

Ohio University Winter 2008 Math 266B Section A01 Course Information, Version 4

Instructor: Mark Barsamian
Office: Morton Hall Room 538
Office Hours: Monday 9:10am-10:00am
Tuesday 9:10am-10:00am
Wednesday 8:10am-12:00pm
Thursday 9:10am-10:00am

e-mail: Mark.Barsamian.1@ohio.edu
Office phone: (740) 593-1273

Course Description: MATH 266 is a calculus sequence that has been specifically designed to meet the needs of prospective life science majors. The mathematical concepts covered in these courses will be developed in the context of biological questions, and numerous exercises will demonstrate further applications of calculus in the life sciences.

Equivalences and Prerequisites: The two courses in the MATH 266 sequence, MATH 266A and MATH 266B, roughly correspond to MATH 263A and MATH 263B. The prerequisite for MATH 266A is MATH 115 or placement level 3. Students cannot earn credit for both 266A and either of 163A or 263A. Students who successfully complete MATH 266A have the option to take either MATH 266B or MATH 263B, but MATH 263A is not considered a sufficient prerequisite for MATH 266B. Students who successfully complete MATH 266B and who wish to learn more calculus can enroll in MATH 263C.

Text: Calculus for Biology and Medicine 2nd Edition, by Claudia Neuhauser; 2004; ISBN: 0-13-045516-4

Resources Online:

- course web page: <http://www.math.ohiou.edu/~barsamian/2008w266B/2008w266B.html>
- course *Blackboard* site: Used for posting handouts and grades. The gradebook will be updated weekly.

Calculators and Computers: On some of the exams calculators will be allowed, but on some exams, they will not. Each of the homework assignments includes a computer project. The programs that you will use for these projects will include MATLAB, Microsoft Excel, and some web-based programs.

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 266B Section A01, you will accumulate points as shown in the table at right.

Written Homework (7 assignments, 20 points each):	140	points
Midterm Exam #1:	200	points
Midterm Exam #2:	200	points
Midterm Exam #3:	200	points
Final Exam:	260	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.

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-	
400 - 549	40% - 54.9%	D	You mastered some essential concepts.
0 - 399	0% - 39.9%	F	You did not master essential concepts.

Attendance: In Math 266A Section A01, 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.

Winter 2008 Math 266B Section A01 (Barsamian) Syllabus and Schedule, Version 4

Date	Class topics	Homework/Exam
Mon Jan 7	5.8 Antiderivatives	
Tue Jan 8	5.8 Antiderivatives	
Thu Jan 10	6.1 The Definite Integral	
Fri Jan 11	6.1 The Definite Integral	H1 Due
Mon Jan 14	6.2 The Fundamental Theorem of Calculus	
Tue Jan 15	6.3 Applications of Integration	
Thu Jan 17	6.3 Applications of Integration	
Fri Jan 18	Exam #1	Exam #1
Mon Jan 21	Holiday: no class	
Tue Jan 22	7.1 The Substitution Rule (Last day to drop without a "W")	
Thu Jan 24	7.2 Integration by Parts	
Fri Jan 25	7.2 Integration by Parts	H2 Due
Mon Jan 28	7.3 Practicing Integration and Partial Fractions	
Tue Jan 29	7.3 Practicing Integration and Partial Fractions	
Thu Jan 31	7.4 Improper Integrals	
Fri Feb 1	7.6 Tables of Integrals	H3 Due
Mon Feb 4	7.7 The Taylor Approximation	
Tue Feb 5	7.7 The Taylor Approximation	
Thu Feb 7	Review	
Fri Feb 8	Exam #2	Exam #2
Mon Feb 11	8.1 Solving Differential Equations (Last day to drop)	
Tue Feb 12	8.1 Solving Differential Equations	
Thu Feb 14	8.1 Solving Differential Equations	
Fri Feb 15	8.1 Solving Differential Equations	H4 Due
Mon Feb 18	8.2 Equilibria and Their Stability	
Tue Feb 19	8.2 Equilibria and Their Stability	
Thu Feb 21	9.1 Linear Systems	
Fri Feb 22	9.1 Linear Systems	H5 Due
Mon Feb 25	Review	
Tue Feb 26	Exam #3	Exam #3
Thu Feb 28	9.2 Matrices	
Fri Feb 29	9.2 Matrices	
Mon Mar 3	9.2 Matrices	
Tue Mar 4	9.3 Linear Maps, Eigenvectors, and Eigenvalues	
Thu Mar 6	9.3 Linear Maps, Eigenvectors, and Eigenvalues	
Fri March 7	9.3 Linear Maps, Eigenvectors, and Eigenvalues	H6 Due
Mon Mar 10	9.3 Linear Maps, Eigenvectors, and Eigenvalues	
Tue Mar 11	11.1 Linear Systems: Theory	
Thu Mar 13	11.1 Linear Systems: Theory	
Fri Mar 14	Review Last day of class	H7 Due
Tue Mar 18	Cumulative Final Exam 8:00am – 10:00am in Morton 215	

Winter 2008 Math 266B Section A01 (Barsamian) Homework, Version 4

HW	Section	Assigned Problems (turn in)	Suggested Problems (do not turn in)
H1	5.8	5, 18, 22, 26, 58	6, 17, 19, 23, 25, 31, 36, 37, 41, 45, 57
	6.1	3, 14, 16, 26, 36	1, 6, 7, 9, 10, 13, 21, 22, 26, 27, 29, 30, 32, 37, 51, 52, 55, 57, 58, 59, 61, 62, 63, 76, 77, 78
	CP1	CP1 results	(The Computer Projects are posted on the course web page.)
	6.2	none	5, 9, 13, 43, 45, 57, 65, 67, 71, 75, 80, 81, 87, 89, 95, 99, 105, 107, 108, 109, 111, 115, 117, 119
	6.3 Skip 6.3.5	none	1, 7, 13, 17*, 19, 23, 29, 35, 36, 38, 40, 47 (*typo: 17c should say "...between time 0 and time 5...")
H2	7.1	4, 12, 18, 22, 30, 50	3, 5, 7, 9, 11, 13, 17, 19, 29, 33, 37, 39, 41, 45, 47, 49, 51, 53, 57
	7.2	2, 8, 12, 18	3, 9, 11, 19, 21, 27, 31, 35, 39, 41, 43, 45, 47
	CP2	CP2 results	(The Computer Projects are posted on the course web page.)
H3	7.3	2, 24, 28, 30, 34, 38	1, 6, 9, 10, 11, 12, 19, 21, 23, 27, 35, 39, 40, 41, 43
	7.4	2, 13, 20, 33	3, 5, 9, 11, 19, 34
	CP3	CP3 results	(The Computer Projects are posted on the course web page.)
	7.6	none	2, 3, 6, 9, 14, 17, 18, 19
	7.7	none	2, 3, 11, 12, 13, 14, 19, 20, 28
H4	8.1	4, 12, 18, 24, 28, 40, 46	2, 5, 6, 10, 13, 19, 22, 26, 45, 53
	Turn in your solutions to Group Work 2: Differential Equations		
H5	8.2	4, 10, 14	2, 7, 13, 20, 25
	9.1	2, 12, 16	1, 3, 9, 11, 15, 19, 21
	CP5	CP5 results	(The Computer Projects are posted on the course web page.)
H6	9.2	16, 22, 26, 46, 52, 54	2, 15, 23, 24, 27, 29, 31, 45, 47, 49, 51, 53, 55, 61, 63, 65
	9.3 Skip 9.3.3	8, 14, 20, 46	1, 3, 7, 9, 13, 17, 27, 29, 31, 37, 39, 41, 45, 53, 55, 59, 61, 63, 65
	CP6	CP6 results	(The Computer Projects are posted on the course web page.)
H7	11.1 Skip 11.1.3	2, 6, 12, 20	1, 7, 9, 11, 13, 17, 19
	CP7	CP7 results	(The Computer Projects are posted on the course web page.)