



## COURSE SYLLABUS

### 1<sup>st</sup> Semester Academic Year 2016

1. Integrated General Education Center

2. Course code: 01999213 Course name: Environment, Technology & Life

Total credits: 3 (3-0)

Prerequisite: -

Section: 450 Friday Time: 13.00-16.00 Room No: E17201

3. Lecturer(s):
1. Dr. Monchan Maketon
  2. Dr. Piyapoong Tongdenoak
  3. Dr. Chamnong Adivadhanasit
  4. Dr. Nopasom Siphurmsukskul
  5. Dr. Poonsak Miphokasap
  6. Dr. Sujinna Karnasuta

4. Office hours for consultation with students

Head of the course: Sarat Rattana

Day: Wednesday Time: 10.00-12.00 (Please make an appointment)

Room: 713, Floor 7, 72<sup>th</sup> Forestry Building, Faculty of Forestry.

Telephone: 02-942-8113

E-mail address: fforsrr@ku.ac.th

Corresponding group lecturer: Dr. Piyapoong Tongdenoak  
Department of Conservation  
Faculty of Forestry

5. Course Objective(s)

1. Knowledge and understanding in environment, technology & quality of life.
2. Their relation and impact.
3. Learning how to utilize natural resources in a sustainable manner.

6. Course Description

Environment, technology, life and interaction. Evolution of technology and environmental impact. Application of science and technology for quality of life and sustainable natural resource utilization. Field trip required.

## 7. Course Outline

- 7.1 Chapter 1: Fundamental of environment
- 7.2 Chapter 2: Sciences and technology
- 7.3 Chapter 3: Environmental conservation
- 7.4 Chapter 4: Environment and quality of life
- 7.5 Chapter 5: Case study

## 8. Student-centered Teaching Method(s)

Lecture, co-operative learning, discussion, homework, field trip.

## 9. Teaching Aids/Materials

Transparencies, slides, video-audio materials, electronics media.

## 10. Measures of Achievement

	Percent
10.1 Examinations and quizzes	
- Mid-term examination	35%
- Final examination	35%
10.2 Class attendance	10%
10.3 Field Trip attendance	10%
10.4 Report and Presentation	10%
Total	100%

## 11. Textbook(s) and Readings (in bibliography style)

Committee of the integrated subject on Environment, Technology and Life.  
Kasetsart University Press.315 p. (in Thai). Lecture note of Environment, Technology and Life.(in English).

## 12. Class Schedule 01999213 Environment, Technology & Life

Section: 450    Friday    Time: 13.00-16.00    Room No: E17201

Week	Date	Topic	Class Activity	Lecturers
1	19 Aug. 2016	<b>Course introduction</b> <b>Chapter 1: Fundamental of environment</b> 1.1 Fundamental of environment 1.1.1 Definitions and meanings 1.1.2 Properties of environment 1.2 Environmental dimensions 1.2.1 Resources 1.2.2 Technology 1.2.3 Waste and pollution 1.2.4 Human	Lecture, discussion	Dr. Piyapoong Tongdenoak

Week	Date	Topic	Class Activity	Lecturers
2	26 Aug. 2016	1.3 Ecology and environmental studies 1.3.1 Ecology and ecosystems 1.3.2 Types and characteristics of ecosystems 1.3.3 Balancing mechanism of ecosystem 1.3.4 Environmental studies based on basic of ecosystem	Lecture, discussion	Dr. Piyapoong Tongdenoak
3	2 Sep. 2016	<b>Chapter 2: Sciences and Technology</b> 2.1 Application of sciences and technological innovation 2.1.1 Definitions and meanings of sciences and technology 2.1.2 Relationship between sciences and technology 2.1.3 Innovation and future of sciences and technology in Thailand	Lecture, movie, discussion	Dr. Monchan Maketon
4	9 Sep. 2016	2.2 Technology and country development 2.2.1 Importance of technology to country development 2.2.2 Forms of implication of technology for country development 2.2.3 Obstacles, success, and failure of technological development of a country 2.2.4 Status of governmental support on research and development	Lecture, movie, discussion	Dr. Monchan Maketon
5	16 Sep. 2016	2.2.5 Future goals of research and development of technology 2.2.6 National science and technology policy 2.6.7 Strategies on strengthening science and technology 2.3 Evolution of technology 2.3.1 Limitations of technology 2.3.2 Evolution rate of technology 2.3.3 Evolution of technology	Lecture, movie, discussion	Dr. Monchan Maketon

Week	Date	Topic	Class Activity	Lecturers
6	23 Sep. 2016	2.4 Interaction of science and technology 2.4.1 Roles of technology on changing the environment 2.4.2 Roles of environment on shaping technology 2.5 Technology and environmental impact 2.5.1 Global environmental impact 2.5.2 Thailand environmental impact 2.5.3 Conclusion	Lecture, movie, discussion	Dr. Monchan Maketon
6	7 Oct., 2016	<b>Chapter 3: Environmental conservation</b> 3.1 Principle and method 3.1.1 Meaning and principle of conservation 3.1.2 Methods of conservation 3.2 Environmental conservation by science and technology 3.3 Sustainable natural resource utilization	Lecture, discussion	Dr. Piyapoong Tongdenoak
7	14 Oct., 2016	3.4 Environmental conservation by education and ethics 3.4.1 Education for life and environment 3.4.2 Building environmental moral and ethics 3.4.3 Conclusion	Lecture, discussion, homework	Dr. Chamnong Adivadhanasit
<b>Midterm exam on 25 Sep, 2016 (9.00-11.00 am.)</b>				
8	4 Nov., 2016	3.5 Environmental Economics 3.5.1 Causes of Market Failure 3.5.2 Economics for sustainable resource utilization 3.5.3 Sustainable resource utilization 3.5.4 Sustainable development 3.5.5 Existing and Optimal Stock 3.5.6 Natural Resources and Resilience of Economic System	Lecture, discussion	Dr. Nopasom Siphurmsukskul
9	11 Nov., 2016	<b>Chapter 4: Environment and quality of life</b> 4.1 Evolution of life and adaptation to the environment 4.1.1 Life on earth 4.1.2 Human evolution and adaptation	Lecture, discussion	Dr. Poonsak Miphokasap

Week	Date	Topic	Class Activity	Lecturers
10	18 Nov., 2016	4.2 Environment and quality of life 4.2.1 Quality of life 4.2.2 Natural environment and quality of life 4.2.3 Social, economics, and environment, and quality of life 4.2.4 Urban quality of life 4.2.5 Sustained quality of life 4.2.6 Indicator and quality of life assessment	Lecture, discussion	Dr. Poonsak Miphokasap
11	25 Nov., 2016	4.3 Sustainable development for quality of life 4.3.1 Meaning of sustainable development 4.3.2 Sustainable development 4.3.3 Socio-economic development for quality of life 4.3.4 The Ninth national social and economic development plan	Lecture, discussion	Dr. Poonsak Miphokasap
12	2 Dec., 2016	<b>Chapter 5: Case study</b> 5.1 El ninno 5.2 Green house effect	Lecture, discussion, movie	Dr. Sujinna Karnasuta
13	9 Dec., 2016	5.3 Biodiversity 5.4 Development and environment 5.4.1 Type and size of development project subjected to study of environmental impact assessment (EIA) 5.4.2 Environmental decision making 5.5 National environmental policy	Lecture, Presentation, discussion	Dr. Piyapoong Tongdenoak
<b>Final exam on 18 Dec, 2016 (9.00-11.00 am.)</b>				

Field Trip (Please see an official announcement)

Signature.....*Sarat Rattana*.....

(Sarat Rattana)

Date 8 Aug., 2016