Tamkang University Academic Year 113, 1st Semester Course Syllabus

Course Title	PLANNING OF INTELLIGENT LIVING STYLE IN GREEN BUILDING ENVIRONMENT	Instructor	JONG-DAR YAU
Course Class	TNUZB0A GLOBAL TECHNOLOGY REVOLUTION, 0A	Details	◆ General Course ◆ Required ◆ One Semester ◆ 2 Credits
Relevance to SDGs	SDG3 Good health and well-being for people SDG4 Quality education		

Departmental Aim of Education

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.

Subject Schoolwide essential virtues

1. A global perspective. (ratio:20.00)
2. Information literacy. (ratio:10.00)
3. A vision for the future. (ratio:20.00)
4. Moral integrity. (ratio:10.00)
5. Independent thinking. (ratio:10.00)
6. A cheerful attitude and healthy lifestyle. (ratio:10.00)
7. A spirit of teamwork and dedication. (ratio:10.00)
8. A sense of aesthetic appreciation. (ratio:10.00)

Course Introduction

This course introduces various aspects of Smart Green Living, combining zero-net green living with environmental protection concepts to enhance quality of life while reducing negative environmental impacts. Based on the Zero-Net Green Living concept, the course covers Smart Buildings, Smart Transportation, Smart Energy, Smart Recycling and Circular Economy, Smart Industries, Energy Saving and Carbon Reduction, and Net Zero Carbon Emissions. Students will learn to use technological means to achieve sustainable development and explore various practical application cases.

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	Understand the basic concepts and importance of Smart Green Living. Explore the application of various smart technologies in environmental protection and sustainable development. Analyze practical cases and successful experiences of Smart Green Living. Cultivate students' innovative thinking and practical abilities in the field of Smart Green Living.	Cognitive

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

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

Course Schedule

Week	Date	Course Contents	Note
1	113/09/09 ~ 113/09/15	課程介紹與智慧淨零綠生活概述 / Introduction of Smart Zer-Net Green Living	
2	113/09/16 ~ 113/09/22	淨零綠色生活行動計畫 / Action and Policy of Zero-Net Green Living	
3	113/09/23 ~ 113/09/29	淨零減碳及循環經濟 / Zer-Net and Circular Economics (Speech Lecture)	
4	113/09/30 ~ 113/10/06	2050 淨零排放策略解方 / 2050 Zero-Net Strategy and Solutions	
5	113/10/07 ~ 113/10/13	Double Ten Festival	

6	113/10/14 ~ 113/10/20	智慧低碳交通 / Smart Low-Carbon Transportation & Green Transportation Tools	
7	113/10/21 ~ 113/10/27	智慧建築 / Smart Buildings	
8	113/10/28 ~ 113/11/03	智慧能源 / Smart Energy	
9	113/11/04 ~ 113/11/10	Midterm Exam Week	
10	113/11/11 ~ 113/11/17	智能電網 / Smart Grids	
11	113/11/18 ~ 113/11/24	智慧回收與淨零循環經濟 / Smart Recycling & Zero-Net Circular Economy	
12	113/11/25 ~ 113/12/01	智慧城市的概念與發展 / Concepts and Development of Smart Cities	
13	113/12/02 ~ 113/12/08	工業物聯網 / Industrial Internet of Things (IIoT)	
14	113/12/09 ~ 113/12/15	節能技術與措施 / Energy-saving Technologies and Measures	
15	113/12/16 ~ 113/12/22	碳排放監測與管理 / Carbon Emission Monitoring and Management	
16	113/12/23 ~ 113/12/29	碳中和策略 / Carbon Neutral Strategies	
17	113/12/30 ~ 114/01/05	Final Exam Week	
18	114/01/06 ~ 114/01/12	Flex week, learning activities should be arranged.	

Key capabilities	self-directed learning Problem solving
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)
Distinctive teaching	Industry-university collaboration courses Special/Problem-Based(PBL) Courses
Course Content	Environmental Safety Green Energy

Requirement	Late submission of assignment = Grade * 0.6, if submitted more than two weeks (14 days) late, the grade for that assignment will not be counted. Students must adhere to class regulations. If a student is absent five times or more, the attendance grade will be zero. Approved leave slips must be submitted to the instructor within seven days after the leave date (if it falls on a holiday, it will be extended by one week). The leave slip must be presented in class for the instructor's signature. Unfortunately, late submissions won't be accepted. 補交成績 = 成績*0.6，超過規定時間兩星期(14天)，該次成績不計 課程進行方式: 實體 修課者應遵守上課規定,曠課達5次(含)以上者, 出席率成績以零分計, 核准假單在請假日後7日內(逢假日, 順延一週)，於課堂中將假單證明聯逕送任課教師完成簽點，逾期不受理。
Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts, Videos
References	
Grading Policy	◆ Attendance： 20.0 % ◆ Mark of Usual：30.0 % ◆ Midterm Exam： 25.0 % ◆ Final Exam： 25.0 % ◆ 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.**