



## 教學計劃表 Syllabus

|  |   |                             |                                 |   |
|--|---|-----------------------------|---------------------------------|---|
| 課程名稱(中文)<br>Course Name in Chinese   | 英文科技論文寫作  |                             | 學年/學期<br>Academic Year/Semester | 114/2   |
| 課程名稱(英文)<br>Course Name in English   | Technical Writing   |                             |                                 |   |
| 科目代碼<br>Course Code  | MS_56040  | 系級<br>Department & Year     | 碩士                              | 開課單位<br>Course-Offering Department  |
| 材料科學與工程學系  |   |                             |                                 |   |
| 修別<br>Type   | 選修 Elective   | 學分數/時間<br>Credit(s)/Hour(s) | 3.0/3.0                         |   |
| 授課教師<br>Instructor   | /紀渥德  |                             |                                 |   |
| 先修課程<br>Prerequisite   |   |                             |                                 |   |
| 課程描述 Course Description  |   |                             |                                 |   |
| The course will show students how to prepare technical documentation, how to write scientific papers, etc.   |   |                             |                                 |   |
| 課程目標 Course Objectives   |   |                             |                                 |   |
| The objectives of the course are: to teach students basic skills of technical writing, to show different forms of communications, to teach how to write proposals, memos, CVs, journal articles. |   |                             |                                 |   |
| 系專業能力<br>Basic Learning Outcomes   |   |                             |                                 | 課程目標與系專業能力相關性<br>Correlation between Course Objectives and Dept.'s Education Objectives |
| A  | 具備材料科學所需的進階物理、化學及數學的知識。Acquire required advanced physical, chemical, and mathematic knowledge for materials science and engineering.                            |                             |                                 |   |
| B  | 具備材料科學的進階專業知識，並能應用於解決工程上之問題。Acquire required advanced professional knowledge for materials science and engineering, applicable in solving engineering problems. |                             |                                 |   |
| C  | 具備獨立研究之能力。Equipped with capabilities of independent research.   |                             |                                 | ○   |
| D  | 具備專業道德及責任感，與良好的溝通及團隊合作的能力。Acquire professional morality and responsibility, and capability of quality communication and team cooperation.                       |                             |                                 | ○   |
| E  | 具備進階的英文能力，應用於學習與交流。Acquire English capability used for learning and interaction.  |                             |                                 | ●   |
| 圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated  |   |                             |                                 |   |
| 授課進度表 Teaching Schedule & Content  |   |                             |                                 |   |
| 週次 Week  | 內容 Subject/Topics   |                             |                                 | 備註 Remarks  |
| 1  | Introduction to the course.   |                             |                                 |   |
| 2  | Oral presentations  |                             |                                 |   |
| 3  | Writing and Work Collaborative Writing  |                             |                                 |   |
| 4  | Your Audience and Aims Organizing and Drafting Documents  |                             |                                 |   |
| 5  | Revising for Organization and Style   |                             |                                 |   |

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|----|--|--|
| 6  | Developing Graphics<br>Design of Page and Screen     |  |
| 7  | Searching the Literature<br>Documenting Sources      |  |
| 8  | Memos, Letters and Electronic Mails                  |  |
| 9  | 期中考試週 Midterm Exam                                   |  |
| 10 | Proposals  |  |
| 11 | Progress Reports                                     |  |
| 12 | Reports  |  |
| 13 | Journal Articles                                     |  |
| 14 | Instructions, Procedures and Computer Documentations |  |
| 15 | Electronic Documents                                 |  |
| 16 | CV, Resumes, Job Correspondences                     |  |
| 17 | Final Presentations (I)                              |  |
| 18 | Final Presentations (II)                             |  |

教學策略 Teaching Strategies

- 課堂講授 Lecture
  分組討論 Group Discussion
  參觀實習 Field Trip  
 其他 Miscellaneous: presentations

教學創新自評 Teaching Self-Evaluation

創新教學 (Innovative Teaching)

- 問題導向學習 (PBL)
  團體合作學習 (TBL)
  解決導向學習 (SBL)  
 翻轉教室 Flipped Classroom
  磨課師 Moocs

社會責任 (Social Responsibility)

- 在地實踐 Community Practice
  產學合作 Industry-Academia Cooperation

跨域合作 (Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
  跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

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學期成績計算及多元評量方式 Grading & Assessments

| 配分項目<br>Items  | 配分比例<br>Percentage | 多元評量方式 Assessments |          |          |          |          |          |          |    |
|--|--------------------|--------------------|----------|----------|----------|----------|----------|----------|----|
|  |                    | 測驗<br>會考           | 實作<br>觀察 | 口頭<br>發表 | 專題<br>研究 | 創作<br>展演 | 卷宗<br>評量 | 證照<br>檢定 | 其他 |
| 平時成績(含出缺席)<br>General Performance<br>(Attendance Record)   | 50%                |                    |          |          |          |          |          |          |    |
| 期中考成績 Midterm Exam   |                    |                    |          |          |          |          |          |          |    |
| 期末考成績 Final Exam   | 25%                |                    |          |          |          |          |          |          |    |
| 作業成績 Homework and/or<br>Assignments  |                    |                    |          |          |          |          |          |          |    |
| 其他 Miscellaneous<br>(Presentation)   | 25%                |                    |          |          |          |          |          |          |    |
| 評量方式補充說明<br>Grading & Assessments Supplemental instructions  |                    |                    |          |          |          |          |          |          |    |
| 教科書與參考書目 (書名、作者、書局、代理商、說明)<br>Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)  |                    |                    |          |          |          |          |          |          |    |
| The MIT guidebook to technical writings  |                    |                    |          |          |          |          |          |          |    |
| 課程教材網址(含線上教學資訊, 教師個人網址請列位於本校內之網址)<br>Teaching Aids & Teacher's Website(Including online teaching information.<br>Personal website can be listed here.) |                    |                    |          |          |          |          |          |          |    |
| Textbook available on a class website  |                    |                    |          |          |          |          |          |          |    |
| 其他補充說明 (Supplemental instructions)   |                    |                    |          |          |          |          |          |          |    |
| none   |                    |                    |          |          |          |          |          |          |    |