

**MSE 4325  
THIN FILM MATERIALS SCIENCE  
Fall 2004**

TR 4:05 - 5:25 pm, Room 299 Love

**INSTRUCTOR:** W.B. Carter                      brent.carter@mse.gatech.edu  
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Office Hours:                                By appointment

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**TEXT:** Milton Ohring, The Materials Science of Thin Films, Academic Press, New York, 1992, ISBN 0-12-524990-X.

**EXAMS:** There will be two midterm exams and a final exam. All will be closed book. The final exam will be comprehensive.

**HOMEWORK:** Homework assignments will be given periodically. It is important to work these problems as they will be graded. Teamwork is encouraged. (See below.)

**PRESENTATION:** Each student will prepare and present to the class a short talk on a preselected topic.

**PAPER:** A literature review paper, to be independently researched and written, will be assigned and graded.

**GRADING:** The weights of the exams, homework, special projects, and paper in the final grade are given below.

Tool	Weight (% of final grade)
Midterm Exams	15 each
Final Exam	30
Homework	15
Presentation	10
Paper	15

(Continued on reverse.)

**TOPICS COVERED**

Vacuum Science and Technology  
Evaporation Coating  
Sputter Deposition  
Chemical Vapor Deposition  
Film Formation and Structure  
Properties of Films and Coatings

**ACADEMIC INTEGRITY**

Students are expected to abide by the Georgia Tech Honor Code and avoid any instances of academic misconduct, including but not limited to:

1. Possessing, using, or exchanging improperly acquired written or oral information in the preparation of a paper or for an exam.
2. False claims of performance or work that has been submitted by the student.
3. Substitution of material that is wholly or substantially identical to that created or published by another individual or individuals, i.e., plagiarism.

“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 violating the Honor Code 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.**

**ATTENDANCE POLICY:**

Students are encouraged to attend lectures and are responsible for all material presented in class.