# Tamkang University Academic Year 107, 2nd Semester Course Syllabus

| Course Title | TECHNICAL WRITING | Instructor | CHENG, LIAO-PING |
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| Course Class | TEDXM1A<br>MASTER'S PROGRAM, DEPARTMENT OF<br>CHEMICAL AND MATERIALS ENGINEERING, 1A | Details | ◆ Selective<br>◆ One Semester<br>◆ 1 Credits |

## Departmental Aim of Education

Education Objectives: Cultivation of chemical/materials engineering experts with professional knowledge and high research-and-development capability.

## Departmental core competences

A. Possess the advanced knowledge of chemical/material engineering and to be able to use it.

B. Capable to plan and execute the chemical/material engineering projects.

C. Capable of writing professional papers.

D. Capable of creative thinking and solving problem independently.

E. Capable to coordinate and integrate interdisciplinary cooperation.

F. Possess global vision.

G. Qualified capability for leadership, management and planning.

H. Capable of self-learning and self-growth.

| Course Introduction | The skills for writting technical papers and reports are introduced. The key elements include: title, authors, introduction, method, results and discussions, conclusion, references, acknowledgement. |
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# 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-Charaterizing,    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 | The skills for writting technical papers and reports are introduced. The key elements include: title, authors, introduction, method, results and discussion, conclusion, references, acknowledgement. | P3 | C |

## Teaching Objectives, Teaching Methods and Assessment

| No. | Teaching Objectives | Teaching Methods | Assessment |
| --- | --- | --- | --- |
| 1 | The skills for writting technical papers and reports are introduced. The key elements include: title, authors, introduction, method, results and discussion, conclusion, references, acknowledgement. | Lecture, Discussion, Practicum | Report |
| | | | |

| This course has been designed to cultivate the following essential qualities in TKU students | |
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| 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 | 108/02/18 ~ 108/02/24 | Title | |
| 2 | 108/02/25 ~ 108/03/03 | Authors | |
| 3 | 108/03/04 ~ 108/03/10 | Introduction | |
| 4 | 108/03/11 ~ 108/03/17 | Introduction | |
| 5 | 108/03/18 ~ 108/03/24 | Introduction | |
| 6 | 108/03/25 ~ 108/03/31 | Introduction | Special Lecture_Tamkang Univ |
| 7 | 108/04/01 ~ 108/04/07 | Methods | |
| 8 | 108/04/08 ~ 108/04/14 | Methods | |
| 9 | 108/04/15 ~ 108/04/21 | Methods | |
| 10 | 108/04/22 ~ 108/04/28 | Methods | |
| 11 | 108/04/29 ~ 108/05/05 | Results and discussions | |
| 12 | 108/05/06 ~ 108/05/12 | Results and discussions | |

| 13 | 108/05/13 ~ 108/05/19 | Results and discussions | |
|----|------------------------|--------------------------|---|
| 14 | 108/05/20 ~ 108/05/26 | Results and discussions | |
| 15 | 108/05/27 ~ 108/06/02 | Results and discussions | |
| 16 | 108/06/03 ~ 108/06/09 | Results and discussions | |
| 17 | 108/06/10 ~ 108/06/16 | Conclusion | |
| 18 | 108/06/17 ~ 108/06/23 | Conclusion | |

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| Requirement | Filled in by assignment instructor only |
| Teaching Facility | Computer |
| Textbook(s) | |
| Reference(s) | |
| Number of Assignment(s) | **3** (Filled in by assignment instructor only) |
| Grading Policy | ◆ Attendance： 　 % ◆ Mark of Usual： 　 % ◆ Midterm Exam： 　 % <br> ◆ Final Exam： 　 % <br> ◆ Other〈report〉：100.0 % |
| 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 . <br><br> ※ **Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.** |