

Instructor: Cheng Chin

Lectures: Tue & Thur 11:00-12:20 pm KPTC 105

Office hour: Thur 12:30-01:30 pm GCIS E107

Email: cchin@uchicago.edu (please add P226 in the subject)

Class notes: <https://ultracold.uchicago.edu/node/160>

Lab Instructor s: Mark Chantell <mchantell@uchicago.edu>
Dave McCowan <mccowan@uchicago.edu>
Kevin Van de Bogart <kevinv@uchicago.edu>

Teaching Assistants: Spoorthi Nagasamudran <nagasamudram@uchicago.edu>
Mingjiamei Zhang <zmjm@uchicago.edu>

Textbooks: Learning the Art of Electronics by *T. Hayes and P. Horowitz*
(Recomm.) The Art of Electronics, 3rd Ed., *P. Horowitz and W. Hill*

Lab sessions: KPTC 208 (Mon & Wed: 1:30-5:20 pm or Tue & Thur: 2 to 5:50 pm)

Attendance of all lab sessions is required.

Lab reports should be turned in by the end of the sessions.

Grades: 14 Lab reports: 70%; Midterm exam: 15%; Final exam: 15%

Wk	Date	Lecture	Lab	Report
1	4/2	DC circuits	----- no lab -----	
	4/4	Capacitors and inductors	----- no lab -----	
2	4/9	Diodes	Lab 1: DC circuits	1
	4/11	P-N physics	Lab 2: Capacitors	2
3	4/16	Transistors I	Lab 3: Diodes	3
	4/18	Transistors II	Lab 4: Transistors I	4
4	4/23	Operational amplifiers I	Lab 5: Transistors II	5
	4/25	Operational amplifiers II	Lab 6: Op-amp I	6
5	4/30	Feedback Theory	Lab 7: Op-amp II	
	5/2	Optoelectronics	Lab 8: Op-amp III	7
6	5/7	Midterm (lec. 1~10)	Temperature Servo I	8
	5/9	Optoelectronics	Temperature Servo II	
7	5/14	Analog meets digital	Temperature Servo III	9
	5/16	Gates	Lab 13: Group Audio I	10
8	5/21	Flip-flops	Lab 13: Group Audio II	11
	5/23	Counters	Lab 13. Gates	12
9	5/28	FPGA	Lab 14. Flip-Flops*	13
	5/30	Electronics shop tour	FPGA I	
10	6/4	<i>Senior Final</i>	FPGA II	14
	6/	Final (lec. 11~17)		

* Lab session on Labor Day (5/27) is moved to Wednesday (6/5).