

Communication Systems Laboratory (revised 1/29/07)

<http://ece-classweb.ucsd.edu:16080/winter07/ece157a/>

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Date	Lab	Topic (Reading is in Labs)	Prelabs/ Write-ups
1/8	1	Overview	Lab 1 prelab due in lab
1/10		Simulation	
1/12			Lab 2 prelab due in lab
1/15	2	No class - MLK day	Lab 1 write-up due in lab
1/17		Bandpass sampling ; Digital Up/Down conversion	
1/19			
1/22	3	Pseudo Random Binary Sequences (PRBS)	Lab 3 Week 1 Prelab due in class
1/24		Spectral shaping	Lab 2 write-up Lab due in lab
1/26			
1/29	3	Eye diagrams - bit error rate	
1/31		Clock/frame recovery	Revised Lab 3 Week 1 Prelab due
2/2			
2/5	3	Baseband signal impairments	Lab 3 Week 2 Prelab due in class
2/7		Quadrature signaling- I	
2/9			
2/12	4	Quadrature signaling- I I	Lab 4 Week 1 Prelab due in class
2/14		Phase lock loops - I	Lab 3 write-up due in lab
2/16			
2/19	4	No class- President's day	
2/21		Phase lock loops - II	Lab 4 Week 2 Prelab due in class
2/23			
2/26	5	BPSK systems	Lab 5 Week 1 Prelab due in class
2/28		Passband impairments - phase noise	Lab 4 write-up due in lab
3/2			
3/5	5	Passband impairments - fading	Lab 5 Week 2 Prelab due in class
3/7		QPSK/QAM	
3/9			
3/12	6	Impairments (AM/PM)	Lab 6 Prelab due
3/14		Case study - digital video broadcast	Lab 5 write-up due in lab
3/19			Lab 6 write-up due in my office

Lab reports

Please purchase two standard lab books with 8.5×11 pages. Also you will need a USB drive drive.

Prelabs The prelabs are due the Friday **before** the lab. They should be written separate sheets of paper and turned into the TA by the end of the Friday lab section (4:30 PM) with the exception of the Prelab for Lab 1 which is due in lab. For two week labs, there is a separate prelab each week. The graded prelabs will then be stapled into the lab books.

Write-ups The write-ups are due in lab the week **after** the lab ends. They will be turned back one week later in lab.

Grading

The grade for the class consists entirely of the lab reports with the weight of each lab proportional to the number of weeks of the lab. There are no exams. The breakdown for the grading of the lab reports is as follows: Prelab 35%, Lab narrative (what you did and observations) 30%, Postlab 35%.