

Literacy in Global Issues (Environment)

1	科目番号	Course Number	VB20001
2	科目名	Course Name	Literacy in Global Issues (Environment) 地球規模課題基礎論(環境)
3	授業方法	Course Type	1
4	単位	Credits	3
5	年次	Year	1
6	学期	Term	Fall/A B
7	曜時限	Weekday and Period	Tue 23 and Thu 6 火23限および木6限
8	教室	Classroom	Cooperative Research Building A112 共同研究棟A112
9	担当教員	Instructors	Maki Tsujimura, Naomi Shimpo 辻村真貴、新保奈穂美
10	概要	Course Overview	This course provide comprehensive understanding on global issues to understand causes of them comprehensively from the viewpoint of environment. Every day of the course, students will discuss what problems occur related the topics taught in the lecture in the daily life of their home countries. At the end of the course, students have to find another global issue other than what have been focused on in the course and analyse its cause. Then they should give presentation about their findings.
11	備考	Remarks	Lectures are conducted in English
12	科目等履修生	Auditor	No
13	教育目標との関連	Link between Course Objectives and Activities	This course grows students' interests in global issues related to environmental problems and enhance the ability of critical thinking to contend with such complicated problems from integrated study fields.
14	授業の到達目標	Academic Goal	Students will acquire the literacy to contend with global issues from the viewpoint of environment: Through case studies they will obtain knowledge on what global issues have been seen so far and enhance the way of critical thinking to understand why they occurred. They will also be able to find global issues in their daily life.
15	キーワード	Course Key Words	global issues, environment ,risk and safety, fundamental course
16	授業計画	Course Schedule	<p>Week 1. Introduction – How should humans live with the earth?</p> <ul style="list-style-type: none"> – History of environmental degradation (deforestation, climate change, desertification, biodiversity) – Human rights and environment (Maslow's hierarchy of needs, money, energy, food, lifestyle) <p>Week 2. Environment and health</p> <ul style="list-style-type: none"> – Life expectancy and living environment – Risk assessment of chemical pollutant – Dawn of the environmental science (Silent Spring by R. L. Carson) <p>Week 3. Humans and the biosphere</p> <ul style="list-style-type: none"> – Basic knowledge on ecosystem – Ecosystem and human activities (deforestation, chemical pollution, invasive species) – Policies for conserving the biosphere <p>Week 4. Humans and natural resource (water, food)</p> <ul style="list-style-type: none"> – Food production and population – Agriculture and environment – Effect of climate change on food production <p>Week 5. What is 'clean' environment?</p> <ul style="list-style-type: none"> – Clean air, clean water – Technology for cleaning environment – Balance of nature and technology (new virus, natural disaster)

			<p>Week 6. Is it possible to restore the environment?</p> <ul style="list-style-type: none"> - Results of industrialisation (eutrophication, ozone hole, soil contamination) - Cost and time for restoring the environment <p>Week 7. What should business do for the environment?</p> <ul style="list-style-type: none"> - Environmental assessment - Monitoring - Regulations <p>Week 8. Future and resource conservation</p> <ul style="list-style-type: none"> - Variety and amount of mining resources - Change of resource consumption - Process of creating mining resources <p>Week 9. 'Recycle' – an integrated approach between natural science and social science</p> <ul style="list-style-type: none"> - Waste management problems
17	履修条件	Course Prerequisites and Advisories	Basically for students employed in Bachelor's Program in Global Issues. Other cases should be inquired.
18	成績評価方法	Grading Philosophy (Percentage/Criteria/Methodology)	<p>Reports 60%</p> <ul style="list-style-type: none"> * After each day students should submit a small report on designated tasks. <p>An exam 40%</p> <ul style="list-style-type: none"> *The criteria to evaluate presentation: 1. The contents and causes of global issues in environmental fields should be clearly stated. 2. Global issues should be found in daily life of students.
19	授業外における学習方法	Self-Directed Learning Other Than Coursework	Read relevant literature and answer some questions designated by the end of each course day.
20	教科書、参考書等	Textbooks, References, and Supplementary Materials	None. Handout will be prepared.
21	オフィスアワー	Office Hours and Contact Information	By appointment / shimpo.naomi.gn[at]u.tsukuba.ac.jp
22	その他(受講生に望むこと)	Other (i.e. Expectations on Classroom Conduct and Decorum etc.)	When you have problems, consult the instructors.

※参考書(授業組み立てのための)

日本化学会編(2004). 環境科学—人間と地球の調和をめざして. 東京化学同人, 193pp.