



# Course Syllabus

TU103 Life and Sustainability (2/2020)

Programs: BAS/BBA/BE/IAC/SPD Thammasat University (Tha Prachan)

## 1. Lecturers and Course Coordinator\*\*

Room	Module 1	Module 2	Module 3
AM1	Asst. Prof. Chol Bunnag (bchol@staff.tu.ac.th)	Asst. Prof. Dr. Supreedee Rittironk (sdr@tu.ac.th)	Assoc. Prof. Dr. Chalie Charoenlarnpopparut** (chalie@siit.tu.ac.th)
AM2	Dr. Nuttavikhom Phanthuwongpakdee (kaynp@staff.tu.ac.th)	Dr. Winyu Ardrugsa (Ardrugsa@ap.tu.ac.th)	Dr. Suparchoek Wangmanaopituk (suparchoek_w@yahoo.com)
AM3	Dr. Shweta Sinha (shweta_s@staff.tu.ac.th)	Asst. Prof. Dr. Boonanan Natakun (boonanan@ap.tu.ac.th)	Dr. Amnart Thamrongmas (armsiit@gmail.com)
PM1	Asst. Prof. Chol Bunnag (bchol@staff.tu.ac.th)	Asst. Prof. Dr. Supreedee Rittironk (sdr@tu.ac.th)	Aj. Rick Levinthal (ricklev@hotmail.com)
PM2	Dr. Nuttavikhom Phanthuwongpakdee (kaynp@staff.tu.ac.th)	Dr. Pongpisit Huyakorn (pongpisit.usl@gmail.com)	Dr. Suparchoek Wangmanaopituk (suparchoek_w@yahoo.com)
PM3	Dr. Shweta Sinha (shweta_s@staff.tu.ac.th)	Aj. Hansa Srilertchaipanit (hansa@ap.tu.ac.th)	Dr. Amnart Thamrongmas (armsiit@gmail.com)

2. **Class Date and Time:** Room AM1-AM3 = Saturdays 9:00-12:00 and PM1-PM3 = Saturdays 13:00-16:00

## 3. Course Objective

This course provides an introduction to the importance of life-cycle systems perspectives in understanding major challenges and solutions to achieving more sustainable societies in this changing world. Students will learn about the relationship between mankind and the environment in the context of energy and resource use, consumption and development, and environmental constraints. Furthermore, an examination of social conflict and change from the life-cycle perspective will be used to develop an understanding of potential solution pathways for sustainable lifestyle modifications.

## 4. Expected Learning Outcomes

Morals and Ethics						Knowledge				Cognitive Skills				Interpersonal skills & responsibilities					Numerical, Communication and IT skills			
1	2	3	4	5	6	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4
●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	○	x	x	x

ทักษะอื่น ๆ (Other skills)	ทัศนคติอื่น ๆ (Other attitudes)
S1: Systematic thinking	A1 : Awareness for the public and awareness of the external impact that they may cause to society.
S2: Well-rounded thinking	A2 : Seeing that sustainability is near and one of the main reasons is the behavior of students in everyday life.

## 5. Grading Criteria:

Module	Participation	Quiz / Exam	Group work	Total (100%)
M1 (Week 1- Week 5)	-	15%	20%	35%
M2 (Week 6- Week 10)	16%	10%	9%	35%
M3 (Week 11- Week 15)	8%	12%	10%	30%

## 6. Reference Material:

Each module will provide reading material and worksheets. There is no text for the students to purchase.

## 7. Course plan:

Week	Date	Topic	Content
<b>Module M1: Economics, Social Science and Environment for Sustainability (5 Weeks)</b>			
1	23-Jan	Introduction to Sustainable Development	Course Introduction <i>Topic selection for group* assignment</i>
2	30-Jan	History of (Un)sustainable Development	Brief history of agrarian capitalism; Mercantilism; Colonization; Industrial revolution; Green revolution; Globalization
3	6-Feb	History of Sustainable Development, Sustainable Development Goals (SDGs)	Brief history of the United Nations; Millennium Development Goals; Paris Agreements; and the SDGs. <i>Quiz (5 points) &amp; Group assignment outline (5 points)</i>
4	13-Feb	Economic Aspect of Sustainable Development	Polluters pay principle; Payment for ecosystem service; Tax policy; Green society, and sufficient economy principle
5	20-Feb	Uneven Development and Inequality	Inequality issues focusing on Thailand <i>Final Quiz (10 points) &amp; Group Assignment (15 points, due 23-Feb)</i>
<b>Module M2: Built Environment and Sustainability (5 Weeks)</b>			
6	27-Feb	Built Environment: definition and Sustainability concept, Utopia	Sustainable Concept and ideal place <i>Participation (4 points)</i>
7	6-Mar	Built Environment: Resilient city.	Adaptive sustainable city <i>Participation (4 points)</i>
-	13-Mar	No class (midterm exam week)	
8	20-Mar	Built Environment: Community and participation	Sustainable community and neighborhood <i>Participation (4 points)</i>
9	27-Mar	Built Environment: Sustainable Architecture	Sustainable and green architecture <i>Participation (4 points)</i>
10	3-Apr	Sustainable Architecture case studies and Green building criteria	Promoting sustainable architecture <i>Exam in-class (10 points) &amp; Project due (9 points)</i>
<b>Module M3: Environmental Science (5 Weeks)</b>			
-	10-Apr	No class (Songkran holiday)	
11	17-Apr	Concept of life and sustainability	Scope and definition; Various types of sustainability; World population
12	24-Apr	Science related to sustainability	Ozone depletion; Climate change and global connectivity; Water scarcity
13	1-May	Personal consumption	Material life cycle (Story of stuff); Ecological footprint and carbon footprint; Consumption measurement and its environmental effect
14	8-May	Environmental protection engagement	Zero-waste life (Green consumerism); Public campaign; Change and inspiration; Learning Game
15	15-May	Project Module 1: Presentation	Thai footprint; inspiration project and module reflection

## 8. Class rules:

- Throughout the semester, all classes are conducted online using Microsoft Teams as the learning management system. Students are expected to join the class meeting via MS Teams meeting on time and actively participate in all class activities.
- Group will be assigned on a random basis.
- Quizzes will be conducted online. There will be no make-up quizzes. Absentee will be given a score of zero, except with valid reason(s). In this manner, the student must inform the instructor before the class via e-mail or, for medical reason(s), provide a medical certificate as soon as possible.
- If the student experience technical difficulty/ies while taking online quiz, the student must screenshot the error and contact the lecturer immediately.