

Course Code:	1043SCG
Course Name:	Introduction to Environmental Sustainability
Semester:	Trimester 2, 2017
Program:	Diploma of Science
Credit Points:	10
Course Coordinator:	Alastair McWhir
Document modified:	12/06/2017

Teaching Team

Alastair McWhir: Lecturer/tutor

Your lecturer/tutor can be contacted via the email system on the portal.

Alastair McWhir: alastair.mcwhir@staff.griffithcollege.edu.au

Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "myTimetable" link.

Prerequisites

There are no prerequisites for this course

Brief Course Description

This course introduces students to the concept of environmental sustainability and its uses in solving real world problems. It explores the relationships between the natural, rural, industrial and urban environments and includes the study of the impact humans have upon nature. The course also considers the way environmental sustainability can be used to address environmental, economic and social issues in an integrated way. Assessment includes on-line tests, a written assignment, workshop exercises and an end of semester examination.

Rationale

Sustainability is a powerful concept that is built on the premise that environmental, economic and social problems are all linked. Understanding how they are linked, and how human activities have undermined the natural systems on which we rely, is the key to finding solutions. This course works through a series of key sustainability issues and gives examples of how they are being addressed.

Aims

The aim of this course is to introduce students to environmental sustainability so that they can:

- 1. Define what is meant by environmental sustainability;
- 2. Analyse how physical, economic, social and technological factors impact on the environment;
- 3. Give an explanation of some of the basic scientific aspects of environmental issues;
- 4. Explain what procedures are required to establish an environmentally sustainable society;
- 5. Apply the principles of sustainability to real world problems;
- 6. Undertake higher level courses in sustainability in future;
- 7. Develop critical thinking abilities; and,
- 8. Develop study skills to improve academic success.

Learning Outcomes

Upon successful completion of this course you will be able to:

After successfully completing this course you should be able to:

- 1. Apply the principles and practices of sustainability to managing natural ecosystems
- 2. Assess the impact of human activities on the environment
- 3. Contribute to the preparation of environmental impact statements

- 4. Identify, evaluate and analyse environmental issues of current and future significance
- 5. Work successfully with a multidisciplinary team
- 6. Research and write a professional paper
- 7. Follow the colleges rules on academic integrity

Texts and Supporting Materials

All required readings are available on-line for free via the Griffith College 1043SCG portal.

Prescribed textbook:

Tom Theis and Jonathan Tomkin, Editors, **Sustainability: A Comprehensive Foundation**. OpenStax CNX. 6 Jan 2015 http://cnx.org/contents/1741effd-9cda-4b2b-a91e-003e6f587263@43.5.

available on-line for free via

https://open.bccampus.ca/find-open-textbooks/?uuid=4e3cc83c-7c80-4dc3-bd3f-40598c6906d8&contributor=&keyword=&subject=Earth,%20Ocean%20&%20Atmo spheric%20Science

Recommended texts:

Organisation and Teaching Strategies

You will participate in a weekly five (5) hour class which is interactive in nature. New material will be delivered that is based upon the relevant chapter in the prescribed text. During class time you will have the opportunity to practise the accounting principles learned to provide you with a solid preparation for all of the course assessment items. An additional one hour component will consist of online activities.

Contact hours

The expected contact hours per week for this course comprises of:

Formal classes	Formal Homework	Online Learning	Supervised Consultation	Total
5 hours	3 hours	1 hour	1 hour	10 hours

Class Contact Summary

Attendance:

Your attendance in class will be marked twice during a five hour class. To receive full attendance, you must be present in the classroom on both occasions. Therefore, you are encouraged actively participate in all class sessions.

It is highly recommended that you attend all lectures, as these will provide the focus and theoretical foundations for the course.

Participation in Class:

It is extremely important that you seek to actively participate in all classes throughout the semester.

Course Materials:

You are expected to acquire the required resources (textbook) for this course as the lectures follow the textbook throughout the semester.

Independent Learning:

Throughout this course you will be encouraged to take personal responsibility for managing your own learning and your own time. Each week throughout the semester you will be asked to prepare for classes by pre-reading the relevant chapters from the textbook. You are also expected to practice your programming skills in your private study time.

Program Progression

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80% and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program progression Policy - for more information].

Content Schedule

Weekly Teaching Schedule

Week	Торіс	Tutorial / Workshop Activity
1	Introduction	Introduction to the course
		Introduction to Sustainability exercise
2	Understanding the Problem	Ecological Footprint Exercise

3	Sustainability as a Solution	Sustainability Exercise		
4	Climate Change & Sustainable Energy	Climate Change Exercise		
5	Biodiversity Loss & Sustainable Food	Your Career & E-portfolio Exercise		
6	Air Pollution & Sustainable TransportPlanning Your AssignmentExercisePlanning Your Assignment			
7	Water Pollution & Sustainable Manufacturing	On-line Study Smart Tutorial (Interactive Exercises)		
8	Waste & Sustainable Settlements	On-line Academic Integrity Tutorial (Interactive Exercises)		
9	Sustainable Economy	On-line Draft Assignment Checking (Assessment)		
10	Sustainable Government	Urban Metabolism Exercise		
11	Sustainable Society	Future Options Exercise		
12	Conclusions	Course review		
13 & 14	Final Exam Period			

Assessment

This section sets out the assessment requirements for this course.

Summary of Assessment

Item	Assessment Task	Weighting	Relevant Learning Outcomes	Due Date
1	<i>Test or quiz</i> On-line tests	20%	1, 2, 3, 4, 5, 7	Wk 2 – Wk 11
2	Assignment - Written Assignment Essay	35%	1, 2, 3, 4, 6, 7	Wk 10
3	<i>Exam - selected response</i> End of trimester exam	45%	1, 2, 3, 4, 7	Final Exam Period

Assessment Details

Title: On-line tests

Type: Test or quiz Learning Outcomes Assessed: 1, 2, 3, 4, 5, 7 Due Date: Week 2 – Week 11 Weight: 20% Marked out of: 20 Task Description:

Weekly on-line tests cover the Lectures, Tutorials and workshops. A full set of instructions is available on the course website and will be discussed in the workshops.

Criteria & Marking:

A full set of marking criteria is available on the course website and will be discussed in the workshops.

Submission: The exercises will be completed and submitted on-line via the course website.

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self-assessment activity
- does not have a resubmission provision

Title: Essay

Type: Assignment - Written Assignment **Learning Outcomes Assessed:** 1, 2, 3, 4, 6, 7 **Due Date:** Week 10 Friday 8th September 5.30pm Weight: 35% Marked out of: 100 Task Description:

Detailed instructions are on the course website.

Criteria & Marking:

A full set of marking criteria is available on the course website.

Submission: TurnItIn on-line submission link

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self-assessment activity
- does not have a resubmission provision

Title: End of trimester exam

Type: Exam - selected response Learning Outcomes Assessed: 1, 2, 3, 4, 7 Due Date: Examination Period Weight: 45% Marked out of: 100 Duration: 120 minutes Format: Closed Book Task Description:

Multiple choice closed book exam covering all lecture content for weeks 1-13.

Criteria & Marking:

Details will be given in the lecture of week 13 and on the course website.

This assessment item:

- is a centrally organised activity
- is an individual activity
- does not include a self-assessment activity
- does not have a resubmission provision

Submission and Return of Assessment Items

Normally you will be able to collect your assignments in class within fourteen [14] days of the due date for submission of the assignment.

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Extensions

To apply for an extension of time for an assignment, you must submit an Application for Extension of Assignment form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. Griffith College Medical Certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

Assessment Feedback

Marks awarded for assessment items will also be available on the on-line grades system on the Student Website within fourteen [14] days of the due date.

Generic Skills

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills	Taught	Practised	Assessed
Written Communication		Yes	Yes
Oral Communication		Yes	
Information Literacy	Yes	Yes	Yes
Secondary Research	Yes	Yes	Yes
Critical and Innovative Thinking	Yes	Yes	Yes
Academic Integrity	Yes	Yes	Yes
Self Directed Learning	Yes	Yes	Yes
Team Work		Yes	
Cultural Intelligence		Yes	Yes

English Language Proficiency		Yes	Yes
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Additional Course Generic Skills

Additional Course Information

In addition to formal contact hours, you are provided with extra support through individual consultation with teaching staff, tutorials in English language, and self-access computer laboratories.

Teacher and Course Evaluations

Students enjoy the challenge of learning and working with advanced Engineering software. In response to student feedback to provide them with more time and support to complete course assessment items, teacher availability was increased so that discussions on assessment items such as assignments and labs could be facilitated.

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's online evaluation tool whenever these are available.

Academic Integrity

Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional

educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of a breach of academic integrity made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the <u>Griffith College Academic Integrity Policy</u>; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Academic Integrity Policy on the Griffith College website – Policy Library.

Risk Assessment Statement

Classroom & Computer Lab use only. No out of the ordinary risks are associated with this course.

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