

11220 NEMS 511000 奈微米元件量測實驗

11220 NEMS 511000 Measurements of Nano and Micro devices

上課時間: F2F3F4

地點: 工程一館 201 室 Eng. Building I. R201.

This course will be offered in English (英語授課)

Host by: Chien-Chung Fu 傅建中

Syllabus

Week	Date	Syllabus 課程安排	
1	2024.02.23	Module 1: Measurement of Microstructures SEM and Confocal Microscope	Prof. Chien-Chung Fu Prof. J. Andrew Yeh
2	2024.03.01		
3	2024.03.08		
4	2024.03.15		
5	2024.03.22	Module 2: Optical Thin Film Multilayer Optics, Simulation and Practice	Prof. Cheng-Yao Lo
6	2024.03.29		
7	2024.04.12		
8	2024.04.19		
9	2024.04.26	Module 3: Experiment on Thermal Oxidation of Silicon and Fabrication of Thermal Actuator	Prof. Guo-Hua Feng
10	2024.05.03		
11	2024.05.10		
12	2024.05.17		
13	2024.05.24	Module 4: Nanoparticle Detection - Microfluidics and Resistive Pulse Sensing	Prof. Takehiko Kitamori Prof. Chih-Chen Chen
14	2024.05.31		
15	2024.06.07		
17	2024.06.14		
18	2024.06.21	Final Exam	

Each lecture handles four weeks during the semester. In those four weeks, oral lectures will be performed by the corresponding lecturer, and practices will be arranged and operated by the students. Corresponding teaching assistants will help the students for the practices. After the corresponding project, students have to hand in personal reports for evaluation. Before the end of the semester, a final examination will be held.

Project (Mid-Term Reports& Participation): 70%.

Final Exam: 30%\_

[Grading: \(Final Grading will be based on the ranking in the class\)](#)

## % Ethics Statement on Generative Artificial Intelligence

After careful consideration, the instructor of this course deems it inappropriate to use generative artificial intelligence in this class. This is because the content within generative AI contains numerous errors and may adversely affect students' understanding of foundational knowledge. In accordance with the published Guidelines for Collaboration, Co-learning, and Cultivation of Artificial Intelligence Competencies in University Education, this course adopts the following policy : **Prohibited use**

Students enrolled in this course should be aware that they may not submit assignments, reports, or personal reflections generated using artificial intelligence. If such usage is discovered, instructors, the institution, or relevant units have the right to reevaluate the assignment or report or withhold scores. Students enrolled in this course agree to the above ethics statement if registering for the class.