# NATS 7034 MANAGING FOR SUSTAINABILITY

**Credit Points** 20

**Legacy Code** 401155

**Coordinator** Mark Williams (https://directory.westernsydney.edu.au/search/name/Mark Williams/)

**Description** This online unit is concerned with delivering and supporting sustainability management. Students will develop a multi-disciplinary perspective on resources, sustainability and health and safety management which will incorporate strategy, policy, data collection and knowledge management. It will introduce students to a systemic approach for studying organisational operations and methods for quantifying and optimising resource use and energy use while using tools to reduce environmental, societal and financial risk. Students will also learn how to improve the efficiency and effectiveness with which organisations can incorporate sustainability issues and to identify future trends and drivers for change in this area.

**School** Science

**Discipline** Natural and Physical Sciences, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 20cp

**Level** Postgraduate Coursework Level 7 subject

**Restrictions**

Students must be enrolled in the online programs Master of Science or any other postgraduate program where this subject can be taken as an unspecified credit and where there are sufficient credit points available in the study program.

## Learning Outcomes

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

1. Explain key ideas of sustainability and managing for sustainability, and the key theoretical debates relating to the discipline.
2. Discuss the concept of resources and key issues relating to the uncertainties surrounding them.
3. Evaluate the methods for assessing the economics of environmental impacts and sustainability auditing.
4. Apply the following sustainability assessment tools: environmental impact assessment, strategic safety, health and environmental impact assessment, life-cycle assessment, multi-criteria decision analysis.
5. Discuss key ideas and theoretical debates relating to management of knowledge and communication, and environmental management systems in managing for sustainability.
6. Explain the structure and content of environmental management systems.
7. Synthesise and critically assess the issues associated with managing for sustainability, particularly as this relates to the utilisation of energy and raw materials in an international context.
8. Critically assess and synthesise data and evidence from a range of sources and apply these within a suitable context.
9. Select appropriate environmental assessment tools and analyse results obtained to assist in environmental decision-making.
10. Interpret the findings of environmental audits aimed at reducing the environmental impact of an organisation.
11. Distinguish between and critically examine knowledge management and communication methods in the context of managing for sustainability.
12. Work with quantitative information in the assessment and presentation of environmental decision-making situations.
13. Communicate the results of a sustainability assessment, in written form and to lay as well as technical audiences.
14. Seek out and interpret relevant information from appropriate sources and integrate the knowledge and skills derived into a coherent product.
15. Provide expertise in environmental decision-making and implementation of strategy, corporate social responsibility and disclosure when developing an EMS across an organisation.
16. Use appropriate frameworks to investigate and analyse sustainability issues.
17. Identify and actively engage with key stakeholders.

## Subject Content

- what are resources?
- sustainability and sustainable development
- resource management
- resource planning
- Risk, management and assessment of environmental impact
- sustainability of Organisations
- environmental policies
- health and safety Issues and auditing
- drivers of change
- strategy Overview
- economic assessment and financial assessment techniques
- resource use: water, energy and materials efficiency
- life cycle assessment
- emergency planning
- data, information and knowledge management
- communicating for sustainability and for stakeholders
- The future and future planning

Teaching Periods