

Syllabus for Comprehensive Physics Laboratory

(BMES319302)

Week	Course contents	Teacher	Room
1	Part I: Laboratory Introduction of Electronics (Basic Electronics Instrumentation)	Yeh, Chieh-Kuang (葉秩光)	工科 304
2	PN and Zener Diodes (PN 與基納二極體)		
3	Filter Circuits (濾波電路)		
4	Half and Full-wave Rectifiers (截波電路)		
5	Voltage Multiplier (倍壓電路)		
6	Common Emitter, Base and Collector Amplifiers(共射極、共基極與共集極放大器)		
7	Integrator and Differentiators (微分與積分放大器)		
8	Mid-term (Part I)		
9	Part II: Laboratory Introduction of Optics, Magnetisms, and Modern Physics	Wu; Hsu; Yuan	BMES308
10	Laser propagation and alignment(雷射光傳播及準直實驗)	Wu, Chin-Ming (吳見明)	BMES201
11	Snell's law---the minimum deviation angle (最小偏向角實驗)	Wu, Chin-Ming 吳見明)	BMES201
12	Electromagnetic wave experiment System	Hsu, Ian (許志楨)	BMES308
13	Magnetic Fields in Helmholtz Coils Experiment	Hsu, Ian (許志楨)	BMES308
14	Geiger-Mueller counter and Cloud Chamber	Yuan, Lee-Chie (袁立基)	BMES308
15	Photoelectric experiment System	Yuan, Lee-Chie (袁立基)	BMES308
16	Final Examination (Part II)	Wu; Hsu; Yuan	BMES308

Grade:

Lab. Report (Per person)	60%.
Mid and Final exam.	40%

Reports:

Hand-in or e-mail the report to the corresponding teacher before the next week after done each experiment.