	日	一	二	三	四	五	六
Feb.	20	21	22	23	24	25	26
	27	28					
Mar.			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
Apr.						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
May	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				
June				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25

宣布規定及上課方式 (賴) Announcement (Prof. Mei-Feng Lai)

Holidays

- Prof. Cheng-Yao Lo：3/4-3/17
- Prof. Yu-Lin Wang and Prof. Chihchen Chen：3/18~3/31
- Prof Da-Jeng Yao：4/8-4/21
- Prof. Sheng-Shian Li：4/22-5/5
- Prof. Chien-Chung Fu：5/6-5/19
- Prof. Mei-Feng Lai：5/20-6/2

期末考 (賴) Final exam (Prof. Mei-Feng Lai)

1. The first class for course announcement is at 10:10-12:00 on 2/25, Friday. Please do attend.

2. Please download and print the experimental manual on the website http://www.nems.nthu.edu.tw/lai/board_course/index.php .
ID: your student ID
Password: your student ID

3. The TA for general affairs of this class is Mr. Chen, ext 33798, email haupig1204@gmail.com . The TA for each lab course will be assigned later by each lecturer.

4. Grading: six experimental reports and class participation (75%), final exam (25%)

5. Lectures: F3F4 (10:10~12:00) (For all four groups)

Experiments: First group: MaMb (18:20~20:10)
second group : T9Ta(17:20~19:10)
third group: W9Wa(17:20~19:10)
fourth group: R9Ra(17:20~19:10)

6. Final exam: 6/10, 10:10

7. The deadline for uploading lab report is one week after the last day of each lab section. For example, Prof. Lo's last lab course is on March 17 (Thur.), so the deadline for uploading lab reports for all 4 groups of students is April 24 (Thur.) 12:00pm. Please upload your lab report on the website http://www.nems.nthu.edu.tw/lai/board_course/index.php, which will be closed after the deadline for uploading.

8. The lab report should be in PDF format.

Lecturer	Course	Weeks	Outline	Equipment
Prof. Da-Jeng Yao	Measurement of surface temperature profile on micro/nano devices)	2	1. IR: fundamentals and applications 2. Measurement of LED 3. Measurement of micro devices 4. Measurement of surface properties of nano structures	Infrascope II
Prof. Sheng-Shian Li	Measurement of Micromechanical Resonators	2	1. Micromechanical Resonators：fundamentals and applications 2.Introduction to Micromechanical Resonators measurement 3.Analysis of frequency characteristics: measurements of motional impedance and Q factor.	Vacuum measurement system, Network analyzer
Prof. Chien-Chung Fu	Laboratory for the measurement of microstructure geometry	2	1. Principles of scanning electron microscope (SEM) 2. Demonstration	scanning electron microscope
Prof. Mei-Feng Lai	Measurement of magnetic properties of micro/nano devices	2	1. Introduction to nano and micron-sized magnetic devices: fundamentals and applications 2. Introduction to magneto-optical Kerr effect (MOKE) measurement system 3. MOKE measurement of nano and micron-sized magnetic devices	MOKE system
Prof. Chen & Prof. Wang	1. Measuring DNA	2	1. Introduction of microfluidic	1. Bioanalyzer 2. semiconduct

	profiles 2. Measurement of semiconductor devices		electrophoresis systems 2. Introduction of semiconductor device measurement. 3. Practice of semiconductor device measurements.	or parameter analyzer/ vacuum system
Prof. Cheng-Yao Lo	Optical Thin Film Measurement	2	1. Multilayer Optical System Introduction 2. Multilayer Optical System Simulation 3. Practical Measurement and Theoretical Calculation	Multilayer Optical System

授課教師	實驗中/英名稱	授課週數 (講授加實驗)	實驗課程大綱	使用儀器項目
饒達仁	奈微米元件表面溫度量測 (Measurement of surface temperature profile on micro/nano devices)	2 周	1. IR 基本原理及應用介紹 2. LED 量測 3. 微米元件量測 4. 奈米結構表面特性量測	熱像儀 Infrascope II
李昇憲	微機械共振器量測 (Measurement of Micromechanical Resonators)	2 周	1. 微機械共振器介紹：基本原理及應用 2. 微機械共振器量測介紹 3. 頻率特性分析：運動阻抗與 Q 值量測	真空量測系統、網路分析儀
傅建中	微結構幾何形狀量測實驗 (Laboratory for the	2 周	1. 電子顯微鏡原理 2. 操作示範	電子顯微鏡

	measurement of microstructure geometry)			
賴梅鳳	奈微米磁性元件之磁光性質量測 (Measurement of magnetic properties of micro/nano devices)	2 周	1. 奈微米磁性元件介紹: 基本原理及應用 2. 磁光量測系統介紹 3. 奈微米磁性元件之磁光性質量測	磁光量測系統
陳致真/王玉麟	微量 DNA 量測 半導體元件量測	2 周	1. 微流道電泳系統介紹 2. 半導體元件量測介紹 3. 半導體元件量測實作	生化分析儀 半導體元件分析儀/真空系統
羅丞曜	光學薄膜量測 Optical Thin Film Measurement	2 周	1. 多層膜光學系統介紹 Multilayer Optical System Introduction 2. 多層膜光學系統模擬 Multilayer Optical System Simulation 3. 系統量測及理論計算 Practical Measurement and Theoretical Calculation	多層膜光學系統