

	日	一	二	三	四	五	六
<b>Feb.</b>		22	23	24	25	26	27
	28						
<b>Mar.</b>		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			
<b>Apr.</b>					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	
<b>May</b>							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					
<b>June</b>			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	

宣布規定及上課方式 (賴)

Prof. Mei-Feng Lai

饒達仁

Prof. Da-Jeng Yao

李昇憲

Prof. Sheng-Shian Li

傅建中

傅建中

Prof. Chien-Chung Fu

賴梅鳳

Prof. Mei-Feng Lai

葉哲良/  
羅丞曜

Prof. J. Andrew Yeh and  
Prof. Cheng-Yao Lo

期末考 (賴)

Final exam  
(Prof. Mei-Feng Lai)

1. The first class is at 10:10-12:00 on 3/12.
2. Please download and print the experimental manual on the website [http://www.nems.nthu.edu.tw/lai/board\\_course/index.php](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. Su, ext 33798, email [yueying.su@gmail.com](mailto:yueying.su@gmail.com) .  
The TA for each experiment 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: 6/18, 10:10
7. The deadline for uploading lab report is one week after the last day of each lab section.  
For example, Prof. Yao's last lab course is on March 25 (Thur.), so the deadline for uploading lab reports for all 4 groups of students is April 1 (Thur.). Please upload your lab report on the website [http://www.nems.nthu.edu.tw/lai/board\\_course/index.php](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.

➤ **3/12 (周五) 10:10** 為第一次正式開始上課，請四個組的全部同學自行印好實驗手冊準時上課。

總助教: 蘇育穎 (分機33798, yueying.su@gmail.com) (負責網頁等共同事務)

實驗手冊下載 (上課前一兩天會上傳至網頁):

[http://www.nems.nthu.edu.tw/lai/board\\_course/index.php](http://www.nems.nthu.edu.tw/lai/board_course/index.php)

帳號: 學號

密碼: 學號 (帳號密碼等最後加退選完畢之後才正式啓用)

**請自行下載列印實驗手冊，上課時請帶著**

實驗報告: 交紙本或上傳電子檔(依授課老師決定)

成績計算: 六份實驗報告和平時分數共**75%**, 期末考**25%**

期末考日期: **6/18 10:10**

老師講授課程: **F3F4 (10:10~12:00)** (四個組的學生都必須出席)

實驗部分: 第一組: **MaMb (18:20~20:10)**

第二組: **T9Ta(17:20~19:10)**

第三組: **W9Wa(17:20~19:10)**

第四組: **R9Ra(17:20~19:10)**

**The deadline for uploading lab report is one week after the last day of each lab section. For example, Prof. Yao's last lab course is on March 25 (Thur.), so the deadline for uploading lab reports for all 4 groups of students is April 1 (Thur.). Please upload your lab report on the website [http://www.nems.nthu.edu.tw/lai/board\\_course/index.php](http://www.nems.nthu.edu.tw/lai/board_course/index.php), which will be closed after the deadline for uploading.**

**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	Infrascop 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	4	1. Principles of scanning electron microscope (SEM) 2. Principles of laser confocal microscope 3. Demonstration	scanning electron microscope and laser confocal 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. J. Andrew Yeh & Prof. Cheng-Yao Lo	Optical Thin Film	2	1. Multilayer Optical System Introduction	Multilayer Optical System

	Measurement		2. Multilayer Optical System Simulation 3. Practical Measurement and Theoretical Calculation	
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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 Infrascopie 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 measurement of microstructure geometry)	4 周	1. 電子顯微鏡原理 2. 雷射共軛焦顯微鏡原理 3. 操作示範	電子顯微鏡 雷射共軛焦顯微鏡
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

葉哲良/ 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
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