張所鋐 (shuohungchang@gmail.com) 工綜館 725

上課時間:週四2:20-3:10,3:30-4:20,4:30-5:20 PM,教室:工綜館B02,時數:3

週次	日期	內容		附註
1	09-15-2011	介紹,英文測驗	3	Give Agreement, copyroght form
2	09-22	撰寫論文原則(HW1)	3	Recv agreement, copyright form
3	09-29	Study state of art, search reports, 撰 寫 Introduction (HW 2)	3	
4	10-06	Study state of art, search reports,撰 寫 Introduction	3	
5	10-13	Study state of art, search reports, 撰 寫 Introduction, references	3	
6	10-20	Presentation skills	3	
7	10-27	撰 寫 main body, figure, table, method (HW 3)	3	
8	11-03	撰寫 main body, method and results	3	
9	11-10	撰寫 main body, methid and results	3	
10	11-17	撰寫 main body, method, results and discussion	3	
11	11-24	撰寫 Discussion, Abstract and Conclusions, and Title (HW 4)	3	
12	12-01	撰寫 Conclusion, abstract and Title	3	
13	12-08	撰寫 Conclusion, abstract and Title	3	
14	12-15	撰寫論文全文	3	
		Copyright and Patent		
15	12-22	完成論文稿撰寫	3	
16	12-29	投稿期刊程序	3	
		Presentation skills		
17	01-05	Presentation skills	3	
		完成論文稿投稿		
18	01-12	[期末考試週]完成論文稿投稿	3	

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上課時間:週四2:20-3:10, 3:30-4:20, 4:30-5:20 PM, 教室:工綜館 B02, 時數:3

週次	日期	內容	Student report	附註
1	09-15	介紹,英文測驗	_	
2	09-22	撰寫論文原則 (HW 1: Learning from nature, search papers, summarize)	分組-	Submit agreement form, copyright form, decide paper subject
3	09-29	Study state of art, search reports,	A (HW 1)	
		撰寫 Introduction		
		(HW 2: write Introduction)		
4	10-06	Study state of art, search reports,	B (HW 1)	
		撰寫 Introduction		
5	10-13	Study state of art, search reports,	A (HW 2)	
		撰寫 Introduction, references		
6	10-20	Presentation skills	B (HW 2)	BSBA change time
7	10-27	撰寫 main body, figure, table, method (HW 3: write main body)	A (HW 2 )	
8	11-03	撰寫 main body, method and results	B (HW 2)	SHJT change time
9	11-10	撰寫 main body, method and results	A (HW 3)	
10	11-17	撰寫 main body, method, results and discussion	B (HW 3)	
11	11-24	撰寫 Discussion, Abstract and Conclusions, and Title (HW 4: write discussion, abstract, conclusion, title)	A (HW 3)	
12	12-01	撰寫 Abstract and Conclusions, Title	B (HW 3)	
13	12-08	撰寫 Abstract and Conclusions, Title	A (HW 4)	
14	12-15	撰寫論文全文	B (HW 4)	
		Copyright and Patent		
15	12-22	完成論文稿撰寫	A (HW 4)	
16	12-29	投稿期刊程序	B (HW 4)	
		Presentation skills		
17	01-05-	Presentation skills		
	2012	完成論文稿投稿		
18	01-12	[期末考試週] 完成論文稿投稿		

授課者:張所鋐

Text: 講師講義

本課程的易記網址為 <u>https://ceiba.ntu.edu.tw/1001100\_1</u> FTP 帳號 1001100\_1 密 碼 9583be

Reference (no need to purchase):

C. T. Brusaw, G. J. Alred, W. Oliu, "Handbook of Technical Writing", 4<sup>th</sup> edition, St. Martin Press, New York, 1993.

計分:習作(40%),口頭與書面報告(35%),期末論文(25%)

授課者:張所鋐

# 課程概要(INTRODUCTION)

This course mainly focuses two parts: writing technical papers and presentation skills. And at the end of course, each student will complete at least one journal paper submission.

The course is to train the capability listed in following related to the writing technical papers.

- 1. How to organize the physical description about engineering subjects
- 2. How to prepare contents for the technical writing
- 3. What elements are included in a technical paper
- 4. Each element, how to prepare and write
- 5. Pratice in writing each elements of the technical papers
- 6. How to evaluate the significance of the contents of the paper,
- 7. How to search the state of the art, to benchmark and evaluate,
- 8. What is the SCI and EI for the journals, how to search papers,
- 9. Learn presentation skills
- 10. How to present your technical results
- 11. Practice Chinese/English presentation
- 12. What are procedures of submission of a journal paper
- 13. Copy right
- 14. How to submit journal papers
- 15. How to deal with the journal reviewers comment
- 16. Misc. issues, such as file a patent before paper publish

授課者:張所鋐

# 學生需知 NOTE:

The design of the course is to illustrate the principle, strategy and techniques to prepare a English paper that is ready for journal submission.

The course is designed for the graduate students to learn and practice to write the technical papers and publish the paper.

Therefore you will need to have enough technical paper contents/materials before the class starts. If you do not have technical material enough for a journal paper, you are suggested NOT to take the course.

The following is what students will do:

- 1. Learn the guide lines in the lecture, practice it at home. It means student will practice and write with significant amount of time after class. And student will orally present it in the class either in Chinese or English. During your presentation, your writing will be discussed in class.
- 2. In case your English capability is not good enough, you should improve your English first somewhere else. This course will NOT teach English. We discuss how to prepare and write English paper from scientific point of view.
- 3. You will need to first identify the subject and contents for the paper to be prepared.
- 4. Due to consideration of the inter-lectural property, you will have agreement form signed by your advisor to approve you to use the research results to write journal papers.
- 5. You also need to sign the copyright form for your home work assignment so that the lecturer has the copyright.
- 6. You will practice presentation that is equally important as well as writing skills.
- 7. At the end of the course, you will complete submission of at least ONE Journal paper.
- 8. During the whole semester, you should communicate with your advisor on a regular basis. You will need to discuss with your advisor regarding the followings: what subject and its contents to publish, may your advisor to check/revise your writing, and finally approve to submit the paper to journal. An agreement form will be signed by your advisor before you starts writing the paper. In this class, the lecturer has np authority to accept the paper submission.
- 9. In the first day of the class, you will be requested to take a English test. The test is to show you have enough capability for writing the technical paper.

授課者:張所鋐

培育學生核心能力 (student outcomes)

A. 培養學生具備學理基礎及應用工程知識與技術之能力。	否
B. 訓練學生具備設計與執行實驗,以及發掘、分析、解釋、處理問題之能力。	否
C. 訓練學生設計系統、元件、製程及工程規劃與整合及創新之能力。	是
D. 配合科技及工業之發展需求,訓練學生執行工程實務之相關知識與技能。	是
E. 培養學生認識當前與機械工程相關之先進科技與時事議題,及整 合跨領域知識之能力	是
F. 培養學生團隊合作之精神,訓練表達溝通、及領導與管理之能力。	是
G. 培養學生端正品行、健全人格、熱心服務及重視專業倫理。	是

### **AGREEMENT FORM**

#### For

## 522 U5930 撰寫英文技術論文 (Write English Technical Papers)

#### 授課者:張所鋐

#### Hand in

This form is for students to receive permission from his/her thesis advisor to use research results that are belonged to the advisor's lab. to prepare a journal paper. Outcome of the course is to complete the paper ready for submit. The submission of the journal paper will be fully decided by the advisor.

In case, the student does not have the research results that are enough for a journal requirements, the student is suggested not to take the course.

What <u>advisor</u> will do:

- 1. Advisor gives permission to stuent to use the research results to prepare the English paper for journal submission.
- 2. Advisor will consider to apply patent before the paper is submitted.
- 3. Advisor monitors progress of the student during the semester if advisor wants. This will speed up the paper submission. For example, advisor will suggest which journal to submit.

What student will do:

To receive signature from his/her advisor before proceed to take the course.

It is mandatory to complete the AGREEMENT FORM for the course.

A <u>tentative title of the paper</u> to be prepared during the course (just write a rough title below, that can be revised later):

Name of student advisor: (fill full name here): \_\_\_\_\_

Signature of advisor:

Date: September \_\_\_\_\_, 2011

Student name:

Signature of student:

Date: September \_\_\_\_\_, 2011

#### **COPY RIGHT FORM**

For

## 522 U5930 撰寫英文技術論文 (Write English Technical Papers)

授課者:張所鋐

The materials of the course that are submitted by the students includes the home work assignments, presentation, reports and other course related requirements are belonged to the lecturer.

However, the lecturer should not claim the copy right of the journal paper that are completed in the course. The lecture may use the student submitted materials for teaching, illustration, talk, writing paper and book.

Student name:

Signature of student:

Date: September \_\_\_\_\_, 2011

# 授課者:張所鋐

# **GUIDELINE** for student oral presentation

Your ppt filename: use your name plus HW# as the filename. An example: 王大有 hw1.ppt

Use the ppt template which is given to prepare your ppt file.

You need to loadyour ppt file into the computer before you present.

Presentation time: 3-5 min

Q/A time: 7-10 min.

授課者:張所鋐

### Home work 1

Subject: Learning from nature creatures

Do find a bio-example of a nature creature that can inspire for an engineering design concept, such as for sensor or actuator and answer the following questions:.

1. what needs you are looking for by inspiration from nature?

2. what has been observed in the nature creature? Use figure, photo to illustrate the structure, composition of the creature.

3. What function it can do?

4. Why it is good, important, significant, and interesting, compared withother similar things?

5. How its function is performed as shown by numbers?

6. What application is inspired by the creature? Specify the application with quantitative requirement and figures?

List reference with detailed information and qute them in your report.

Note: the bio-example of a nature creature includes all living creatures, small and large, components and systems. It is not necessary that it can move. It can be as small as a DNA, cell, protein, etc. It can be as large as a big group of fish, and bird.

522 U5930 **撰寫英文技術論文** (Write English Technical Papers) 授課者: 張所鋐 Home work 2

As shown in schedule

522 U5930 **撰寫英文技術論文** (Write English Technical Papers) 授課者: 張所鋐

#### Home work 3

As shown in schedule

522 U5930 撰寫英文技術論文 (Write English Technical Papers)

授課者:張所鋐

## Home work 4

As shown in schedule