Tamkang University Academic Year 113, 1st Semester Course Syllabus

Course Title	ENERGY POLICY AND MANAGEMENT	Instructor	LIAO HUEI-CHU
Course Class	TLYAM2A MASTER'S PROGRAM IN ECONOMICS AND FINANCE, DEPARTMENT OF ECONOMICS, 2A	Details	◆ General Course ◆ Selective ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG7 Affordable and clean energy SDG13 Climate action		

Departmental Aim of Education

Ⅰ. Establish a strong core foundation and enhance advanced specialized skills.

Ⅱ. Encourage active thinking and cultivate independent analysis.

Ⅲ. Creatively apply specialized knowledge and skills to practical issues.

Ⅳ. Emphasize the development of group communication, coordination and cooperation.

Ⅴ. Shape an international perspective and civic consciousness.

Subject Departmental core competences

A. Have a firm grasp of advanced economic concepts.(ratio:40.00)

B. Have the ability to apply advanced analytical tools to economic issues.(ratio:5.00)

C. Understand the interrelations in practice between advanced economics and finance. (ratio:25.00)

D. Possess the skill to communicate and integrate advanced economic concepts.(ratio:5.00)

E. Understand and be able to analyze international economic affairs and trends.(ratio:20.00)

F. Have the skill to apply advanced economic analysis to welfare topics.(ratio:5.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:30.00)

2. Information literacy. (ratio:10.00)

3. A vision for the future. (ratio:30.00)

4. Moral integrity. (ratio:5.00)

5. Independent thinking. (ratio:10.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:5.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

Course Introduction	（英）Focusing on the new trend of international energy development, this course analyze the problem of each traditional energy: oil, coal, gas, electricity and renewable energy. While, the hot issue of energy and climate change is arranged in the final part.

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	1.realize the current situations of every energy industries and their impacts on the economy and environment 2.know and familiar with the techniques for analyzing the energy issues 3.know the writing skills by reading more international Journal papers 4.intensify English Proficiency by reading more professional papers in English	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEF	12345678	Lecture, Discussion	Testing, Discussion(including classroom and online), oral presentation

Course Schedule

Week	Date	Course Contents	Note

1	113/09/09 ~ 113/09/15	Introduction	
2	113/09/16 ~ 113/09/22	Traditional fuel：oil	
3	113/09/23 ~ 113/09/29	Traditional fuel：coal	
4	113/09/30 ~ 113/10/06	Traditional fuel：gas	
5	113/10/07 ~ 113/10/13	Electricity：thermal power	
6	113/10/14 ~ 113/10/20	Electricity：nuclear	
7	113/10/21 ~ 113/10/27	Energy storage	
8	113/10/28 ~ 113/11/03	Carbon Footprint	
9	113/11/04 ~ 113/11/10	Mid-term Exam	
10	113/11/11 ~ 113/11/17	New& Renewable power： solar & wind power	
11	113/11/18 ~ 113/11/24	New& Renewable power：biomass	
12	113/11/25 ~ 113/12/01	New& Renewable power：ocean power and others	
13	113/12/02 ~ 113/12/08	Energy & Environment	
14	113/12/09 ~ 113/12/15	Energy & CO2	
15	113/12/16 ~ 113/12/22	EU ETS CDM & others (Tony)	
16	113/12/23 ~ 113/12/29	Climate Change	
17	113/12/30 ~ 114/01/05	Power Plant & Grids (Table Game)	
18	114/01/06 ~ 114/01/12	Final Exam	

Key capabilities	International mobility Problem solving
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)
Distinctive teaching	Special/Problem-Based(PBL) Courses

Course Content	Environmental Safety Green Energy
Requirement	Midterm exam is oral presentation
Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts Using teaching materials from other writers:Videos
References	Handbook of Natural Resource and Energy Economics, Journal Papers
Grading Policy	◆ Attendance： 20.0 % ◆ Mark of Usual： % ◆ Midterm Exam： 40.0 % ◆ Final Exam： 40.0 % ◆ Other〈 〉： %
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php . ※ **Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.**