develop the skills to assess the threatened status of species and ecosystems, and how decisions are made to prioritise resource allocation. You will be encouraged to think about conservation recovery plans in state, national, and international policy and governance frameworks. You will assess how conservation outcomes are managed on different land holdings such as private land including on farms (agroecology) and how biodiversity offsetting is applied. You will build a cross-disciplinary awareness of biodiversity conservation practices and how to engage with diverse interest groups.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3003 Environmental Risk Management (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3003/>) **Legacy Code:** 300858

This unit examines the world of environmental risk management and will introduce students to environmental management systems including Environmental Impact Assessment and Environmental Auditing. The unit considers and examines the application of the precautionary principle in real world situations. Students will also be introduced to methods of quantitative risk assessment as applied to environmental and agricultural risks such as urban, peri-urban and rural growth; industrial and agricultural land use; contaminated land, and climate change.

Level: Undergraduate Level 3 subject

Equivalent Subjects: ENVL 3004 - Environment Risk Management LGYA 6128 - Agriculture Risk

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3005 Planning the City: Development, Community and Systems (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3005/>) **Legacy Code:** 101593

This unit aims to provide students with a fundamental understanding of the role of government, focusing on the role and nature of planning across all levels of government from a variety of theoretical frameworks. It presents a critical examination of the urban development and planning processes, with particular attention given to the environmental and political issues associated with planning at the local government level. It looks at the changes and challenges confronting local government in view of the demands made on them by the changing social and economic conditions and societal values such as those relating to requirements for public participation, transparency and accountability. The unit also examines the role of private sector in planning and assessment processes.

Level: Undergraduate Level 3 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3006 Transport, Access and Equity (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3006/>) **Legacy Code:** 101645

This unit examines the equity and efficiency issues in the provision of transport in cities and regions from a critical social science perspective. Issues of transport disadvantage and policy and planning responses to improve access to urban services are examined. The social and environmental impact of transport systems are considered in the context of urban management.

Level: Undergraduate Level 3 subject

Equivalent Subjects: LGYA 7234 - Transport Access and Equity

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3007 Urban Environment (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3007/>) **Legacy Code:** 300860

This unit explores the relationships between community, the natural environment and government within an urban context through considering how housing and urban development can influence population health. Concepts explored include "healthy housing", "active living" "safety by design" and "energy efficiency". Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to assessing the "healthiness" and sustainability of urban environments. The unit examines methods of construction and building regulation aimed at the preservation of health and amenity.

Level: Undergraduate Level 3 subject

Equivalent Subjects: LGYA 6254 - Urban Environment

Incompatible Subjects: LGYB 9943 - Environmental Health Law ARCH 3007 - Urban Development Systems NATS 2020 - Healthy Built Environments

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3009 Air Quality and Climate Change (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3009/>) **Legacy Code:** 301391

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.

Level: Undergraduate Level 3 subject

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

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 3010 Environmental Planning, Policy & Regulation (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl3010/>) **Legacy Code:** 301403

This unit is an introduction to environmental planning and environmental regulations in local and state governments. It covers the role of planning and enforcement of regulations in protecting the natural environment, enhancing public health and/or encouraging sustainable development practices. Students become familiar with the key legislation for environmental protection and then explore how planning and regulations can assist with achieving optimal environmental outcomes. Current planning and regulations are examined using urban development and planning in Sydney as the primary case study. The unit includes key environmental planning policies and important legislation used by state, local and Commonwealth governments to protect the natural and built environment and to protect public health.

Level: Undergraduate Level 3 subject

Equivalent Subjects: PUBH 2007 Environmental Planning and Climate Change

ENVL 2002 Environmental Regulations and Policy

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 7002 Planning and Environmental Regulation (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl7002/>) **Legacy Code:** 101634

This unit provides students with an understanding of the planning process from both a state and local government perspective. The unit will cover concepts related to the planning process, focusing on development control and regulation issues, planning instruments and development applications. It will also address the areas of planning and environment law, with specific reference to the legal framework that regulates planning and development in NSW.

Level: Postgraduate Coursework Level 7 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 7003 Urban Research Report (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl7003/>) **Legacy Code:** 101637

This capstone unit requires students to write a 5,000 word comprehensive research report on a local or international urban planning issue. Students will select a research topic of individual interest, and work to assemble a range of evidence to address the research question. This facilitates an opportunity for students to apply their skills and knowledge acquired in the Master's program, through a high level of work and quality engagement in an authentic and professional context.

Level: Postgraduate Coursework Level 7 subject

Equivalent Subjects: LGYA 1299 - Urban Management Placement Thesis

Restrictions: Please see the Subject Details page for any restrictions for this subject

ENVL 9001 Higher Degree Research Thesis - Environmental Studies (20 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/envl9001/>) **Legacy Code:** 800067

Level: PhD and Research Masters Level 9 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject