NUMERICAL ANALYSIS

MATH 3350 FALL 2010

CRN# 44455

T 3:45PM – 5:00PM (NIB135)

Th 3:45PM – 5:00PM (Smith119)

Aug. 23 2010 – Dec. 17 2010 (3 credit hours)

Instructor: Jie Liu **Email address:** liu@dixie.edu

Office Room #: NIB147 **Office Hours:** 11AM-12PM Daily
2-3PM MTWR

Office Phone #: 652-7983

Website: http://new.dixie.edu/math/jie_liu.php

Course Prerequisites
C or better in Math2270 & Math2280.

Text Book
Numerical Analysis, 9th Edition by Richard L. Burden & J. Douglas Faires

Course Description
All mathematics classes at Dixie State College support the general education goal of the college, and will:

1. Require students to perform mathematical processes including fractions, percentages, decimals, proportions/ratios, algebraic equations and/or calculus techniques.
2. Provide students with application problems that use a variety of methods including arithmetical, algebraic and geometric methods.
3. Challenge students to make inferences from mathematical models that include formulas, graphs and tables.
4. Provide students with real-life applications that use a variety of mathematical functions.

Objectives
The purpose of the course is to introduce computational techniques and algorithms for numerical solutions of various mathematical problems. Upon successful completion of Math 3350, a student will demonstrate the ability to numerically solve and analyze:

- root-finding problem
- Interpolation and polynomial approximation
- Differentiation and integration
- Ordinary differential equations

Disabilities
Students with medical, psychological, learning or other disabilities desiring reasonable academic adjustment, accommodations, or auxiliary aids to be successful in this class will need to contact the DISABILITY RESOURCE CENTER Coordinator (Baako Wahabu) for eligibility determination. Proper documentation of impairment is required in order to receive services or accommodations. DRC is located at the ground floor of the Financial Aid Office.

Visit or call 652-7516 to schedule appointment to discuss the process. DRC Coordinator determines eligibility for and authorizes the provision of services.

Dmail
All information sent from the college or the instructor will be sent to your Dmail account. You MUST check that email account frequently. You are responsible for knowing what is contained within those messages.

Important dates/deadlines
Important dates /deadlines are included in the following Assignments and Tentative Schedule and also can be found in the following link.
http://www.dixie.edu/reg/calendar.html

Academic Dishonesty/Academic integrity policy
Please refer to college faculty policy **3.34 Academic discipline policy.**
http://www.dixie.edu/humanres/polfac.html

Course Work:
The student's final grade will be determined by her/his performance on homework, exams, class activities & projects.

- Homework: I will assign homework during each class. Homework will be collected after each chapter. Points will be deducted by two points per day for late homework. The homework may be graded on a scale from 0-30. Show all work. You homework may include Maple programming, you are welcome to discuss with your classmates but copy the program from other students will be treated as academic dishonesty, thus no credit will be given.
- Exams: There will be 2 exams and a comprehensive final. Each student is expected to take the examinations as scheduled in the syllabus. Make-up exams will be given at the discretion of instructor, and only if prior arrangements have been made.
- Grading: Exams – 40% total (20% each), Final – 30%, Homework – 30%. Grades will be assigned as follows: **A** (94-100%), **A-** (90-93%), **B+** (87-89%), **B** (83-86%), **B-**(80-82%), **C+**(75-79%), **C** (70-74%), **C-**(65-69%), **D+**(60-64%), **D**(55-59%), **D-**(50-54%), **F**(O-49%)

We shall cover the following parts of the text book.

Chapter 2: 2.1-2.4

Chapter 3: 3.1, 3.3, 3.4, 3.5

Chapter 4: 4.1-4.7

Chapter 5: 5.1-5.7

If time permit, I would like to also cover

Chapter 11: 11.1-11.4

Tentative Schedule

Course schedules, assignments, and exam dates are subject to change as circumstances dictate. It is the responsibility of each student to attend the class and get the updated info.

Date	Section	Important days
	Week 1	
T 8/24	Introduction, 2.1	
W 8/25		**Last day to add without signature**
Th 8/26	Maple programming	
	Week 2	
M 8/30		**Drop fee begins ($10 per class)**
T 8/31	2.2	
Th 9/02	2.3	
	Week 3	
T 9/07	2.4	**($50 Late Registration/Payment Fee)**
Th 9/09	3.1	
	Week 4	
M 9/13		**Pell Grant Census/ Last day for Refund/Last day to drop without receiving a "W" grade**
T 9/14	3.3	**Courses dropped for non-payment**
Th 9/16	3.4	
F 9/17		**Last day to add classes**
	Week 5	
T 9/21	3.5	
Th 9/23	**Test 1**	
	Week 6	
T 9/28	4.1	
Th 9/30	4.2	
	Week 7	
T 10/05	4.3	
Th 10/07	4.4	
	Week 8	
T 10/12	4.5	

Th 10/14		**Semester Break (No Class)**
Week 9		
M 10/18		**Last day to drop/audit**
T 10/19	4.6	
Th 10/21	4.7	
Week 10		
T 10/26	5.1	
Th 10/28	5.2	
Week 11		
T 11/02	5.3	
Th 11/04	5.4	
Week 12		
T 11/09	5.5	
Th 11/11	5.6	
F 11/12		**Last Day for Complete Withdrawal**
Week 13		
T 11/16	5.7	**Career Day**
Th 11/18	**Test 2**	**Spring registration open**
Week 14		
T 11/23	11.1	
Th 11/25		**Thanksgiving Holiday (No class)**
Week 15		
T 11/30	11.2	
Th 12/02	11.3	
Week 16		
T 12/07	11.4	
Th 12/09	Review	**Last day of classes**
Final Exam:		