Tamkang University Academic Year 113, 2nd Semester Course Syllabus

Course Title	SEMINAR (II)	Instructor	KANG SHUNG-WEN
Course Class	TEBXD1A DOCTORAL PROGRAM, DEPARTMENT OF MECHANICAL AND ELECTRO-MECHANICAL ENGINEERING, 1A	Details	◆ General Course ◆ Required ◆ One Semester ◆ 1 Credits
Relevance to SDGs	SDG6 Clean water and sanitation SDG7 Affordable and clean energy SDG11 Sustainable cities and communities SDG13 Climate action		

Departmental Aim of Education

Ⅰ. To prepare students who have a comprehensive understanding of the principles of applied sciences and engineering to be innovators in the field of mechanical and electromechanical engineering.

Ⅱ. To train emerging professionals who possess a high level of expertise and ethical standards who will become independent research and development leaders in the industry.

Ⅲ. To motivate students who will pursue continuing education as a means to stay on the cutting edge of global competiveness and meet changes in their careers and the workplace with confidence and ease.

Subject Departmental core competences

A. Head: Knowledge of mechanical and electromechanical engineering.(ratio:55.00)

B. Hand: Hands-on skills and practical realization.(ratio:5.00)

C. Heart: Love of learning and innovation.(ratio:20.00)

D. Eye: Vision of progress and improvements.(ratio:20.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:20.00)

2. Information literacy. (ratio:30.00)

3. A vision for the future. (ratio:5.00)

4. Moral integrity. (ratio:5.00)

5. Independent thinking. (ratio:25.00)

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	This course is designed to help students learn how to study the idea, collection / compilation of relevant information, analysis and discussion of related research papers, books, and patents, decided to study methods, execution and problem solving.

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	To explore and learn the motivation and the innovative purpose of scientific and engineering research.	Affective

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

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

Course Schedule

Week	Date	Course Contents	Note
1	114/02/17 ~ 114/02/23	Introduction	
2	114/02/24 ~ 114/03/02	Papers reading, analyzing and discussion	
3	114/03/03 ~ 114/03/09	Papers reading, analyzing and discussion	
4	114/03/10 ~ 114/03/16	Papers reading, analyzing and discussion	

5	114/03/17 ~ 114/03/23	Papers reading, analyzing and discussion	
6	114/03/24 ~ 114/03/30	Papers reading, analyzing and discussion	
7	114/03/31 ~ 114/04/06	兒童節、民族掃墓節連假	
8	114/04/07 ~ 114/04/13	Papers reading, analyzing and discussion	
9	114/04/14 ~ 114/04/20	Midterm Report	
10	114/04/21 ~ 114/04/27	Papers reading, analyzing and discussion	
11	114/04/28 ~ 114/05/04	Papers reading, analyzing and discussion	
12	114/05/05 ~ 114/05/11	Papers reading, analyzing and discussion	
13	114/05/12 ~ 114/05/18	Papers reading, analyzing and discussion	
14	114/05/19 ~ 114/05/25	Papers reading, analyzing and discussion	
15	114/05/26 ~ 114/06/01	Papers reading, analyzing and discussion	
16	114/06/02 ~ 114/06/08	Final Report/Presentation/Group Discussion	
17	114/06/09 ~ 114/06/15	Final Report/Presentation/Group Discussion	
18	114/06/16 ~ 114/06/22	教師彈性補充教學：Final Report/Presentation/Group Discussion	

Key capabilities	
Interdisciplinary	
Distinctive teaching	
Course Content	Logical Thinking Green Energy
Requirement	

Textbooks and Teaching Materials	Self-made teaching materials:journal papers
References	
Grading Policy	◆ Attendance： 15.0 % ◆ Mark of Usual：15.0 % ◆ Midterm Exam： 30.0 % ◆ 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.**