

## Tamkang University Academic Year 106, 1st Semester Course Syllabus

|   |  |            |   |
|---|--|------------|---|
| Course Title  | TECHNICAL WRITING  | Instructor | PETER LIU   |
| Course Class  | TETEM1S<br>MASTER'S PROGRAM IN ROBOTICS<br>ENGINEERING, DEPARTMENT OF ELECTRICAL<br>AND COMPUTER ENGINEERING, 1S   | Details    | <ul style="list-style-type: none"> <li>◆ Required</li> <li>◆ One Semester</li> <li>◆ 2 Credits</li> </ul> |
| 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   |  |            |   |
| <ul style="list-style-type: none"> <li>I . Educate students to have electrical and robotics engineering knowledge to solve electrical engineering related problems.</li> <li>II. Educate the student as a senior electrical engineer to enable creative thinking, to be independently complete the assigned tasks and be willing to work as a team member.</li> <li>III. Educate students to have advanced global awareness to cope with the challenges of modern diversified professor careers.</li> </ul>   |  |            |   |
| 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   |  |            |   |
| <ul style="list-style-type: none"> <li>A. Have professional knowledge in the fields of VLSI and computer system; communication and electromagnetic; control chips and system.</li> <li>B. Have the ability to plan and execute electrical engineering research studies.</li> <li>C. Have the ability to prepare professional papers in the electrical engineering field.</li> <li>D. Have the abilities to be creative thinking and to independently solve electrical engineering related problems.</li> <li>E. Have the ability to lead, manage, plan, coordinate and integrate personnel from various fields.</li> <li>F. Have advanced global awareness and the ability of lifelong self-study.</li> </ul> |  |            |   |
| Course Introduction   | Let students understand the differences between technical writing and normal daily writing with emphasis on how to find, read, summarize and write technical documents in a professional manner. |            |   |
|   |  |            |   |

**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   | To let students be able to write technical documents and deliver professional talks. | P3               | ABCDEF                        |

**Teaching Objectives, Teaching Methods and Assessment**

| No. | Teaching Objectives  | Teaching Methods                    | Assessment            |
|-----|--|-------------------------------------|-----------------------|
| 1   | To let students be able to write technical documents and deliver professional talks. | Lecture, Practicum, Problem solving | 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    | 106/09/18 ~<br>106/09/24 | Course Overview                                  |      |
| 2    | 106/09/25 ~<br>106/10/01 | Differences of Technical Writing                 |      |
| 3    | 106/10/02 ~<br>106/10/08 | Finding what you want - I                        |      |
| 4    | 106/10/09 ~<br>106/10/15 | Finding what you want - II                       |      |
| 5    | 106/10/16 ~<br>106/10/22 | Efficient Reading of Technical Documents - I     |      |
| 6    | 106/10/23 ~<br>106/10/29 | Efficient Reading of Technical Documents - II    |      |
| 7    | 106/10/30 ~<br>106/11/05 | Summarizing and Dissemination of Literature - I  |      |
| 8    | 106/11/06 ~<br>106/11/12 | Summarizing and Dissemination of Literature - II |      |
| 9    | 106/11/13 ~<br>106/11/19 | Main parts of technical Documents                |      |
| 10   | 106/11/20 ~<br>106/11/26 | Midterm  |      |
| 11   | 106/11/27 ~<br>106/12/03 | How to begin writing - I                         |      |
| 12   | 106/12/04 ~<br>106/12/10 | How to begin writing - II                        |      |

|                         |  |   |  |
|-------------------------|--|---|--|
| 13                      | 106/12/11 ~<br>106/12/17   | Common errors of technical writing - I  |  |
| 14                      | 106/12/18 ~<br>106/12/24   | Common errors of technical writing - II |  |
| 15                      | 106/12/25 ~<br>106/12/31   | Student Presentation - I                |  |
| 16                      | 107/01/01 ~<br>107/01/07   | Student Presentation - II               |  |
| 17                      | 107/01/08 ~<br>107/01/14   | Student Presentation - III              |  |
| 18                      | 107/01/15 ~<br>107/01/21   | Finals and Student Presentation - IV    |  |
| Requirement             |  |   |  |
| Teaching Facility       | Computer, Projector  |   |  |
| Textbook(s)             | 上課投影片  |   |  |
| Reference(s)            |  |   |  |
| Number of Assignment(s) | (Filled in by assignment instructor only)  |   |  |
| Grading Policy          | ◆ Attendance : 20.0 %   ◆ Mark of Usual : 40.0 %   ◆ Midterm Exam :   %<br>◆ Final Exam :   %<br>◆ Other 〈 期末報告 〉 : 40.0 %   |   |  |
| Note                    | This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> .<br><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b> |   |  |