

Tamkang University Academic Year 103, 1st Semester Course Syllabus

Course Title	SEMINAR (I)	Instructor	CHIAO-CHEN CHEN
Course Class	TSCAM1R MASTER'S PROGRAM, DIVISION OF CHEMISTRY, DEPARTMENT OF CHEMISTRY, 1R	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 2 Credits
D e p a r t m e n t a l A i m o f E d u c a t i o n			
<p>I. Cultivate the advanced professional knowledge and experimental techniques.</p> <p>II. Cultivate the capacity of practical implementation.</p> <p>III. Cultivate professional ethics and lifelong learning.</p>			
D e p a r t m e n t a l c o r e c o m p e t e n c e s			
<p>A. Possess advanced knowledge in chemistry such as organic, physical, inorganic, and instrumental analysis, and extend them into biochemistry, material chemistry, and related chemistry.</p> <p>B. Possess basic experimental chemistry techniques and apply them to other chemistry-related experimental works.</p> <p>C. Possess basic research ability and seminar participation in chemistry-related projects, and independently finish writing the research paper.</p> <p>D. Possess the professional ethics in chemistry workplace.</p> <p>E. Possess collecting and analyzing information in chemistry and apply them to solve chemistry problems.</p>			
Course Introduction	<p>The capabilities to collect valid information, appreciate scientific works and give a successful presentation are significant to professionals in various fields. In this course, weekly literature report will be given by students to develop their capabilities mentioned above.</p>		

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I. Objective Levels (select applicable ones) :

- (i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying,
C4-Analyzing, C5-Evaluating, C6-Creating
- (ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation,
P4-Linked Operation, P5-Automation, P6-Origination
- (iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing,
A4-Organizing, A5-Characterizing, A6-Implementing

II. The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3, C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A, AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Provide a platform to introduce the students to significant/interest research topics of chemistry in diverse fields.	C2	AD
2	Develop the capability of students to conduct literature search, information analysis and organization.	A4	ADE
3	Improve student's communication capability in professional fields through oral presentation and discussion.	A5	ACE

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Provide a platform to introduce the students to significant/interest research topics of chemistry in diverse fields.	Lecture, Discussion, Appreciation	Report, Participation
2	Develop the capability of students to conduct literature search, information analysis and organization.	Lecture, Discussion	Report, Participation
3	Improve student's communication capability in professional fields through oral presentation and discussion.	Lecture, Discussion, Appreciation	Report, Participation

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◆ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◆ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◆ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	103/09/15 ~ 103/09/21	Introduction	
2	103/09/22 ~ 103/09/28	How to use journal database for literature search	
3	103/09/29 ~ 103/10/05	Tips for successful oral presentations	
4	103/10/06 ~ 103/10/12	Presentation and discussion	
5	103/10/13 ~ 103/10/19	Presentation and discussion	
6	103/10/20 ~ 103/10/26	Presentation and discussion	
7	103/10/27 ~ 103/11/02	Presentation and discussion	
8	103/11/03 ~ 103/11/09	Presentation and discussion	
9	103/11/10 ~ 103/11/16	Presentation and discussion	
10	103/11/17 ~ 103/11/23	Midterm Exams	
11	103/11/24 ~ 103/11/30	Presentation and discussion	
12	103/12/01 ~ 103/12/07	Presentation and discussion	

13	103/12/08 ~ 103/12/14	Presentation and discussion	
14	103/12/15 ~ 103/12/21	Presentation and discussion	
15	103/12/22 ~ 103/12/28	Presentation and discussion	
16	103/12/29 ~ 104/01/04	Presentation and discussion	
17	104/01/05 ~ 104/01/11	Presentation and discussion	
18	104/01/12 ~ 104/01/18	Final Exams	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	Chemical articles and papers in Journals and literature		
Reference(s)			
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 20.0 % ◆ Mark of Usual : 30.0 % ◆ Midterm Exam : % ◆ Final Exam : % ◆ Other (Oral Presentation) : 50.0 %		
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.		