Office Hours: By Appointment

Lecture: TuTh 12:30-1:45, Beaupre 300


Course Description:
In-depth presentation of theory of surface analysis methods. Emphasis on methods development, advanced topics, and current advances using electron spectroscopy, surface mass spectroscopy, and surface vibrational spectroscopy.

Course Content:

Week of:
1/21 Introduction to Surface Analysis
1/28 XPS
2/4 XPS
2/11 XPS Lab introduction
2/18 AES/SIMS
2/25 SIMS (mid-term Exam 2/28)
3/4 No class
3/11 Spring Break
3/18 Vibrational Spectroscopy
3/25 STM/AFM
4/1 TEM and SEM
4/8 Student Presentations
4/15 Student Presentations
4/22 Student Presentations
4/30 Review

Final Exam TBD

Course Grading:
Problem sets 2x50 pts
Final Exam 100 pts
Presentation 100 pts