

Ohio University Spring 2008 Math 163A Section A03 Course Information

Instructor: Mark Barsamian

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Office Hours: Monday 10:10am-11:00am
 Tuesday 10:10am-11:00am
 Wednesday 9:10am-12:00pm
 Thursday 10:10am-11:00am

Course Description: A survey of basic concepts of calculus for students who want an introduction to calculus, but who do not need the depth of 263A-B-C.

Prerequisites: Math 113 or Placement level 2 or higher.

Note: Students cannot earn credit for both 163A and either of 263A or 266A.

Text: Calculus with Applications (Brief Version), 8th Edition, by Lial, Greenwell, and Ritchey, published by Addison Wesley, 2005; ISBN: 0-321-22829-4

Calculators: will not be allowed on exams

Resources Online:

- Math 163A Web page: <http://www.math.ohiou.edu/courses/math163/index.php>
- Section A03 Web Page: <http://www.math.ohiou.edu/~barsamian/2008s163A/2008s163A.html>
- Section A03 Blackboard site: <https://blackboard.ohiou.edu/>
- The Academic Advancement Center's Math Center website: <http://cscwww.cats.ohiou.edu/aac/math/>
- Supplemental Instruction (SI) website: <http://www.ohiou.edu/AAC/supins/>

Resources on Campus:

- The Academic Advancement Center's Math Center has drop-in help tutors, online help, and a phone hotline.
- Supplemental Instruction (SI) provides free, out-of-class study sessions.

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:

In Math 163A Section A03, you will accumulate points as shown in the table at right.

Written Homework (7 assignments, 25 points each):	175	points
Midterm Exam #1:	125	points
Midterm Exam #2:	200	points
Midterm Exam #3:	200	points
Final Exam:	300	points
Total Points Possible for the Quarter:	1000	points

Your course letter grade will be computed from your total score using the percentage scale shown in this table.

(The Learning Objectives for the course can be found on the main Math 163A web page.)

Total Score	Percentage	Grade	Interpretation
900 - 1000	90% - 100%	A	You mastered all concepts, with no significant gaps
850 - 899	85% - 89.9%	A-	
800 - 849	80% - 84.9%	B+	You mastered all essential concepts and many advanced concepts, but have some significant gaps.
750 - 799	75% - 79.9%	B	
700 - 749	70% - 74.9%	B-	
650 - 699	65% - 69.9%	C+	You mastered most essential concepts and some advanced concepts, but have many significant gaps.
600 - 649	60% - 64.9%	C	
550 - 599	55% - 59.9%	C-	You mastered some essential concepts.
400 - 549	40% - 54.9%	D	
0 - 399	0% - 39.9%	F	

Attendance: In Math 163A Section A03, attendance is mandatory, but is not part of your grade. If you miss a class, it is your responsibility to copy a classmate's notes and study them.

Spring 2008 Math 163A Section A03 Syllabus and Tentative Schedule

Date	Class topics	Homework/Exam
Mon Mar 31	1.1 Slopes and Equations of Lines	
Tue Apr 1	1.2 Linear Functions and Applications	
Thu Apr 3	2.1 Properties of Functions	
Fri Apr 4	2.2 Quadratic Functions; Translation and Reflection	Homework 1 Due
Mon Apr 7	Handout 3: Sign Charts	
Tue Apr 8	2.3 Polynomial and Rational Functions	
Thu Apr 10	2.3 Polynomial and Rational Functions	
Fri Apr 11	Exam 1	Exam 1
Mon Apr 14	3.1 Limits: Basic Definitions (Last day to drop without a W)	
Tue Apr 15	3.1 Limits: Basic Definitions	
Thu Apr 17	3.2 Continuity (do class drill 1)	
Fri Apr 18	3.2 Continuity	Homework 2 Due
Mon Apr 21	3.3 Rates of Change	
Tue Apr 22	3.3 Rates of Change (do class drill 2)	
Thu Apr 24	3.4 Definition of the Derivative	
Fri Apr 25	3.4 Definition of the Derivative	Homework 3 Due
Mon Apr 28	3.5 Graphical Differentiation (do class drill 3a)	
Tue Apr 29	3.5 Graphical Differentiation (do class drill 3b)	
Thu May 1	Review	
Fri May 2	Exam 2	Exam 2
Mon May 5	4.1 Techniques for Finding Derivatives (Last day to drop)	
Tue May 6	4.2 Derivatives of Products and Quotients	
Thu May 8	4.3 The Chain Rule	
Fri May 9	4.3 The Chain Rule	Homework 4 Due
Mon May 12	5.1 Increasing and Decreasing Functions	
Tue May 13	5.2 Relative Extrema	
Thu May 15	5.3 Higher Derivatives and Concavity (class drills 4,5)	
Fri May 16	5.3 Higher Derivatives and Concavity	Homework 5 Due
Mon May 19	5.4 Curve Sketching (class drill 6)	
Tue May 20	5.4 Curve Sketching	
Thu May 22	Review	
Fri May 23	Exam 3	Exam 3
Mon May 26	Holiday: No Class	
Tue May 27	6.1 Absolute Extrema	
Thu May 29	6.2 Applications of Extrema	
Fri May 30	6.2 Applications of Extrema	Homework 6 Due
Mon Jun 2	9.1 Functions of Several Variables	
Tue Jun 3	9.2 Partial Derivatives (do class drill 8)	
Thu Jun 5	9.3 Maxima and Minima	
Fri Jun 6	9.3 Maxima and Minima (do class drill 9)	Homework 7 Due
Tue Jun 10	Cumulative Final Exam 10:10am-12:10pm in Morton 237	

Spring 2008 Math 163A Section A03 Homework Assignments

One learns math primarily by trying to solve problems. For that reason, homework plays a central role in Math 163A Section A03. The table below shows a list of *suggested homework problems* and refers to *assigned homework sets*.

The *suggested homework problems* shown in the table are selected from the textbook. These problems are not to be turned in and are not part of your grade. But in order to learn the material covered in the course, you should do as many of the suggested problems as possible and keep your solutions in a notebook for study.

The seven *assigned homework sets* that are referred to in the table are found at the web page for Section A03. (The web address is on page 1, above.) The assigned homework sets are graded. For each of the assigned homework sets, you should do the following:

- From the course web page, follow the link to the cover sheet for the homework set and print it out.
- Work the assigned problems on separate pages.
- You are encouraged to work together, but the words that you write should be your own.
- Staple the cover sheet to the front of your pages
- Submit the completed homework set in class on the date indicated. Late work will not be accepted.

The assigned homework sets contain custom problems that are similar in style to the questions that I put on exams. These custom problems are based on the suggested textbook problems, but the custom problems more often ask you to show your work, or explain, or draw a graph. It is my hope that by working on the assigned homework sets, you will become accustomed to my style of questions and thus be better prepared for the exams.

	Assigned Homework Sets (turn in)	Suggested Homework Problems (do not turn in)
H1	download cover sheet from course web page	1.1#1, 3, 4, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 39, 47, 51, 53, 57, 59
		1.2#1, 2, 3, 4, 9, 13, 15, 17, 23, 27
		2.1#1, 3, 5, 7, 15, 17, 23, 25, 27, 29, 37, 41, 43, 45, 55, 57, 59, 63, 65
		2.2#1, 2, 3, 5, 7, 9, 11, 21, 25, 26, 27, 29, 49
		Handout 3: Sign Charts, Problems #1, 2, 3, 4, 5, 6
		2.3#1, 2, 3, 5, 7, 9, 11, 13, 15, 17, 21, 25, 27, 31, 33, 39
H2	download cover sheet	3.1#1, 3, 5, 7, 9, 10, 11, 25, 29, 31, 39, 41, 43, 47, 49
		3.2#1, 3, 5, 7, 9, 11, 13, 19, 23, 25
H3	download cover sheet	3.3#1, 3, 5, 7, 9, 11, 13, 15, 21, 27
		3.4#1, 2, 3, 4, 5, 9, 10, 11, 13, 15, 17, 19, 21, 33, 47
		3.5#3, 5, 7, 9, 11, 13
H4	download cover sheet	4.1#3, 5, 7, 13, 19, 27, 29, 31, 37, 41, 45, 46, 53, 54
		4.2#1, 7, 15, 21, 23, 27, 28, 30*, 31 (*hint for #30: Do the derivative yourself & compare.)
		4.3#1, 3, 7, 13, 19, 21, 27, 37, 45, 54a
H5	download cover sheet	5.1#7, 11, 15, 19, 21, 29, 41
		5.2#7, 11, 15, 21, 29, 30, 35, 49
		5.3#3, 5, 9, 29, 31, 35, 37, 51
		5.4#5, 9, 11, 13, 17, 18, 19, 20, 35, 36, 37
H6	download cover sheet	6.1#1, 3, 11, 15, 17, 19, 27, 35
		6.2#1, 3, 7, 9, 11, 13, 16, 18, 23, 27
H7	download cover sheet	9.1#3, 7, 21, 22, 23, 24, 25, 26, 27
		9.2#1, 3, 5, 11, 17, 21, 25, 33, 35, 51
		9.3#7, 9, 11, 13, 21, 22, 23, 24, 25, 26, 35