MATH-348 **Advanced Engineering Mathematics**

Course Syllabus

`http://www.mines.edu/Academic/courses/math_cs/math348/` **Spring 2008**

Text

E. Kreyszig, Advanced Engineering Mathematics, 9th edition, Wiley, New York, 2006

Course Description

Introduction to partial differential equations, with applications to physical phenomena. Fourier series. Linear algebra, with emphasis on sets of simultaneous equations. Prerequisite: MATH225 or equivalent.

Times

Section A : 9:00am-9:50am : Meyer Hall 357
Section B : 10:00am-10:50am : Alderson Hall 162

Instructor Info

Instructor: Scott Strong
Office: Chauvenet Hall 278

Email: math348.spring2008@gmail.com
Office Phone: 303.384.2446

Office Hours: Tuesday 9:00am to 10:00am and 3:00pm to 4:00pm
Thursday 9:00am to 10:00am and 2:00pm to 3:00pm
Other times can be made by appointment.

Grading

Exams (2 @ 25% each):	50%
Final Exam:	30%
Discretionary:	20%
Total:	100%

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
Below 60%	F

Examinations will be taken in class and announced at least two weeks prior to testing. Calculators, note-cards and crib sheets will not be allowed. Students are responsible for contacting their instructor about excused absences in advance.

Important Dates

First Day of Class	January 9
Last Day to Drop Without a W	January 24
Presidents Day (no classes)	February 18
Spring Break	March 10-14
Last Day To Withdraw	March 25
Last Day To Withdraw (Freshman and Transfers)	April 25
Engineering Days	April 3-4
Final Exam	TBA

Tentative Course Schedule

Week of	Section	Week of	Section
January 6	Review	**March 2**	12.6
January 13	11.1, 11.2	**March 16**	12.3, 12.4
January 20	11.3, 11.4	**March 23**	12.9
January 27	11.7, 11.8	**March 30**	12.11
February 3	11.9	**April 6**	7.1, 7.2, 7.3
February 10	Review	**April 13**	7.4, 7.7
February 17	Power Series, BVP	**April 20**	7.8, 8.1
February 24	12.1, 12.5	**April 27**	8.3, 8.4, 8.5

Recommended Problems

Section	Problems	Section	Problems
11.1	2, 3, 6, 9, 11, 17, 18, 19, 22	12.11	4, 5
11.2	1, 5, 7, 9, 11	7.1	5, 7
11.3	2, 3, 12, 13	7.2	3, 5, 8, 13, 19, 20
11.4	2, 9, 11	7.3	1, 4, 8, 16
11.7	3, 7, 9, 14, 15	7.4	2, 4, 6, 7, 14, 20
11.8	1,5 ,6	7.7	5, 6, 13, 15, 16, 19, 24(a,b,c)
11.9	2, 3, 9, 14(a)	7.8	7, 8, 15, 17, 19
12.1	17, 19, 22, 23, 24, 26(c), 27	8.1	3, 5, 13, 14, 16, 19
12.3	2, 9	8.3	5, 7, 10, 17
12.4	12, 17	8.5	5, 6, 9, 12, 16
12.5	13,18	8.4	4, 7, 12, 15, 17
12.9	10, 11		

Academic Honor Code

I pledge to uphold the high standards of academic ethics and integrity expressed by the Colorado School of Mines Student Honor Code by which I am bound. In particular, 'I will not misrepresent the work of others as my own, nor will I give or receive unauthorized assistance in the performance of academic coursework.' I understand that my instructor will report any infraction of academic integrity to the Department Head and that any such matter will be investigated and prosecuted fully.