Electron Microscopy in Materials Characterization

Instructor
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Department: Materials Research Centre
Course Time: Tue., Thu., 1030AM-12Noon
Lecture venue: MRC Auditorium

Detailed Course Page:

Announcements

Brief description of the course
The course will cover the fundamentals of electron microscopy including basics, principles of operation and interpretation of images. Both SEM and TEM basics will be covered.

Prerequisites
None

Syllabus
SEM - principles of operation, Instrumentation

TEM - Instrumentation, Basics of Diffraction, Imaging and Spectroscopy

Course outcomes
Fundamental understanding of principles of operation of SEM, TEM and interpretation of images and diffraction patterns. This course will be a prerequisite for undergoing hands-on training on TEM at AFMM.

Grading policy
50% for Sessional/Including assignments
50% for Finals
2 mid-term tests and 1 final exam

**Assignments**

4 assignments at roughly equal intervals during the semester

**Resources**

   

   
   David B Williams and C. Barry Carter

Lecture notes (ppt) will be provided to the students