

Environmental Policy & Socio-Economic Values SFS 3020

Syllabus

The School for Field Studies (SFS)
Centre for Rainforest Studies
Queensland, Australia

This syllabus may develop or change over time based on local conditions, learning opportunities, and faculty expertise.

Course content may vary from semester to semester.

COURSE CONTENT SUBJECT TO CHANGE

Please note that this is a copy of a recent syllabus. A final syllabus will be provided to students on the first day of academic programming.

SFS programs are different from other travel or study abroad programs. Each iteration of a program is unique and often cannot be implemented exactly as planned for a variety of reasons. There are factors which, although monitored closely, are beyond our control. For example:

- Changes in access to or expiration or change in terms of permits to the highly regulated and sensitive environments in which we work;
- Changes in social/political conditions or tenuous weather situations/natural disasters may require changes to sites or plans, often with little notice;
- Some aspects of programs depend on the current faculty team as well as the goodwill and generosity of individuals, communities, and institutions which lend support.

Please be advised that these or other variables may require changes before or during the program. Part of the SFS experience is adapting to changing conditions and overcoming the obstacles that may be present. In other words, the elephants are not always where we want them to be, so be flexible!

Course Description

The Environmental Policy and Socio-economic Values (SFS 3020) course explores the historical, social-cultural, economic and political factors that determine the use of natural resources and shape their conditions, with particular emphasis on the Wet Tropics of Australia. Topics to be covered in this course include; environmental history, the impact of human activities on the Great Barrier Reef, conservation conflicts, resource governance and so on (see pages 8-12 for a complete list of topics). In addition, students will be introduced to social science research techniques, and will have opportunities to interact with local Aboriginal tribes, to gain a better understanding of the first Australian's envirocultural heritage values.

All lectures and activities in this course are aimed at addressing the following questions:-

- a) What is the impact of human settlement in the Wet Tropics bioregion?
- b) What are the current and emerging threats facing the region, and what is the justification for various interventions?
- c) How can the landscapes be managed for long-term sustainability?

Throughout the course students will be introduced to, and are expected to gain hands-on experience on social research techniques.

Overall, the Environmental Policy and Socio-economic Values course will integrate the other courses (NRM & Ecology), and show how policy questions, which emerge from the integration, can be addressed by the incorporation of economic and social considerations.

Learning Objectives

SFS3020, Environmental policy and socioeconomic values, aims to:

- provide a broader social context for conservation issues, using specific examples from the Australian Wet Tropics to illustrate more general points;
- discuss the impacts of various economic activities on the landscape;
- discuss possible ways of ensuring sustainable futures in the face of global environmental change;
- explore emerging environmental governance issues and legislative frameworks;
- introduce concepts and terms used in socio-economic analysis of environmental issues as well as methods of data collection, analysis and use of information;
- provide a foundation for pursuing more specialised environment-related courses at higher levels of study.

On completion of this course, students should be able to:

- explain the array of socio-cultural, economic and political factors that shape resource use;
- explain the economic, socio-cultural, and political incentives and impediments to conservation
- demonstrate an understanding of the interactions between human and ecological systems in the Wet Tropics;
- discuss the dilemmas in choosing between economic development and the environment;
- express and discuss factors which influence NRM planning and decision making;
- demonstrate the information literacy skills of collecting, analysing and reporting data;

Teaching Methods

SFS 3020 is interactive in nature and is based on the constructivist model of education. The lecturer facilitates students to acquire more knowledge and develop skills associated with the course content. Classroom lectures include essential background information for field lectures to reinforce key concepts. Lectures and discussions are held both at the Centre and in the field. Assessment tasks are varied to account for various learning styles and abilities. The course makes use of guest lecturers with authority in their fields. However, due to the possibility of other commitments, the content and timing of guest lectures may be subject to change.

Technology use: Access to the internet and the student drive is essential in this course.

Workload expectation: SFS3020 is a 4 credit course. Since we offer a program that is likely more intensive than you might be used to at your home institution, missing even one lecture can have a proportionally greater effect on your final grade simply because there is little room to make up for lost time. Participation in all components of the program is mandatory because your actions can significantly affect the experience you and your classmates have while with SFS and our reputation in the community. Therefore, it is important that you are prompt for all activities, bring the necessary equipment for field exercises, and simply get involved.

Assessments

There are four assessment tasks in this course (see table below)

Assessment	Value (%)
Sustainability report	20
Class debate (group)	20
Social science research techniques quiz	20
Final take home exam	40
	100

Sustainability report: Students will be expected to work in groups of 3-4 to gather information, write and submit a 1500-word report. The report will explore the use of technology (including smart technologies) in addressing agricultural pollution (i.e. biotic and abiotic byproducts of farming practices that degrade the environment) in the Wet Tropics. Students will be expected to search relevant literature to inform their report. A guest lecture will provide supplementary information for this exercise.

Class debate/negotiations: The class debate and negotiations will be based on the contentious issue of economic development and environmental conservation. The debate is aimed at helping students to improve their advocacy skills, while the negotiation exercise will help students to understand the process of achieving an agreement on a divisive matter. Students will be divided into 4 groups, each representing a particular stakeholder in the matter. Each group will be expected to prepare for and participate in both the debate and the negotiation exercise. This being a group assignment, all students in the group will be awarded the same marks. Therefore, it is the responsibility of each group to ensure equal participation by all group members, and to report any problems with group dynamics to Justus. The actual scenario will be introduced one week prior to the debate/negotiation exercise.

Quiz: Students will be expected to do a quiz based on materials to be covered directed research skills series of lectures (EP 10 - EP 17). The aim of the quiz is to test the students' understanding and their ability to collect, analyze, clearly present and intelligently interpret data. This knowledge is crucial in planning, conducting and reporting social science research studies.

Final take home paper: In lieu of an invigilated examination, students will be given a take home paper. The paper will be released on Tuesday 4th Nov and must be returned within 24 hours on Tuesday 5th Nov. In the absence of an approved extension, there will be no opportunity to complete this task after this due date, and no late penalty will be applicable. Further details on the take home paper will be provided at the exam review session to be held prior to the release of the paper.

Grading Scheme

In this course, grading will be done according to aggregate scores. Scores on different assessment tasks will be added together and then projected on to a 100-point scale (percentage grading). Component scores are going to be weighted before being added so as to reflect their relative importance in the assessment scheme. The 100-point scale will be divided into segments with grades as shown in the table below.

Α	95.00 - 100.00%	B+	86.00- 89.99%	C+	76.00 - 79.99%	D	60.00 - 69.99%
A-	90.00 - 94.99%	В	83.00 - 85.99%	С	73.00 - 75.99%	F	0.00 - 59.99%
		B-	80.00 - 82.99%	C-	70.00 - 72.99%		

General Reminders

Faculty availability: I will ordinarily keep regular office hours. Extended meetings with me should be pre-arranged, and any meeting outside office hours must be arranged at least 24 hours in advance.

Academic honesty and plagiarism: Using the work of another person without clearly stating or acknowledging its source is plagiarism. It includes doing any of the following things in an assignment:

- copying out part(s) of any document, including computer- or internet-based material, without acknowledging the source and by not putting quotation marks around the copied extract;
- summarising someone else's concepts, experimental results or conclusions without acknowledgment, even if you put them in your own words;
- copying out, or taking ideas from another student's work, even if you put the borrowed material in your own words;
- submitting the same or very similar final version of any assignment as a fellow student.

If you are in any doubt whatsoever, please discuss this with faculty.

Please ensure that you always:

- state clearly in an appropriate form where [you] found the material on which [you] have based your work", using a consistent referencing system
- acknowledge the people whose concepts, experiments, or research results [you] have extracted, developed, or summarised, even if [you] put these ideas into your own words
- avoid excessive [direct quotation] of passages by another author, even where the source is acknowledged.

Note: Any assignment containing plagiarism will receive a fail grade. Extensive plagiarism will result in a mark of zero.

Using the Internet is one aspect of your preparation for assignments that can result in plagiarism. All material accessed from the Internet and used in your assignments must be referenced in exactly the same way as material from books, journal articles or other print media. Plagiarism from Internet-based sources can be detected easily by your marker using web search engines so it is important to take Internet referencing seriously.

Deadlines: Assessments items are instated to promote equity among students and to allow faculty ample time to review and return assignments before others are due. As such, deadlines are firm and extensions will only be considered under extenuating circumstances. If you believe that you have been prevented from completing your work on time for reasons beyond your control (e.g. illness), make sure that you discuss this with Assoc. Prof. Justus Kithiia **as soon as possible**, and certainly before the assignments are due. Assignments submitted after the due date and without extension will be penalised at **10% per day late**.

Marking Guides and Feedback: To assist students as much as possible with the assignments, marking guides/rubrics have been created. These guides provide information on the criteria I will use in grading each assignment. In addition to these guides, I will provide individual feedback to students on their assignments. This feedback is intended to help students understand the justification for their grade as well as provide instructions for future improvement. Please feel free to contact me if you have any questions about the feedback.

Referencing: Correct referencing is vital for ensuring academic honesty in all your assessment pieces in SFS 3020. Please note: *the Harvard system of referencing is the preferred style in SFS 3020*.

Course Content

L: Lecture, FL: Field Lecture, FW: Field Work, GL: Guest Lecture, D: Discussion, GW: Group Work

No.	Titles of Lectures	Туре	Time (hrs.)
EP01/0 2a	Course overview /Introduction to Tablelands Discovery Exercise Students will be introduced to the EP & socioeconomic values course. Assessments tasks and due dates will be discussed. Students will also be introduced to the Atherton Tablelands discovery exercise (see EP02b below)	L	1.5
EP02b	The socio-economics of AT: The discovery exercise The aim of the discovery exercise is to provide an opportunity for inquiry based learning, observation & gathering of information in order to determine the socio-economic context of the local area.	FW	3
EP02c	Group activity-work on presentation After the visit to the towns, students will work in groups to prepare a 10 minutes presentation about the towns. Please note that this is not an assessable task	GW	1.5
EP02d	AT discovery exercise group presentations (see EP02c above)	D	1.5
EP03a	The doctrine of terra nullius In this lecture, students will be introduced to the doctrine of terra nullius, a European colonial principle which allowed the crown to acquire land that was unoccupied/unsettled. We shall discuss the application of this doctrine	L	0.5

No.	Titles of Lectures	Туре	Time (hrs.)
	in the Australian context, and especially its effect on indigenous people's dispossession and marginalization.		
EP03b	Human settlement in Australian Landscapes We will examine the impacts of both the indigenous people and European settlement on natural resources.	L	1
EP 04	In this lecture/discussion, the existing impediments and incentives to environmental conservation, within the Wet Tropics region will be identified and discussed. In particular, the involvement of the indigenous people in the management of natural resources will be evaluated.	L	1.5
EP05	Visit to the Mandingalbay Yidinji community: Briefing session This short session is aimed at providing students with the necessary information prior to their visit to the MY Aboriginal community. The objective and expectations of the visit will be outlined. Students will be afforded an opportunity to ask questions about the visit.	D	0.5
EP 06	Human activities on the GBR Students will visit Green Island, one of the numerous islands in the Great Barrier Reef (GBR) world heritage area. The evening before visiting the reef, students will attend a talk about the GBR. The talk, conducted by a reef educational company called Reef Teach, is designed to enhance and compliment the students' GBR experience. At Green island, students will observe the conditions of corals and other marine life followed by a discussion on the impacts of human activities on the reef.	FL	2
EP 07	Exposure visit to the Mandingalbay Yidinji Aboriginal community: Indigenous management of Natural resources Students will spend a whole day in the MY country. This is a rare but important opportunity to interact with and learn from the First Nations people. Among other things, students will gain a hands-on experience on the local management /conservation of natural resources, as is carried out by the Djunbunji Land and Sea Program indigenous rangers.	GL /FL/D	5
EP08	Debrief excursions to the Green Island and the MY community This debriefing session is aimed at encouraging students to reflect on their experiences during the excursion to the MY country and Green Island. Students will be prompted to reflect on the roles of indigenous people in the management of natural resources; importance of indigenous protected areas, co-management issues, native title claims, traditional use of marine resource agreements, and so on. The discussion will help students to synthesize the information gained during the trip and result in achieving the intended learning outcomes.	D	1
EP 09	Field excursion: Daintree lowland rainforest In the Daintree, we will discuss about the conservation conflicts which took place there in the early to late 1980s, which conflicts led to the designation of Wet Tropics rainforests as a World heritage area	FL	2
	Directed research skills The following series of lectures (EP 09-EP 16) are aimed at equipping students with basic knowledge and skills to conduct social science research. In addition to equipping students with basic skills to conduct social science		

No.	Titles of Lectures	Туре	Time (hrs.)
	research, the material covered in these lectures would be helpful to those		
	students who may choose to undertake EP & Socio-econ related directed		
	research projects.		
EP 10	Introduction to social science research techniques	L	1.5
EP 11	Designing data collection tools	GW/ L	2
EP 12	Capturing the interviewees perspectives	D	1
EP 13	Ethics in human research	L	1
EP 14	Making sense of the data	L	1
EP 15	Data analysis workshop	GW	2
EP 16	Research report writing workshop 1	D	2
EP 17	Research report writing workshop 2	D	2
EP 18	Directed research skills quiz		1
	This quiz will test students' understanding of the directed research skills	L	
	Addressing sustainability issues across sectors: waste management;		
	agriculture and mining		
	Lectures under this broad area of sustainability (EP 17- EP 20) will focus on		
	agriculture, mining and waste management. Students will visit one of the		
	economically successful coffee farms in the Atherton Tablelands to observe		
	some of their sustainable practices. A trip to Herberton, a former mining		
	town in the Atherton Tablelands will help students appreciate the lasting		
	impacts of mining on the landscape. It is hoped that this will stimulate a		
	discussion on how safe and sustainable practices can be incorporated into all aspects of mining. Finally, we will have a class discussion on smart and		
	sustainable management of solid waste, especially in the light of the new		
	Waste Levy Act 2019 (Qld), which came into effect on July 2019. Students		
	will work in groups to research on and write a short report on the use of		
	technologies in addressing agricultural pollution.		
EP 19a	'Sustainable' agriculture practices (see above description)	FL	3
	Use of smart technologies to address agricultural pollution (see above	GW/	6
EP 19b	description)	GL/	
	accompanion,		
EP 20	Effects of mining on the landscape (see above description)	FL/D	4
EP 21	Solid waste management (see above description)		1
	Ecologically sustainable development (ESD)		
	As a component of sustainable development, ESD aims to provide for the		
EP 22	needs of present generations without compromising the ability of future		
	generations to meet their own needs. In this regard, we will explore ways		1
	of integrating economic, social, environmental and equity considerations	L	
	into decision-making processes.		
	Governing local resources- legislation/precautionary		
EP 23	principle/overcoming private property rights	1.75	
	In these three lectures and discussions, we will identify the relevant pieces	L/D	2.5
	of legislation governing natural resource use in Australia and compare		
	these to those of the United States. Students will discuss the precautionary		
	principle and its application in Australia. In addition we shall discuss how		

No.	Titles of Lectures	Туре	Time (hrs.)
	both the Australian and USA governments overcome private property rights		
	in order to achieve conservation outcomes.		
	Accounting for ecosystems services		
	The class discussion will explore ways of valuing nature (environmental		
FP 24	services). In particular, we will explore ways of internalizing externalities		1
LF Z4	e.g. through triple bottom-line accounting. The aim of this discussion is to	D 1	1
	help students to understand the importance of including environmental		
	degradation into the measurement of economic performance.		
	Introduction to class debate/Negotiations exercise		
EP25	This session will introduce students to the class debate and negotiation		1
	exercise as explained in EP23 below.	L	
	Class debate and negotiations: Economic development or environmental		
	protection?		
	The class debate is an assessable task. Students will be provided with a		
FP26	scenario describing conflicts between economic development and		2
EPZ6	environmental protection. They will be divided into stakeholder groups to		3
	debate the matter, followed by a negotiation session aimed at reaching an	GW/	
	agreement. This exercise is aimed at enhancing students understanding and	D	
	appreciation of environmental decision-making processes.		
EP 27	Take home paper review	L	1
	Take home paper		
	The take home paper/final exam will text knowledge of the course		2
	materials as well as the		
TOTAL C	ONTACT HOURS		60

Reading List

EP03 Human settlement in Australian landscapes: Going back 60,000 years

Bradshaw, C.J.A (2011) Little left to lose: deforestation and forest degradation in Australia since European colonization. *Journal of Plant Ecology*. 5(1), 109-120

Hepburn, S (2015) Statutory interpretation and native title extinguishment: Expanding constructional choices. *UNSW Law Journal*, 38(2)

Larson, S (book Chapter, nd) The socio-economic features of northern Australia

EP 04: Incentives and impediments to environmental conservation

Nursey-Bray, M and Rist, P (2009) Co-management and protected area management: Achieving effective management of a contested site, lessons from the Great Barrier Reef World Heritage Area (GBRWHA) *Marine Policy 33* 118–127

Austin, B.J et al (2018) Integrated Measures of Indigenous Land and Sea Management Effectiveness: Challenges and Opportunities for Improved Conservation Partnerships in Australia

EP 06: Human activities on the Great Barrier Reef

Goldberg, J. A et al (2018) On the relationship between attitudes and environmental behaviours of key Great Barrier Reef user groups. *Ecology and Society* 23(2):19

EP 10 - EP 17: Directed research skills

- Curtis, S., Geslerb, W., Smitha, G and Washburn, S (2011) Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social Science and Medicine*, 50:1001-1014
- Lahlou, S (2011) How can we capture the subject's perspective? An evidence-based approach for the social scientist? An evidence-based approach for the social scientist. *Social science information*, 50 (4). pp. 607-655
- Trotter II R. T (2012) Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive medicine*, 55: 398-400
- ** Please refer to additional materials in the students drive

EP19-EP 21: Addressing sustainability issues across sectors

Seadon, J.K (2010) Sustainable waste management systems. *Journal of Cleaner Production* 18 ,1639-1651

Erbaugh, J, et al. (2019) Toward sustainable agriculture in the tropics

Goldsmith, P & Avery Cohn, A (2017) Commercial Agriculture in Tropical Environments. *Tropical Conservation Science Volume* 10: 1–4.

Kirsch, S (2010) Sustainable mining. Dialect Anthropol 34:87–93

EP 22: Ecologically sustainable development

Gerry, B (2016) Environmental Law in Australia (9th edn), LexisNexis, Butterworths-Australia

EP 23: Governing local resources

- Argent, N (2011) Trouble in paradise? Governing Australia's multifunctional rural landscapes. Australian Geographer, 42 (2), 183_205:
- Wood, M. C (2010) "You Can't Negotiate with a Beetle": Environmental Law for a New Ecological Age. *Natural resources journal*, 50, 167-184-

EP 24: Accounting for ecosystem services

Boyd, J. and Wainger, L (2003) *Measuring Ecosystem Service Benefits: The Use of Landscape Analysis to Evaluate Environmental Trades and Compensation*. Discussion Paper 02-63, Resources for the Future. Available from http://www.rff.org.

Buyinza, M., Bukenya, M. and Nabalegwa, M (2007) Economic valuation of Bujagali Falls Recreational Park, Uganda. <i>Journal of Park and Recreation Administration</i> 25 (2), 12-28
EP 25/26: Class debate: Economic development or environmental protection
Resource materials to be provided prior to the debate.