Adv. Experimental Physics
PH585
Winter Term - 2011

Section number: PH585

Instructor: Dr. Erik J. Sánchez, esanchez@pdx.edu
Science Bldg II, Room 170A, 169, 170 or 171
503-725-3819

Textbook: List from instructor

Office Hours: Thursday, 14:30 - 15:30

Class Times: Wednesday, 10:00 – 14:00

Class Room: Science BLDG 1, 201 (& User shop)

Tentative Course Outline:

Jan 5th – Introduction and basic laser training (Erik Sánchez/Chuck Cooper)
Jan 12th – Basic chemical training (Rubin Torres)
Jan 19th – Electronics I (SB1, Room 201) - Basic skills, soldering, DMM usage, Oscilloscopes, circuit board fabrication. (Erik Sánchez)
Jan 26th – LabView programming – NI to come and teach the class to the public/class.

Feb 2nd – Electronics II (Board stuffing and testing - (SB1, Room 201)
Feb 9th – Machining part I (student shop in basement of SB1) Basic Skills (Derek Nowak and Erik Sánchez) - 3 classes
Feb 16th – Machining part II (student shop in basement of SB1)
Feb 23rd – Machining part III (student shop in basement of SB1)
March 2nd – Atomic Force Microscopy (SB1, Room 201) - Basic Scanning probe details, (Erik Sánchez.)
March 9th – Vacuum Technology/Deposition (SB1, Room 201) - Basic High vacuum and UHV systems, (Erik Sánchez.)
March 16th – FIB/SIMS (SB2, Room 159) Focused Ion Beam(FIB)/Secondary Ion Mass Spectroscopy (SIMS) Microscope Training - Erik Sánchez

Grading: P/NP, Passing class involves attending >8 out of 10 classes.

Outside Resources: Instructor will give information in class