

Ohio University Winter 2007 Math 163A Section A15 Course Information, Version 4

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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. Note: Students cannot earn credit for both 163A and either of 263A or 266A. **Prerequisites:** Math 113 or Placement level 2 or higher.

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

Online Resources:

- Math 163A Web page: <http://www.math.ohiou.edu/courses/math163/index.php>
- Section 15 Web Page: <http://www.math.ohiou.edu/~barsamian/2007w163A/2007w163A.html>
- Section 15 Blackboard site: Used for posting handouts, solutions, and grades.

Calculators: will not be allowed on exams.

Grading: In Math 163A Section A15, you will accumulate points as follows.

Homework (5 assignments, 20 points each):	100 points
Midterm Exams (Best 3 of 4 exams, 200 points each):	600 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 below. There will be no curve. An estimate of your current grade will be available on the Blackboard site each week.

Total Score	Percentage Score	Letter 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-	You mastered most essential concepts and some advanced concepts, but have many significant gaps.
650 - 699	65% - 69.9%	C+	
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	

Homework: In Math 163A Section A15, homework assignments will be graded. You may work together on homework, but the words that you write should be your own. Follow the *guidelines for preparing your homework papers*, found on the page with the homework assignments. Late homework is not accepted.

Attendance: Attendance is required. If you miss class, you should get a copy of the notes from someone and check the Blackboard site for handouts. If you miss a midterm exam, that exam score will be the one dropped.

Winter 2007 Math 163A Section A15 Syllabus

Date	Class topics	Homework Due
Thu 4 Jan	1.1 Slopes and Equations of Lines	
Fri 5 Jan	1.2 Linear Functions and Applications	
Mon 8 Jan	2.1 Properties of Functions	
Tue 9 Jan	2.2 Quadratic Functions; Translation and Reflection	
Thu 11 Jan	Sign Charts	
Fri 12 Jan	2.3 Polynomial and Rational Functions	H1 Due
Mon 15 Jan	Holiday: no class	
Tue 16 Jan	2.3 Polynomial and Rational Functions	
Thu 18 Jan	Leftovers and review	
Fri 19 Jan	Exam 1	
Mon 22 Jan	3.1 Limits	
Tue 23 Jan	3.2 Continuity	
Thu 25 Jan	3.3 Rates of Change	
Fri 26 Jan	3.4 Definition of the Derivative	H2 Due
Mon 29 Jan	3.4 Definition of the Derivative	
Tue 30 Jan	3.5 Graphical Differentiation	
Thu 1 Feb	Leftovers and review	
Fri 2 Feb	Exam 2	
Mon 5 Feb	4.1 Techniques for Finding Derivatives	
Tue 6 Feb	4.2 Derivatives of Products and Quotients	
Thu 8 Feb	4.3 The Chain Rule	
Fri 9 Feb	4.3 The Chain Rule	H3 Due
Mon 12 Feb	5.1 Increasing and Decreasing Functions	
Tue 13 Feb	5.2 Relative Extrema	
Thu 15 Feb	5.2 Relative Extrema	
Fri 16 Feb	Exam 3	
Mon 19 Feb	5.3 Higher Derivatives and Concavity	
Tue 20 Feb	5.4 Curve Sketching	
Thu 22 Feb	5.4 Curve Sketching	
Fri 23 Feb	6.1 Absolute Extrema	H4 Due
Mon 26 Feb	6.1 Absolute Extrema	
Tue 27 Feb	6.2 Applications of Extrema	
Thu 1 Mar	6.2 Applications of Extrema	
Fri 2 Mar	Exam 4	
Mon 5 Mar	9.1 Functions of Several Variables	
Tue 6 Mar	9.2 Partial Derivatives	
Thu 8 Mar	9.3 Maxima and Minima	
Fri 9 Mar	9.3 Maxima and Minima	H5 Due
Thu 15 Mar	Cumulative Final Exam 10:10am – 12:10pm in Morton 237	

Winter 2007 Math 163A Section A15 Homework Assignments

Guidelines for preparing your homework papers

1. Your work will be graded not only on correctness of the final answer, but also on readability of the presentation and clarity of the explanations.
 - a. Handwriting should be legible and not crowded.
 - b. Your work should be presented in sentences, including the mathematical symbols. (Remember that mathematical computations should be readable as sentences, even if they are written entirely in symbols.)
 - c. Graphs should be large and neat, with key information labeled:
 - i. Curve should be labeled.
 - ii. Axes should be labeled.
 - iii. Key points (including all axis intercepts) should be labeled with their coordinates.
2. Staple your work in the upper left corner. Work that is not stapled will be discarded. No exceptions.
3. Print your name on the front of the first page. Also print your name on the back of the last page, in the upper right corner near the staple.
4. Label each problem with its section number and problem number. For example, write [1.1#32], not [32].
5. You are encouraged to work together on homework, but the words that you write should be your own. If two homework papers contain solutions that are identical, both students will be penalized.
6. Late homework is not accepted. No exceptions.

Sections	Assigned Problems (turn in)	Suggested problems (do not turn in)
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H1	1.1	2,14,32,50	1,3,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,40,47,49,51,53,57,59
	1.2	8,12,14,16	1,2,3,4,9,13,15,17,23
	2.1	30,44,64	1,3,5,7,8,11,13,15,17,23,25,29,31,35,37,41,45,47,49,53,55,57,65
	2.2	4,10,20,26,30,48	1,2,3,7,9,11,21,24,25,27,33,37,41,49
	SignCharts	SignCharts 2,6	SignCharts 1,3,4,5
	2.3	none	1,2,3,5,7,9,11,13,15,17,21,23,25,27,31,33,39

H2	3.1	2,6,12,30,32,41,48,56	1,3,5,7,9,11,25,29,31,37,39,43,49,55
	3.2	6,8,10,12,20,30	1,3,5,7,9,11,19,23
	3.3	6,12,21,28*	1,3,5,7,11,13,15,27 (*note on #28d: Compare parts b&c, not a&b.)
	3.4	none	1,2,3,4,5,9,10,11,13,15,17,19,21,33,47
	3.5	none	5,6,7,8,9,11,13

H3	4.1	8,25,31,40,46,54	3,5,13,19,27,29,45,53
	4.2	8,16,28,30*,31	1,21,23,27 (*hint for #30: Do the derivative yourself, then compare.)
	4.3	18,29,36,46,54b	1,3,5,7,13,19,27,37,45
	5.1	none	5,7,13,15,19,21,29,35
	5.2	none	5,7,11,21,29,30,35

H4	5.3	10,30,32,36,38,50,67	3,5,11,29,31,35,37,51
	5.4	6,12,14,20,36	9,11,13,17,19,35,37
	6.1	none	1,3,13,15,17,23,27,30,35
	6.2	none	1,3,7,9,11,13,19,23,27

H5	9.1	8,14,22,24,28	3,21,23,25,26,27
	9.2	18,22,33,48	1,3,5,11,25,35,51
	9.3	15,22,36	7,9,11,21,23,24,25,26,35