INSTRUCTOR: W. B. Carter  
Office: 351 Love  
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Office Hour: Wednesday 10:00 - 11:00 am  

TEACHING: Kevin Chasse (kchasse3@gatech.edu) &  
ASSISTANTS: David Lipke (Dlipke@gatech.edu)  

CLASS: TR 10:00 - 11:45, room 299 Love Building  


TOPICS TO BE COVERED

1. Introduction  
2. Introduction to Vacuum Technology  
3. Review of Atomic Theory  
4. Review of Electrons in Solids  
5. Introduction to Electron Spectroscopies and Instrumentation  
6. Surface Structure, LEED, RHEED, SPM (STM, AFM, etc.)  
7. X-ray Photoelectron Spectroscopy (XPS, A.K.A. ESCA)  
8. Auger Electron Spectroscopy (AES)  
9. Secondary Ion Mass Spectrometry (SIMS)  
10. Rutherford Backscattering Spectrometry (RBS)

GRADING POLICY

Final grades will be computed as follows:

- Homework: 25% (of final grade)
- Literature Research Paper: 25%
- Final Examination: 50%
ATTENDANCE POLICY

Students are strongly encouraged to attend lectures and are responsible for all material presented during lectures. Class roll will not be taken.

ACADEMIC INTEGRITY

“Plagiarism is using others’ ideas and words without clearly acknowledging the source of that information.” (http://www.indiana.edu/~wts/wts/plagiarism.html)

An example would be incorporating information found on the internet into a paper without providing the appropriate reference.

Any student suspected of plagiarism will be referred to the Georgia Tech Office of Student Integrity.

In this course, students are encouraged, and allowed, to work together on the homework assignments. Simply copying someone else’s work is unacceptable.

Students are to neither receive nor give help to others during exams. Violations will be referred to the Georgia Tech Office of Student Integrity.