



**ATTENDANCE:** Regular attendance is required. Frequent absences will result in a “W” or “F” for the class. The last day for you to drop the class is **May 31**. After that day, you will receive a grade.

Chapter	SEC	Topics		Monday	Tuesday	Wednesday	Thursday	Friday
Integrals	5.1	Areas and Distances	April	8	9	10	11	12
	5.2	The Definite Integral		5.1, 5.2		5.2, 5.3		
	5.3	The Fundamental Theorem of Calculus	April	15	16	17	18	19
	5.4	Indefinite Integrals and the Net Change Thm		5.3, 5.4		5.5		
	5.5	The Substitution Rule						
Hyp/Invhyp	3.11	Hyperbolic and Inverse Hyperbolic Functions						
Appendix G		ln as a def. integral & exp as the inv of ln.	April	22	23	24	25	26
Applications of Integrals	6.1	Areas Between Curves	April	3.11		AppG		
	6.2	Volumes						
	6.3	Volume by Cylindrical Shells	April	29	30	1	2	3
	6.4	Work	May	Review		6.1, 6.2		
	6.5	Average Value of a Function		Exam 1				
Techniques of Integration	7.1	Integration by Parts	May	6	7	8	9	10
	7.2	Trigonometric Integrals	May	6.3, 6.4		6.4, 6.5		
	7.3	Trigonometric Substitution						
	7.4	Integration of Rat'l Funct'ns by Partial Fractions	May	13	14	15	16	17
	7.5	Strategy for Integration	May	7.1, 7.2		7.2, 7.3		
	7.6	Integration Using Tables and Computer						
	7.7	Approximate Integration		20	21	22	23	24
	7.8	Improper Integrals		Review		7.4, 7.5		
Further Applications	8.1	Arc Length	May	27	28	29	30	31
	10.2	Arc Length of Parametric Equations		Memorial Day		7.6, 7.7		
	8.3	Applications to Physics and Engineering		<b>Holiday</b>				last day to drop w/W
	8.5	Probability						
Differential Equations	9.1	Modeling with Differential Equations	June	3	4	5	6	7
	9.2	9.2 Direction Fields and Euler's Method	June	7.8		8.1, 10.2, 8.3		
	9.3	9.3 Separable Equations						
	9.4	9.4 Models for Population Growth	June	10	11	12	13	14
<p>All homework assignments and due dates are listed on WebAssign.</p> <p>These are the least amount of exercises you need to do. If you don't master the material well after doing WebAssign, work with more of the similar problems in the text.</p>			June	Review		8.5		
			Exam 3					
			June	17	18	19	20	21
	9.1, 9.2		9.3, 9.4					
June	24	25	26	27	28			
			<b>Final</b>					
			<b>1:45-4:45p</b>					

**Student Learning Outcome(s):**

- \*Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
- \*Formulate and use the Fundamental Theorem of Calculus.
- \*Apply the definite integral in solving problems in analytical geometry and the sciences.