

## Math 263A Calculus I Winter 2009 Sections A03 (04699) and A04 (04700) Course Information

- Instructor:** Mark Barsamian **e-mail:** Mark.Barsamian.1@ohio.edu  
**Office:** Morton Hall Room 538 **Office phone:** (740) 593-1273  
**Office Hours:** Monday - Thursday 10:10am-11:00am  
**Course Description:** The first in a four quarter calculus sequence. Topics include limits and continuity, derivatives, derivative rules, and applications of differentiation.  
**Prerequisites:** Math 115 or Placement level 3 or higher.  
**Note:** Students cannot earn credit for both 263A and either of 163A or 266A.  
**Text:** *Essential Calculus: Early Transcendentals 5<sup>th</sup> edition*, Stewart  
**Calculators:** Calculators will sometimes be used on homework, but will not be allowed on exams.  
**Computers:** We will be making extensive use of MATLAB, a computer program for mathematical computing, visualization, and programming. Information about MATLAB and the MATLAB assignments may be found on the web page for Sections A03 and A04.  
**Early Quiz:** On Friday, January 9 there will be an in-class quiz on prerequisite material. The quiz will count as part of the Homework 1 grade. Study resources for the quiz are available on the Web Page for Sections A03 and A04.  
**Final Exam:** The final exam will be cumulative and common for all the 263A sections.

### Resources Online:

- Main Math 263A Web page: <http://www.math.ohiou.edu/courses/math263/index.php>
- Student Handbook for Math 263 A and B: <http://www.math.ohiou.edu/courses/math263/handbookab.pdf>
- Web Page for Sections A03 & A04: <http://www.math.ohiou.edu/~barsamian/2009w263A/2009w263A.html>

### Resources on Campus:

- The Academic Advancement Center's Math Center has drop-in help tutors, online help, and a phone hotline. Find out more about the Math Center on the website: <http://cscwww.cats.ohiou.edu/aac/math/>
- Supplemental Instruction (SI) provides free, out-of-class study sessions. Find a schedule of SI sessions at the website: <http://www.ohiou.edu/AAC/supins/>

**Special Needs:** If you have physical, psychiatric, or learning disabilities that require accommodations, please let me know as soon as possible so that your needs may be appropriately met.

### Grading:

You will accumulate points as shown in the table at right.

Written Homework (6 assignments, 25 points each):	150 points
In-Class Exams (3 exams worth 150, 200, 200 points):	550 points
Final Exam:	300 points
<b>Total Points Possible for the Quarter:</b>	<b>1000 points</b>

Your total points score will be converted to your course letter grade using the percentage scale shown in this table.

Total Score	Percentage	Grade	Interpretation
930 - 1000	93% - 100%	A	You mastered all concepts, with no significant gaps
900 - 929	90% - 92.9%	A-	
870 - 899	87% - 89.9%	B+	You mastered all essential concepts and many advanced concepts, but have some significant gaps.
830 - 869	83% - 86.9%	B	
800 - 829	80% - 82.9%	B-	
770 - 799	77% - 79.9%	C+	You mastered most essential concepts and some advanced concepts, but have many significant gaps.
730 - 769	73% - 76.9%	C	
700 - 729	70% - 72.9%	C-	
600 - 699	60% - 69.9%	D	You mastered some essential concepts.
0 - 599	0% - 59.9%	F	You did not master essential concepts.

**Homework:** There are six Homework Assignments that will be graded. In addition, there is a list of Suggested Problems that will not be graded. The Homework Assignments and Suggested Problems are found on the web page for Sections A03 and A04.

**Attendance:** In Math 263A Sections A03 and A04, attendance is mandatory and is recorded. Attendance is not part of your grade. However, data from previous quarters shows that there is a very strong correlation between attendance and performance in this course. If you do miss a class, it is your responsibility to copy a classmate's notes and study them. I will not use my office hours to teach topics that were discussed in class to students that missed class.

**Tentative Schedule:**

Date	Class topics
Mon Jan 5	1.3 – The Limit of a Function
Tue Jan 6	1.3 – The Limit of a Function
Thu Jan 8	1.4 – Calculating Limits
Fri Jan 9	1.5 – Continuity (Homework 1 Due; Review Quiz)
Mon Jan 12	1.6 – Limits involving $\infty$
Tue Jan 13	2.1 – Derivatives and Rates of Change
Thu Jan 15	2.1 – Derivatives and Rates of Change
Fri Jan 16	In-Class Exam 1 Covering 1.3 - 1.6 and 2.1
Mon Jan 19*	Holiday: no class
Tue Jan 20	2.2 – The Derivative as a Function
Thu Jan 22	2.2 – The Derivative as a Function
Fri Jan 23	2.3 – Basic Differentiation Formulas (Homework 2 Due)
Mon Jan 26	2.3 – Basic Differentiation Formulas
Tue Jan 27	2.4 – The Product and Quotient Rules
Thu Jan 29	2.5 – The Chain Rule
Fri Jan 30	2.6 – Implicit Differentiation (Homework 3 Due)
Mon Feb 2	2.7 – Related Rates
Tue Feb 3	2.8 – Linear Approx. & Differentials
Thu Feb 5	Leftovers and Review
Fri Feb 6	In-Class Exam 2 covering Chapter 2.2 - 2.8
Mon Feb 9	3.1 – Exponential Functions
Tue Feb 10	3.2 – Inverse Functions and Logarithms
Thu Feb 12	3.2 – Inverse Functions and Logarithms
Fri Feb 13	3.3 – Derivatives of Logarithmic and Exponential Functions (Homework 4 Due)
Mon Feb 16	3.4 – Exponential Growth and Decay
Tue Feb 17	3.5 – Inverse Trigonometric Functions
Thu Feb 19	3.7 – Indeter. Forms & L'Hopital's Rule
Fri Feb 20	3.7 – Indeter. Forms & L'Hopital's Rule (Homework 5 Due)
Mon Feb 23	Leftovers and Review
Tue Feb 24	In-Class Exam 3 covering Chapter 3
Thu Feb 26	4.1 – Maximum and Minimum Values
Fri Feb 27	4.2 – The Mean Value Theorem
Mon Mar 2	4.3 – Derivatives and the Shape of a Graph
Tue Mar 3	4.3 – Derivatives and the Shape of a Graph
Thu Mar 5	4.4 – Curve Sketching
Fri Mar 6	4.4 – Curve Sketching (Homework 6 Due)
Mon Mar 9	4.5 – Optimization Problems
Tue Mar 10	4.5 – Optimization Problems
Thu Mar 12	Course Review
Fri Mar 13	Course Review and Course Evaluations
Wed Mar 18	Common Final Exam at 7:00pm Location to be announced in class.