

Experimental Physics I  
**PHYS 3600**  
 2009

Professor : Dr. R. Austin	austin@ap.smu.ca	MM301F	491 6260
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This course will ensure that physics students obtain laboratory skills, electronics skills and data acquisition skills. Students will devise and undertake their own physics experiment as a major project.

**MN006 TUESDAYS** 2:30-5:30 pm according to the following schedule:

FIRST TERM		
Date	Activity	Date Due
	Introduction to the Laboratory Data Analysis Workshop	September 27
September 22	Module: Thevenin Theorem	October 5
September 29	Module: RC Circuits, Filters, and Complex Impedance	October 12
October 6	Module: RLC and Resonant Circuits	October 19
October 13	Library Workshop	-
October 20	Module: Diodes, Rectifiers, and pn-Junctions	November 2
October 27	Module: Transistors, and CE & CB Amplifiers I	November 16
November 3	Module: Transistors, and CE & CB Amplifiers II	November 16
November 10, 17	Module: Amplifiers I, Amplifiers II	November 30
November 24	LABVIEW Workshop	January 5
December 1	Exam Review	-
TBA	Exam	-
January 5, 12	Experiment I	January 25
January 19, 26	Experiment II	February 15
February 2, 9	Experiment III	March 8
Rest of Term	PROJECTS	April 6

This schedule is subject to change. Students will be informed through the lab webpage, signs on the door, and where possible, advance notice the lab if there are changes to the schedule.

Professor Austin's office hours are	Tuesday	9:30–12:00
	Wednesday	9:30–12:00
	Friday	10:30–11:30

### Required Materials:

Bound notebook for keeping laboratory notes

A&P computing account (See Dr. M. Dunlavy, MM022, mdunlavy@ap.smu.ca, 420 5833)

### Optional Reading Materials:

*Data Reduction and Error Analysis for the Physical Sciences* by Philip R. Bevington and D. Keith Robinson (any edition) McGraw-Hill

*Practical Physics* by G.L. Squires (any edition) Cambridge University Press

In the event of absence for illness or other justified reason, the professor may be approached regarding make-up schedules or other accommodations. Submissions made after the deadline will be assessed a penalty.

The grades for the course will be assigned as follows

Assignments	5%
Modules	20%
Christmas Exam	10%
Experiments	30%
Project	35%

Students will be held to the standards outlined in the Calendar section on Academic Integrity and Student Responsibility which starts on page 22. Plagiarised work will be assigned a grade of 0 and a report will be made to the Dean of Science Office, the department chair and the Registrar. Other instances of transgressions of the Academic Integrity policy will be likewise reported to the Dean, chair and Registrar.