

[回上一頁](#) [列印](#)

國立高雄科技大學
NATIONAL KAOHSIUNG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY
授課大綱 Syllabus

部別：日間部博士

112學年度第2學期

列印日期：2024/03/01

| | | |
|---------------|------------------------------------|----------|
| 中文課程名稱：底泥品質監測 | 英文課程名稱：Sediment Quality Monitoring | 授課教師：董正欽 |
| 開課班級：水產科技博班二甲 | 學分：3.0 | 授課時數：3.0 |
| 合班班級： | | 實習時數：0.0 |

| | | |
|---|--|---------|
| 1. 中文教學目標(Chinese Teaching objectives) | | |
| 1. To build up the basic concepts of sediments monitoring and analysis and develop an appropriate attitude towards scientific learning. 2. To build up the basis for studying courses in sediments monitoring and analysis and related fields. 3. To build up the ability to interpret general relevant engineering scientific information. | | |
| 2. 英文教學目標(English Teaching objectives) | | |
| 1. To build up the basic concepts of sediments monitoring and analysis and develop an appropriate attitude towards scientific learning. 2. To build up the basis for studying courses in sediments monitoring and analysis and related fields. 3. To build up the ability to interpret general relevant engineering scientific information. | | |
| 3. 中文教學綱要(Chinese CourseDescription) | | |
| This course " Sediment Quality Monitoring " is conducted in full English. The course content includes sampling and analytical techniques in sediments, and case study. The teaching materials are self-produced handouts, and the way of teaching is classroom instruction. | | |
| 4. 英文教學綱要(English CourseDescription) | | |
| This course " Sediment Quality Monitoring " is conducted in full English. The course content includes sampling and analytical techniques in sediments, and case study. The teaching materials are self-produced handouts, and the way of teaching is classroom instruction. | | |
| 5. 中文核心能力 | | |
| | 核心能力名稱 | 核心能力百分比 |
| 1 | 生物資源永續 | 25% |
| 2 | 產銷管理能力 | 25% |
| 3 | 整合與研究能力 | 25% |
| 4 | 創新溝通能力 | 25% |
| 6. 英文核心能力 | | |
| | 核心能力名稱 | 核心能力百分比 |
| 1 | Biological resource sustainability | 25% |
| 2 | Production and sales management capabilities | 25% |
| 3 | Integration and research skills | 25% |
| 4 | Innovative communication skills | 25% |

7. 教科書

中文書名：無 英文書名：

中文作者： 英文作者：

1 中文出版社： 英文出版社：

出版日期：年 月 備註：

8. 參考書

中文書名：無 英文書名：

中文作者： 英文作者：

1 中文出版社： 英文出版社：

出版日期：年 月 備註：

9. 教學進度表

| 週次或項目 Week or Items | 中文授課內容 Chinese Course Content | 英文授課內容 English Course Content | 分配節次 Assigned Classes | 備註 Note |
|------------------------|----------------------------------|---|--------------------------|------------|
| 1 | 導論 | Introduction | 3 | |
| 2 | 底泥採樣方法 | Sediment Sampling Methods | 3 | |
| 3 | 底泥含水量、固定性與揮發性固體物、燒失量分析 | Water Content, Fixed and Volatile Solids, Loss On Ignition Analysis | 3 | 開放觀摩 |
| 4 | 底泥粒徑、比重及酸鹼度分析 | Grain Size, Specific Gravity, pH Analysis | 3 | |
| 5 | 底泥總有機碳分析 | Total Organic Carbon Analysis | 3 | |
| 6 | 底泥總氮分析 | Total Nitrogen Analysis | 3 | |
| 7 | 底泥總磷分析 | Total Phosphorus Analysis | 3 | |
| 8 | 底泥總油脂分析 | Total Oil and Grease Analysis | 3 | |
| 9 | 期中考 | Midterm Exam | 3 | |
| 10 | 底泥奈米粒徑/界達電位分析儀原理 | Principle of Zetasizer Nano-Particle Analyzer | 3 | |
| 11 | 底泥奈米粒徑/界達電位分析 | Zeta Potential and Particle Size Analysis | 3 | |
| 12 | 底泥重金屬分析簡介 | Introduciton of Sediment Heaby Metals Analysis | 3 | |

| | | | |
|----|---------------------|--|---|
| 13 | 底泥重金屬分析之微波消化前處理程序 | Sediment Microwave Digestion for Heavy Metals Analysis | 3 |
| 14 | 底泥重金屬原子吸收光譜分析 | Principle of Atomic Absorption Spectrophotometry (AAS) for Heavy Metals Analysis | 3 |
| 15 | 底泥砷汞分析-氫化物產生原子吸收光譜法 | Principle of Hydride Generation-Atomic Absorption Technique for As, Hg Analysis | 3 |
| 16 | 期末報告及討論 | Final Report and Discussion (I) | 3 |
| 17 | 期末報告及討論 | Final Report and Discussion (II) | 3 |
| 18 | 期末考 | Final Exam | 3 |

10. 中文成績評定(Chinese Evaluation method)

Attendance, quiz, homework, and the mid-/final- exams

11. 英文成績評定(English Evaluation method)

Attendance, quiz, homework, and the mid-/final- exams

12. 中文課堂要求(Chinese Classroom requirements)

Projector

13. 英文課堂要求(English Classroom requirements)

Projector

14. 本課程與SDGs相關項目(This course is relevant to these of SDGs as following)

4. 優質教育(Quality Education); 14. 水下生命(Life Below Water);

「遵守智慧財產權」；「不得非法影印」！