

FALL 2011
MATH 3200

INTRODUCTION TO ANALYSIS I

CRN# 45299

TR 6:45-8:00PM (NIB135)

Aug. 22 2011 – Dec 2011 (3 credit hours)

Instructor: Jie Liu
Office Room #: NIB147
Office Phone #: 652-7983

Email address: liu@dixie.edu
Office Hours: 11:00-11:50 Daily
Or by appointment

Course Prerequisites

C or better in Math 2200 (Discrete Math) and Math 2210 (Multivariable Calculus).

Required Materials

- Text Book: **Advanced Calculus (2nd edition) by Patrick M. Fitzpatrick**

Course Description

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

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

Math 3200 is designed for those interested in advanced mathematics. The course introduces the construction of rigorous proofs of mathematical claims in beginning analysis. Additionally, completion of Math 3200 partially fulfills requirements for Mathematics Endorsements Level 3 and 4 through the Utah State Office of Education.

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.

Policy for Absences Related to College Functions

Please refer to college student policy **5.23 Attendance**.

<http://www.dixie.edu/humanres/polstu.html>

Important dates/deadlines

<http://www.dixie.edu/reg/calendar.html>

Resources

Library - <http://library.dixie.edu>

Writing Center - http://new.dixie.edu/english/dsc_writing_center.php

Testing Center - <http://new.dixie.edu/testing>

Tutoring Center - <http://new.dixie.edu/tutoring/>

Course Work

- Homework: Homework will be assigned every class and discussed in the following class. It is essentially important that you seriously work with your homework by yourself first and discuss with your classmates if possible before you attend the next class. Homework will be collected after each chapter. Homework will be graded based on completeness and randomly picked problems.
- Exams: There will be 3 chapter exams plus 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.
- Attendance: Attending every class is crucial for your grade. Group discussions during class period are really helpful for expressing/clarifying your understanding of abstract concepts embedded through the whole class. You are responsible for all announcements and materials presented in the class.
- Grading: Exams – 80%, Homework – 20%, Grades will be assigned as following:
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**(0-49%)

Material planning to be covered:

Preliminaries

Chapter 1: Tools for Analysis (Real number system)

Chapter 2: Convergent Sequences

Chapter 3: Continuous functions

Chapter 4: Differentiation

Chapter 6: Integration

Chapter 8: Taylor expansion

Chapter 9: Sequences and series of functions

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 8/23	Preliminary 1.1	
W 8/24		Last day to add without signature
Th 8/25	1.1cont. 1.2,1.3	
Week 2		
M 8/29		Drop fee begins (\$10 per class)
T 8/30	2.1, 2.2	
Th 9/01	2.3, 2.4	
Week 3		
T 9/06	Catch up/Review	(\$50 Late Registration/Payment Fee)
Th 9/08	Test 1	
Week 4		
M 9/12		Pell Grant Census/ Last day for Refund/Last day to drop without receiving a "W" grade
T 9/13	3.1, 3.2	Courses dropped for non-payment
Th 9/15	3.3, 3.4	
F 9/16		Last day to add classes
Week 5		
T 9/20	3.5, 3.6	
Th 9/22	3.7	
Week 6		
T 9/27	4.1, 4.2	
Th 9/29	4.3, 4.4	Graduation application deadline
Week 7		
T 10/04	4.5 /Catch up	
Th 10/06	6.1, 6.2	
Week 8		
T 10/11	6.3, 6.4	
Th 10/13		Fall Semester Break (No Class)
Week 9		

M 10/17		Last day to drop/audit
T 10/18	6.5, 6.6	
Th 10/20	Catch up/Review	
Week 10		
T 10/25	Test 2	
Th 10/27	8.1, 8.2	
Week 11		
T 11/01	8.3, 8.4	
Th 11/03	8.5, 8.6	
Week 12		
T 11/08	8.7	
Th 11/10	Catch up	
F 11/11		Last Day for Complete Withdrawal
Week 13		
T 11/15	9.1, 9.2	
Th 11/17	9.3, 9.4	Spring registration open
Week 14		
T 11/22	9.5, 9.6	
Th 11/24		Thanksgiving Holiday (No class)
Week 15		
T 11/29	Catch up/Review	
Th 12/01	Test 3	
Week 16		
T 12/06	Review	
Th 12/08	Review	Last day of classes
Final Exam: TBA		

Enjoy your learning adventure!