Syllabus - MATH 370 - Advanced Mathematics for Engineers

Vector algebra; matrix algebra; systems of linear equations; eigenvalues and eigenvectors; vector differential calculus; divergence, gradient and curl; vector integral calculus; integral theorems; Fourier series with applications to partial differential equations.

Prerequisite: MATH 355**. Credit**: 3 hours
Text: Peter O'Neil. *Advanced Engineering Mathematics*, Sixth Edition Thomson Learning, 2007.
Professor: Kim Druschel, Office: Ritter Hall 228, Phone: 977-2804, email: druschelks@slu.edu, office hours: M, W 2:30-3:30, F 1:00-2:00 and by appointment. Feel free to email me to set up an appointment or with any questions regarding the course.

Grades / assessment:
Three one hour exams: 100 points each
Final exam: 200 points
Homework,projects, quizzes, in class participation: approximately 100 points
Total approximately 600 points.
Letter grade is based on percentage: 92% or greater earns an A, 88% or better an A-, 85% or better a B+, 82% or better a B, 78% or better a B- ,75% or better a C+, 72% or better a C, 68% or better a C-, 60% or better a D, below 60% an F.

Missed exams, late homework, etc: Your lowest exam score (including a 0 from a missed exam) is replaced by 1/2 your final exam score, provided you show you have learned the material to that extent. Late homework results in no credit unless you have doctor's excuse. Please get in touch with me if you will have late homework in that circumstance. A missed quiz results in a zero. I will drop your lowest quiz score. Attendance and class participation are important for learning the material and are included in your class participation grade. Note that if you have are sick with a doctor's excuse you will get full credit for attendance for that day. For university sponsored events that a student is required to attend and which conflict with scheduled class events: Please let me know in advance and give me the proper documentation of this and I will accommodate you.

Tentative schedule: Exam 1: Friday September 24, , Sections 6.4- 8.8
Exam 2: Friday October 29, Sections 9.1-9.3, Chapters 12, Sections 13.1-13.3
Exam 3:Wednesday December 1 Sections 13.4-13.8,14.1-14.6,17.1,17.2
Final: Wednesday December 8 12:00-1:50, cumulative

Academic Integrity and Honesty Students are expected to be honest in their academic work. The University reserves the right to penalize any student whose academic conduct at anytime is, in its judgment, detrimental to the University. Such Conduct shall include cases of plagiarism, collusion, cheating, giving or receiving or offering or soliciting information in examinations, or the use of previously prepared material in examinations or quizzes. Violations should be reported to your course instructor, who will investigate and adjudicate them according to the Policy on Academic Honesty of the College of Arts and Sciences. If the charges are found to be true, the student may be liable for academic or disciplinary probation, suspension, or expulsion by the University.
Students should review the College of Arts and Sciences policy on Academic Honesty, which can be accessed on-line at http://www.slu.edu/colleges/AS/ under "Quicklinks for Students" or in hard copy form in the Arts and Sciences Policy Binder in each departmental or College office.

Students with Special Needs - Disability Services Any student who feels that he/she may need academic accommodations in order to meet the requirements of this course -- as outlined in the syllabus -- due to presence of a disability, should contact the Office of Diversity and Affirmative Action. Please telephone the office at 314-977-8885, or visit Busch Student Center, Ste 331. Confidentiality will be observed in all inquiries