

## Tamkang University Academic Year 110, 1st Semester Course Syllabus

Course Title	EARTH'S ECOSYSTEMS AND ENVIRONMENT	Instructor	CHEN-LING HUNG
Course Class	TNUZB0F GLOBAL TECHNOLOGY REVOLUTION, 0F	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG4 Quality education SDG6 Clean water and sanitation		
<b>Departmental Aim of Education</b>			
Students will understand recent development of modern science and technology and its impact on human society and global environment. Through the design of course students will also be familiar with broadly-based fundamental technical knowledge and improve.			
<b>Subject Schoolwide essential virtues</b>			
<ol style="list-style-type: none"> <li>1. A global perspective. (ratio:70.00)</li> <li>2. Information literacy. (ratio:10.00)</li> <li>3. A vision for the future. (ratio:20.00)</li> </ol>			
<b>Course Introduction</b>	This course introduces students to the concepts of Earth's ecosystems and environmental science related to the spheres of the environment including hydrosphere, atmosphere, and geosphere.		

**The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.**

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	This course equips students with a breadth of knowledge of Earth's ecosystems and environmental science and an understanding of the importance and role of human being in the spheres of the environment.	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1		123	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online), Report(including oral and written)

**Course Schedule**

Week	Date	Course Contents	Note
1	110/09/22 ~ 110/09/28	Introduction & course mechanics	
2	110/09/29 ~ 110/10/05	A basic overview of environmental science	
3	110/10/06 ~ 110/10/12	The Five Spheres of the Environment	
4	110/10/13 ~ 110/10/19	The Hydrosphere	
5	110/10/20 ~ 110/10/26	Aquatic Ecosystem	
6	110/10/27 ~ 110/11/02	Water Pollutants and Water Pollution	
7	110/11/03 ~ 110/11/09	World Water Crisis and Climate Change	
8	110/11/10 ~ 110/11/16	Air Pollutants	
9	110/11/17 ~ 110/11/23	Midterm Exam Week	

10	110/11/24 ~ 110/11/30	The Atmosphere	
11	110/12/01 ~ 110/12/07	The Geosphere	Abstract submission
12	110/12/08 ~ 110/12/14	Soil: Earth's Lifeline	
13	110/12/15 ~ 110/12/21	Forest Ecosystem	
14	110/12/22 ~ 110/12/28	Energy Resources	
15	110/12/29 ~ 111/01/04	Group Presentations	
16	111/01/05 ~ 111/01/11	Group Presentations	
17	111/01/12 ~ 111/01/18	Group Project Submission	
18	111/01/19 ~ 111/01/25	Group Project Submission	
Requirement			
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	Environmental Science (16th) by G. Tyler Miller and Scott Spoolman, Boston, Massachusetts: National Geographic Learning and Cengage Learning.		
Number of Assignment(s)	10 (Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 20.0 %   ◆ Mark of Usual : 20.0 %   ◆ Midterm Exam : 30.0 % ◆ Final Exam : % ◆ Other 〈Group Project〉 : 30.0 %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>		