Academic Year	AY19/20	**Semester**	1
Course Coordinator	Natasha Bhatia		
Course Code	ES1001		
Course Title	Environment and Society		
Pre-requisites	NA		
No of AUs	4		
Contact Hours	52 hours		
Proposal Date	02.08.19		

Course Aims

This course aims to provide first year ASE students with an introduction to the concepts and theories surrounding the science of how humans and society interact with the environment. Topics will include the key challenges as we move into the Anthropocene, how we created this new epoch, and what we can do to mitigate these impacts.

Intended Learning Outcomes (ILO)

By the end of this course, you (as a student) would be able to:

1. Identify and describe the key concepts and theories which characterise the Anthropocene epoch
2. Clearly communicate these key concepts, their drivers and impacts, both orally and in writing.
3. Engage critically with different disciplinary and theoretical perspectives on environmental issues
4. Apply what you have learned in the classroom to wider world, as well as future learning opportunities

Course Content

Content covers theoretical approaches to the interaction of humans with the environment, including anthropology, sociology, economics, game theory, resilience, and natural capital.

Assessment (includes both continuous and summative assessment)

Component	Course LO Tested	Related Programme LO or Graduate Attributes (Appendix 1)	Weighting	Team/Individual	Assessment Rubrics
1. Written research papers	1,2,4	1,2,3	40%	Individual	Appendix 2
2. Continuous Assessment- Tutorials and Peer Feedback	1,3,4	1,3,4	30%	Individual	Appendix 3 + 4
3. Continuous Assessment- Weekly Quiz	1,3	1,2	15%	Individual	NA
4. Presentation	1,2,4	1,2,3,6	15%	Team	Appendix 5
Total			100%		

Formative feedback

You will receive informal feedback continuously throughout the course where appropriate, and formal feedback following every assignment. In addition, I will be available to answer questions regarding your research or assignments throughout this course.

Learning and Teaching approach

Approach	How does this approach support students in achieving the learning outcomes?
Active learning	You will engage in active learning techniques periodically throughout lectures, and during tutorial sessions.
Independent learning	You are required to show self motivation and initiative in your learning process, such as preparation for tutorials and team work opportunities

Reading and References

Robbins, P., Hintz, J., Moore, S.A., 2014. Environment and Society: A critical introduction. Second edition, Wiley Blackwell, ISBN-13: 978-1-118-45156-4

Course Policies and Student Responsibilities

(1) General

You are expected to complete all assigned pre-class readings and activities, attend all seminar classes punctually and take all scheduled assignments and tests by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions they have missed. You are expected to participate in all seminar discussions and activities.

(2) Absenteeism

Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you

are uncertain of the definitions of any of these terms, you should go to the academic integrity website for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Course Instructors

Instructor	Office Location	Phone	Email
Dr Natasha Bhatia	N2-01C-56		nbhatia@ntu.edu.sg

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Introduction to the class and tutorials		
2	Global environmental problems and regime shifts	1,3,4	Looking at ecological footprints
3	Tragedy of the commons	1,3,4	Game theory and the prisoners dilemma
4	Population and poverty	1,3,4	Income vs environmental values
5	Capitalism, markets and commodities	1,3,4	Marketing green technology
6	Ecosystem services and natural capital	1,2,3	First paper peer review
7	Environmental Ethics	1,3,4	George Monbiot vs Dieter Helm
8	Political economy	1,3,4	Ejatlas.org
9	Social construction of nature	1,3,4	Energy discourses
10	Rules and superrules	1,2,3	Presentation tutorial
11	Case studies	1,2,3	Second paper peer review
12	Class round up	1,2,3,4	Final questions/ discussion
13	Presentations	1,2,3,4	Presentations

Appendix 1: ASE Learning Outcomes

At the completion of your course of study in ASE, you will be able to:

1) Demonstrate intellectual flexibility and critical thinking in order to apply environmental knowledge in the real world

2) Communicate environmental concepts with enthusiasm to varied audiences both orally and in writing

3) Formulate scientific questions, and be able to access and analyse quantitative and qualitative information to address them

4) Exhibit the motivation, curiosity and skills for lifelong learning

5) Demonstrate ethical values and responsibility

6) Collaborate and lead by influence

Appendix 2. Assessment criteria for written research papers

Grade / Numerical Score	Criteria
A+ (Exceptional) A (Excellent)	- Chosen topic is thoroughly thoughtful, relevant, interesting, unexpected and challenging. - Shows clear ability to search for and read scientific texts, and originality in interpreting them in the context of the report. - Correct use of referencing throughout. - Use of stylish scientific language, with no grammatical or spelling errors. - Ability to introduce, review and engage critically with secondary readings (where relevant) - Shows clear understanding of key concepts and theories, and interpretation of wider context issues.
A- (Very good)	- Chosen topic is thoughtful, relevant, interesting, unexpected and challenging. - Shows clear ability to search, read and interpret scientific texts. - Correct use of referencing throughout. - Use of scientific language, with few grammatical and no spelling errors. - Shows an understanding of secondary readings/research - Shows an understanding of the key concepts and theories.
B+ (Good) B (Average)	- Chosen topic is somewhat thoughtful, relevant, interesting, unexpected and challenging. - Shows some skills in searching for, reading and interpreting scientific texts. - Correct use of referencing throughout most of the paper. - Fair use of scientific language, with some grammatical and spelling errors. - Shows a fair understanding of secondary readings/research - Shows some understanding of the key concepts and theories.
B- (Satisfactory) C+ (Marginally satisfactory) C (Bordering unsatisfactory)	- Chosen topic is not thoughtful, relevant, interesting, unexpected or challenging. - Shows limited skills in searching for, reading and interpreting scientific texts. - specific context for the report. - Correct use of referencing throughout some of the paper. - Some use of scientific language, with grammatical and spelling errors. - Identifies secondary readings/research - Identities key concepts and theories.
C- (Unsatisfactory) D (Deeply unsatisfactory)	- Chosen topic is completely thoughtless, irrelevant, uninteresting, expected and easy. - Little or no attempt to search for, read and interpret scientific texts. - Shows little or no ability to translate this information into prose. - Incorrect use of referencing throughout most of the paper. - No scientific language, with grammatical and spelling errors. - No secondary readings/research referenced. - No identification or misinterpretation of key concepts and theories.
F (0-44)	Failure to submit Assessment

Appendix 3. Assessment criteria for tutorials

Grade / Numerical Score	Criteria
A+ (Exceptional) A (Excellent)	- Student has thoroughly read the given materials as well as several additional materials for context - Student has taken measures to ensure they understand the key concepts and theories proposed in the readings, and has made connections to wider world issues - Student has rigorously considered their own opinion in relation to these concepts - Participates in class discussions in a considered and respectful fashion - Is prepared to contribute to the discussion at an appropriate time - Discussion points are insightful, relevant and thought provoking. - Questions or counter points are thoughtful, logical and unexpected, sometimes presenting a new viewpoint to the discussion.
A- (Very good)	- Student has read the given materials - Student has taken measures to ensure they understand the key concepts and theories proposed in the readings, and has made connections to wider world issues - Participates in class discussions in a considered and respectful fashion - Is prepared to contribute to the discussion at an appropriate time - Discussion points are insightful and relevant - Questions or counter points are thoughtful and logical
B+ (Good) B (Average)	- Student has read most of the given materials - Student has taken measures to ensure they understand the key concepts and theories proposed in the readings - Participates in class discussions in a considered and respectful fashion - Is somewhat prepared to contribute to the discussion at an appropriate time - Discussion points are mostly relevant - Questions or counter points are logical
B- (Satisfactory) C+ (Marginally satisfactory) C (Bordering unsatisfactory)	- Student has read some of the given materials - Student mostly understands the key concepts and theories proposed in the readings - Participates in class discussions in an unconsidered or disrespectful fashion - Discussion points are irrelevent
C- (Unsatisfactory) D (Deeply unsatisfactory)	- Student has read some of the given materials - Student recognises they do not understand the concepts, and has not taken any measures to rectify this - No participation in the majority of tutorials - Is not prepared to contribute to the discussion at any time
F (0-44)	Failure to do the readings Failure to participate in any way

Appendix 4. Assessment criteria for peer feedback

Grade / Numerical Score	Criteria
A+ (Exceptional) A (Excellent)	- Comments are comprehensive, detailed and clear - Feedback thoroughly considers content, structure, language, interpretation of information and resources used - All points for improvement are constructive, feasible and reasonable - All points for improvement are specific and achievable
A- (Very good)	- Comments are mostly comprehensive, detailed and clear - Feedback mostly considers content, structure, language and resources - Most points for improvement are constructive, feasible and reasonable - All points for improvement are specific and achievable
B+ (Good) B (Average)	- Comments are somewhat comprehensive, detailed and clear - Feedback somewhat considers content and structure - Some points for improvement are constructive, feasible and reasonable - Most points for improvement are specific and achievable
B- (Satisfactory) C+ (Marginally satisfactory) C (Bordering unsatisfactory)	- Comments are sparse and unclear - Feedback does not consider content, structure, language, interpretation of information or resources used - Points for improvement are largely unconstructive - Points for improvement are largely vague and unachievable
C- (Unsatisfactory) D (Deeply unsatisfactory)	- No reference to specific parts of the talk is made - Feedback does not consider content, structure, timing or delivery - No points for improvement are constructive - No points for improvement are specific or achievable
F (0-44)	No comments are given Failure to give feedback

Appendix 5. Assessment criteria for presentation

Please note that teamwork is an important graduate outcome that we wish to inculcate in all students. Therefore, we expect everyone to meaningfully contribute to the presentation. If there is any evidence that you are not contributing to your team's presentation, your individual score may be adjusted.

Grade / Numerical Score	Criteria
A+ (Exceptional) A (Excellent)	- Exceptionally prepared for the presentation, showing calm confidence yet enthusiasm. - Oral delivery of the material is clear, articulate and concise - Presentation is logically structured - Presentation is precisely timed to allow introduction and conclusions, as well as adequate time for questions. - Any questions are answered knowledgably and thoroughly, showing the ability to make links to wider regional, national or global issues - Any supporting materials (eg powerpoint slides) are solely used as a visual aid to the presentation, rather than the primary basis for it
A- (Very good)	- Well prepared for the presentation, showing confidence - Oral delivery of the material is clear and articulate - Presentation is logically structured - Presentation is precisely timed to allow introduction and conclusions, as well as adequate time for questions. - Any questions are answered knowledgably and thoroughly, showing the ability to make links to wider regional, national or global issues - Any supporting materials (eg powerpoint slides) are mostly used as a visual aid to the presentation, rather than the primary basis for it
B+ (Good) B (Average)	- Reasonably prepared for the presentation. - Oral delivery of the material is mostly clear - Presentation is reasonably structured - Presentation is somewhat well timed to allow introduction and conclusions, as well as some time for questions. - Most questions are answered appropriately - Any supporting materials (eg powerpoint slides) are somewhat used as a visual aid to the presentation, rather than the primary basis for it
B- (Satisfactory) C+ (Marginally satisfactory) C (Bordering unsatisfactory)	- Somewhat prepared for the presentation - Oral delivery of the material is unclear in places - Presentation is somewhat structured - Presentation is poorly timed - Some questions are answered appropriately - Relies too much on visual aids
C- (Unsatisfactory) D (Deeply unsatisfactory)	- Shows no preparation for the presentation - Presentation has no clear structure - Presentation is poorly timed - Few questions are answered - Relies solely on visual aids
F (0-44)	Failure to give presentation