MSE/BMED 4751: Introduction to Biomaterials
Fall, 2007
TTh 1:35-2:55 PM
Room 1201A, Molecular Sciences & Engr Bldg
Revised 9/18/07

Instructor: Dr. Valeria Tohver Milam
Office: MS&E Building, Room 3100J (starting September 24)
Email: valeria.milam@mse.gatech.edu

OFFICE HOURS: Tuesday and Thursday 3-4 pm

COURSE DESCRIPTION: A broad-based introduction for undergraduates to different types of biomaterials (metals, ceramics, polymers) and physiological responses to biomaterials. The first half of the course provides an overview of the structure, properties, and processing of biomaterials. The second half of the course will focus on biological responses in the presence of a biomaterial.
Prerequisites: MSE 2001

TEXTBOOK: J.S. Temenoff and A.G. Mikos. "Biomaterials: The Intersection of Biology and Materials Science." A soft copy of this textbook is available at the bookstore.

LECTURES: The lectures will follow the material presented in the text and will be supplemented with additional concepts, examples and demonstrations for clarification. Students are strongly encouraged to read assigned textbook material prior to class. **Please turn off cell phones, pagers, etc. before entering the classroom.**

QUIZZES: To encourage regular class attendance and review of lecture material, scheduled quizzes will be given during class. Quizzes will cover any lecture material and suggested problem sets presented since the previous quiz (or exam). There will be NO makeup quizzes after a quiz is administered unless a *legitimate* conflict is provided. If a *legitimate* schedule conflict is known in advance, the student must provide a documented excuse at least one week in advance and schedule a makeup prior to the official quiz date.

HOMEWORK AND IN-CLASS ASSIGNMENTS: Two homework assignments and one scheduled in-class assignment will given throughout the course. If you have a legitimate conflict with the schedule in class assignment, you must provide a documented excuse by Wednesday, August 29th. Homework must be turned in one week after it is assigned.

SUGGESTED PROBLEM SETS: Suggested problem sets will be given routinely at the beginning or end of lecture. It is the responsibility of each student to keep up with all assignments, however, these problem sets will NOT be collected or graded. Solutions will be provided.

EXAMINATIONS: There will be two in-class, closed book and notes examinations during the semester and a comprehensive final exam. If a schedule conflict is known, the student must provide a documented excuse at least one week in advance and schedule a makeup prior to the official exam date. Calculators will be provided by the instructor. Personal calculators cannot be used. In fairness to all students I will not answer ANY questions regarding material for an examination on the day of the exam.

REVIEW SESSIONS: A review session outside of regular class time will be scheduled prior to the two regular exams. Attendance is not mandatory. These review sessions should be viewed as

extended office hours in which students come prepared with questions about course material.
Based on a class vote taken Thursday, August 23rd these review sessions will take place on the following dates (room TBA):
Tuesday, Oct 2nd 5:30-7pm
Tuesday, Nov 20th 5:30-7pm

QUIZ SCHEDULE
Quiz #1: Tuesday, September 4th
Quiz #2: Tuesday, September 25th
Quiz #3 Thursday, October 25th
Quiz #4: Thursday, November 15th

IN CLASS ASSIGNMENT
Thursday, August 30th

EXAM SCHEDULE:
Exam 1: Thursday, October 4th (Chpts 1-5 and 7)
Exam 2: *Thursday, November 30th* (Chpts 8-13).
Final Exam: Wednesday, December 12th 11:30am-2:20pm.
All exams will occur in our regular classroom (Room 1201A, MS&E Bldg).

GRADE: Your final course average will be computed based upon your performance and scaled according to the following scheme:

Homework and in-class assignments – 5%
Quizzes – 15%
Examination 1 - 25%
Examination 2 - 25%
Final Exam (Comprehensive) - 30%

Dr. Milam's "Minimum Letter Grade Guarantee":
If your course average is 90-100% - your minimum grade is an "A"
If your course average is 80-89% - your minimum grade is a "B"
If your course average is 70-79% - your minimum grade is a "C"
If your course average is 60-69% - your minimum grade is a "D"
If your course average is below 60% - your minimum grade is a "F"

I cannot and will not predict if grades will be curved, so use the above guidelines to determine your minimum letter grade. Note: Students who are taking this course on a P/F (pass/fail) basis, a passing grade is C. If your average is below C you will receive a F in the course.

ACADEMIC INTEGRITY
In this course students are encouraged to study together. This policy includes working together on the assigned problem sets and homework problems.

Students are to neither receive nor provide help to others during exams, quizzes, in-class assignments or homework assignments (turned in).

The use of programmable calculators is not allowed during exams.

Any student suspected of academic misconduct outlined above or outlined in the GA Tech Academic Honor Code will be referred to the Office of Student Integrity at the Georgia Institute of Technology.