Instructor: Junkun Ma
Office Location: Room 329C, Fayard Hall
Phone: (985)549-2501
E-mail: junkun.ma@selu.edu
Lecture Time: 12:30PM – 01:45PM Mo & We
Lecture Location: Fayard Hall 213
Office Hours: 9:30AM~12:00PM & 1:00PM~5:00PM Tu
10:00AM~12:00PM Fr ONLINE office hour
Other time by appointment

THE FOLLOWING IS A TENTATIVE PLAN. THE INSTRUCTOR RESERVES THE RIGHT TO MAKE CHANGES TO THIS SYLLABUS DURING THE SEMESTER BASED ON PROGRESS AND CHANGES OF OTHER CONDITIONS.

Course Description:
This is a post-calculus I mathematical techniques and methods course specifically designed for engineering technologist. Topics including multi-variables integration, differential equations, matrices, determinants, vector analysis, statistics and probability will be discussed. MATH 200 is prerequisite of this course. Three credits will be awarded upon successful completion of this course.

Course Objectives:
1. To conduct and apply multi-variables integration to solve practical engineering problems
2. To develop basic understanding of linear algebra
3. To understand fundamentals of complex numbers and Laplace transform
4. To be able to derive and solve ordinary differential equations
5. To understand and apply basic concepts of probability and statistics to solve practical problems.

Course Materials:
- Notes and materials provided as the semester proceeds.
Grades:
1. Grades will be assigned according to the departmental scale.
   90 ~ 100 = A, Superior
   80 ~ 89 = B, Very Good
   70 ~ 79 = C, Average
   60 ~ 69 = D, Below Average
   0 ~ 59 = F, Failure

Note: Students MUST score a ‘C’ or better grade in this course and all others within their major. Otherwise, they must retake the course.

2. Basis for assigning grades:
   a) Three exams (two mid-terms and one final): 300 Points
      Note: All students are to take the exams on the scheduled date and time.
   b) Assignments: 100 points

If you have any problem with this grading system, please make an appointment to talk with the instructor immediately! NO LATE HOMEWORK WILL BE ACCEPTED. Students with unexcused absences will NOT be able to make-up exams or homework! A grade of ZERO (0) will be assigned to missing exams or homework! Students are required to provide documentations for legal absence before any make-ups.

Important Dates and Notes:
1. **Wednesday, January 13, 2016 ~ Thursday, January 14, 2016** is the Drop/Add period. Students can make schedule adjustment without receiving a ‘W’ grade for each class dropped. Students may make final schedule adjustments by **5:00PM on Thursday, January 14, 2016**.
2. **Monday, February 15, 2016** is the last day to apply for Spring 2016 graduation, and Summer/Fall 2016 graduation without late fee.
3. Students will NOT automatically be dropped from classes. Students who choose to drop from this class must do so via LEONET by the university deadline of **Friday, March 11, 2016 before 12:30PM**. It is also the deadline to resign from the university.
4. The time and location of the final exam for this class will be announced during the last week of lecture.
5. **Friday, May 6, 2016** is the last day of classes.
6. **Friday, May 20, 2016** is the deadline to return rental textbook without fine. Student accounts will be charged for any rental books not returned by **12:30PM on Friday May 20, 2016**.
7. If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with the Office of Disability Services, War Memorial Student Union 1304. No accommodations will be granted without documentation from the Office of Disability Services.
8. Student behavior/Classroom decorum: "Free discussion, inquiry, and expression are encouraged in this class. Classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely entering class late or departing early; use of beepers, cellular telephones’ or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is crossing the civility line.” In the event of a situation where a student legitimately needs to carry a beeper/cellular telephone to class, prior notice and approval by the instructor is required.” Otherwise, **ALL PAGERS, BEEPERS, CELLULAR TELEPHONES AND OTHER ELECTRONIC DEVICES ARE TO BE TURNED OFF OR TURNED TO SILENT MODE BEFORE YOU ENTER THE CLASSROOM. TEXT MESSAGING DURING THE LECTURE IS NOT ALLOWED.** Classroom behavior that is deemed inappropriate and cannot be resolved by the student and the faculty member may be referred to the Office of Judicial Affairs for administrative or disciplinary review as per the Code of Student Conduct which may be found at http://www.selu.edu/admin/stu_affairs/handbook/.

9. Academic Integrity: Students should note that repercussions of academic integrity are discussed in the university catalogue. “Cheating on examinations, plagiarism, improper acknowledgment of sources in essays and the use of a single essay or paper in more than one course without permission are considered very serious offenses and shall be grounds for disciplinary action”.

10. The students Southeastern Louisiana University e-mail address **MUST** be used for all e-mail communication between students and faculty/administration/staff. Students are encouraged to check their Southeastern e-mail frequently for important communications from the university.

11. University policy states that the lab is not a place for children. Students are not to bring their children to the lab.

**Course Requirements:**

1. Adherence to departmental policies and procedures, which you were provided.
2. Regular and punctual class attendance. Students who have unexcused absences will receive the grade of zero (0) for all tests, quizzes, and/or lab experiments missed. When any student receives unexcused absences (e.g., ten percent of the total classes) in any class prior to the published withdrawal date, the instructor may withdraw the student with a grade of W.
Course Outline:

1. Differentiation
2. Engineering Applications of Differentiation
3. Integration
4. Engineering Applications of Integration
5. Complex Numbers
6. Matrices
7. Vectors
8. First Order Differential Equations
9. Second Order Linear Differential Equations
10. Partial Differentiation
11. Probability and Statistics

Bibliography: