BIOS 1031 RESOURCE SUSTAINABILITY (WSTC)

Credit Points 10

Legacy Code 700099

Coordinator Phillip Newman (https://directory.westernsydney.edu.au/search/name/Phillip Newman/)

Description Resource sustainability deals with the local, national, and global sustainability issues concerning human interactions with the environment. The unit uses current resource issues and scientific concepts to provide the practical and theoretical information needed for students to think critically about environmental issues and to contribute to the sustainable management of natural and built environments. Students will also learn how science and society interact in the management of resources. Using the concept of ecologically sustainable development as a foundation, students will use critical thinking skills to research a resource issue of their choice at the local, national and/or international level. Students will communicate their research using new mediaexploring the issue and make recommendations for improving sustainability.

School Science

Discipline Ecology and Evolution

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 1 subject

Equivalent Subjects BIOS 1029 - Resource Sustainability BIOS 1030 - Resource Sustainability

Restrictions Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory subjects listed in the program structure prior to enrolling in this University level subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year 2 subjects.

Assumed Knowledge

Basic biological science and an understanding of referencing.

Learning Outcomes

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

1. Demonstrate critical thinking skills to make informed decisions about environmental issues and resource sustainability at the global, national, local, and personal levels.
2. Describe the scientific principles underlying sustainability, the limits of science in natural resource management, and the concept of ecologically sustainable development.
3. Explain and reflect on how human activities impact on sustainability of environments and resources.
4. Apply skills in academic reading, accessing library resources and field research to understand current issues in resource sustainability.
5. Analyse in-depth a resource issue at a range of scales and recommend solutions to sustainability problems.
6. Use spatial information in sustainable resource management.
7. Communicate a sustainable resource issue through new media.

Subject Content

1. Broad principles of Environmental Science and ecology and sustainable resource management
2. Concepts & principles of Ecologically Sustainable Development (ESD) and other policies that influence resource use.
3. How science interacts with societal values in resource use
4. Local, regional, national and international issues and current events in resource management
5. Sustainability issues involving Human Population, Threatened and Endangered Species, Invasive Species, Water Availability and Quality, Energy, Climate Change, Fisheries, and Agriculture
6. Critical thinking skills and the application of these skills to information obtained from the media and other sources regarding resources

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.

Item	Length	Percent	Threshold	Individual/ Group Task
Research Report	1250 words	15	N	Individual
Presentations	5 minutes each workshop (10%) and peer-assessed (5%)	15	N	Group
Quiz	1 hour in total (30 minutes each)	30	N	Individual
New Media Presentation	5-7 minutes	40	N	Individual

Prescribed Texts

- Botkin and Keller 2000, Environmental Science: Earth as a Living Planet. Wiley and Sons

Teaching Periods