

Tamkang University Academic Year 2012, 2nd Semester
Course Syllabus

Course Title	Technical Paper Writing		Instructor	Peter Liu	
Department/Year/Class		Course Details			
Dept. of Electrical Engineering, Doctorate Program		<input type="checkbox"/> Required <input checked="" type="checkbox"/> Selective	<input checked="" type="checkbox"/> 0 (One Semester) <input type="checkbox"/> 1 (1st Semester) <input type="checkbox"/> 2 (2nd Semester) <input type="checkbox"/> 3 (3rd Semester)	Credits	3
Aim of Education			Core Competences		
1. Teach students how to solve electrical problems with electrical engineering/robotic knowledge. 2. Teach students creative thinking and how to be a senior electrical engineer with ability to independently complete the assigned job and have a team work attitude. 3. Teach students global perspective and skills to achieve global competitiveness and face various challenges in the career environment.			A. Have the ability of solving the electrical engineering problem with the professional knowledge. B. Have the ability to manage and execute electrical engineering projects. C. Have the ability of writing professional technical papers. D. Have the creative thinking and ability of solving electrical problems independently. E. Have the ability to cooperate with people who are from the different professional areas. F. Have a global perspective. G. Have the ability to lead, manage and plan. H. Have the lifetime ability to self education.		
Course Introduction (50 to 100 words)	This course gives the students a professional skill set with practical training towards executing efficient technical communication with emphasis on paper writing and delivering presentations.				
The Relevance among Teaching Objectives, Objective Levels and 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 Core Competences :					
(I)Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objectives. 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 core competences that correspond to each teaching objective. Each objective may correspond to one or more core competences at a time. (For example, if one objective corresponds to three core competences: A, AD, and BEF, list all of the three in the box.)					

Teaching objectives	Relevance	
	Objective Levels	Core Competences
1 Understand role of technical communications in engineer's professional career	C2, A3	CDG
2 Execute efficient data gathering and categorization with emphasis on literature review	C4, P3, A4	ABCD
3 Identifying the research problem statement	C4, P6, A6	BCD
4 Using professional typesetting tools	C3, P4, A6	AC
5 Understand paper submission process	C2, P3, A3	C
6 Delivering professional presentations	C4, P6, A6	EFGH
7 Writing professional curriculum vitae and resumes	C4, P6, A6	FH
8 Professional email writing	C4, P6, A6	FH
Teaching Objectives, Teaching Methods and Assessment		
Teaching Objectives	Teaching Methods	Assessment
1 Understand role of technical communications in engineer's professional career	Lecture	Homework
2 Execute efficient data gathering and categorization with emphasis on literature review	Interaction	In class contribution percentage
3 Identifying the research problem statement	Actual implementation	Quiz
4 Using professional typesetting tools	Actual implementation	Final Paper
5 Understand paper submission process	Actual implementation	Homework
6 Delivering professional presentations	Actual implementation	Final presentation
7 Writing professional curriculum vitae and resumes	Lecture	Homework
8 Professional email writing	Lecture	Homework
This course has been designed to cultivate the following essential qualities in TKU students.		
Essential Qualities of TKU Students	Description	
■ global perspectives	Ability to communicate professional with global counterparts	
□ a vision for the future		
■ information literacy	Use of professional typesetting SW packages	
■ ethical and moral principles	Identifying and avoiding plagiarism	
■ independent thinking	Identifying and defining the research problem	
□ an awareness of healthy living		

<input type="checkbox"/> effective teamwork			
<input type="checkbox"/> an appreciation of the arts			
Course Schedule			
Week	Date	Subject/Topics	Note
1	2/20	Role of technical communications in an engineer's career	
2	2/27	Efficient technical communications do make a difference	
3	3/6	Research flow and its role in technical communications	
4	3/13	Paper writing's role in the research flow	
5	3/20	Efficient information gathering and literature review	
6	3/27	Identifying and defining the problem statement	
7	4/3	Day Off	教學行政觀摩日
8	4/10	Identifying and avoiding plagiarism	
9	4/17	Curriculum Vitae, Resume, Emails	
10	4/24	期中考試週 Midterm Exam Week	
11	5/1	Professional Typsetting I – What you see is what you get (WYSIWYG)	
12	5/8	Professional Typsetting II – Latex (Introduction)	
13	5/15	Professional Typsetting III –Latex (Templates, Bibliography, Graphics)	
14	5/22	Delivering presentations I – Storyboarding	
15	5/29	Delivering presentations II – Examples to making the audience fall asleep	
16	6/5	Final presentation	
17	6/12	National Holiday	端午節
18		期末考試週 Final Exam Week	
Requirement			
Teaching Facility	<input checked="" type="checkbox"/> Computer <input type="checkbox"/> Overhead Projector <input type="checkbox"/> Other (_____)		
Textbook(s)	Professional and technical writing strategies: Communication in technology and science, 6 th Ed., Judith S. VanAlstyne, Pearson (高立代理)		
Suggested Readings			
Number of Assignment(s)	5 (Filled in only for those courses that apply)		
Grading Policy	Attendance 10%, Quiz 10%, Homework 25%, Final paper 25%, Final Presentation 30%		

Note	<p>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/index.asp.</p> <p>※Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>
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