Computers in Physics Exps.
Spring Quarter 2020
Physics 116C

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Physics 317

Lectures: MWF 1:10-2:00 PM 140 Physics (Cancelled!)

Lab: Section 1: M 4:10-7:00 PM 152 Roessler (Cancelled!)
Section 2: W 3:10-6:00 PM 152 Roessler (Cancelled!)

References: `https://www.scipy-lectures.org`
Online lecture notes on data analysis.

Office Hours: TBD
Lab Instructor: Rahim Ullah
Final Exam: No Final Exam

COVID-19 Response: To facilitate shelter-in-place during the COVID-19 pandemic, and to accommodate the diverse challenges that students are likely facing, this course will be taught in an asynchronous fashion. As much as possible, there will be no pre-arranged times for activitates. On an approximately weekly timescale, new material will provided including activities and assignments. You should strive to finish the assignments within two weeks, but deadlines will be flexible. Try not to get too far behind, however, or you will struggle to finish.
On-line Help Sessions: The instructor and TA will be available at specified times to offer help. More details will be provided soon.
Course Description: Modern experiments rely heavily on microprocessors to acquire and analyze experimental data. This course uses the Arduino microprocessor as a platform for creating data acquisition systems in different experimental contexts. We will use Scientific Python for analysis of experimental data. Topics include statistical distributions, experimental uncertainties, statistical analysis, Fourier analysis, and noise.

Lab Safety: Even though you will not be attending lab, you should complete the online course for Electrical Safety at
`http://safetyservices.ucdavis.edu/training/electrical-safety`.

Course Outline:

Week	Dates	Topics
1	30 Mar,1,3 Apr	Cancelled
2	6,8,10 Apr	CPUs and Assembly
3	13,15,17 Apr	Distributions
4	20,22,24 Apr	
5	27,29 Apr 1 May	
6	4,6,8 May	
7	11,13,15 May	
8	18,20,22 May	
9	(25),27,29 May	
10	1,3 Jun	