

INTRODUCTION:

Welcome to integration calculus. I am Millia Ison. I have been teaching at DeAnza College for almost 30 years. I plan to work with you closely to help you to succeed. In this course, you will use of your algebra, and pre calculus skills to work with higher level mathematics and solve interesting application problems.

You will need to spent **at least 25 hours a week** to study the material, do homework and quizzes. Homework and quizzes are on webassign. About \$100 to purchase the access online. If you used webassign in Math 1A at DeAnza, you may already have your account. Class code is in the syllabus next page.

Homework: You have 5 submissions to get the correct answer for a question to earn a point. It is very important for you to understand the concepts when you do problems. You need to practice until you can do a problem without a sample example, notes or hint. Sections listed on the class syllabus calendar are suggested study plan.

Quizzes: You have quiz twice a week. I list section number as quiz name on webassign. For example Quiz 5.3 means this quiz covers section 5.3 in the text. Learn the material and do the related homework first before you start quiz. You have 3 submissions for each question on quiz. Quiz(zes) will be available Monday 8 am weekly, due the following Sunday 11:59 pm. Once you start, you have 60 minutes to finish. **NO EXTENSION.**

Exams and Final: Reveiws for each exam will be provided on Webassgn a few days before the exam for you to prepare. Doing the reviews will **not** earn you any points for your grade. Exams and Final are to test your understanding of the course material. Questions on exams are similar to the questions on the reviews.

Need Help?

1. Tutoring is available both on-campus and online. See <http://deanza.edu/studentssuccess/mstrc/>
2. Post questions in the Discussion section in Canvas
3. Email me at isonmillia@deanza.edu
4. Form a study group with other students in the class
5. Follow the “NetTutor” on the navigation in Canvas

Students with disability-related need for academic accomidations or services, please contact Disability Support Services (DSS) 408 864 8753 or Educational Diognistic Center (EDC) 408 864 8839. The Center will inform me your situation. You may take exams at EDC, but you must schedule with EDC Wednesday or Thursday of the official exam week. You need to schedule one week ahead the exam day.

Chapter	SEC	PROBLEMS		Monday	Tuesday	Wednesday	Thursday	Friday	
Integrals	5.1	Areas and Distances	April	6	7	8	9	10	
	5.2	The Definite Integral							
	5.3	The Fundamental Theorem of Calculus							
	5.4	Indefinite Integrals and the Net Change Thm	April	13	14	15	16	17	
	5.5	The Substitution Rule	Wk1	5.1, 5.2 Quiz 5.2		5.2, 5.3 Quiz 5.3			
Applications of Integrals	6.1	Aresa Between Curves	April	20	21	22	23	24	
	6.2	Volumes							
	6.3	Volume by Cylindrical Shells	Wk2	5.4, 5.5 Quiz 5.4		5.5, 6.1 Quiz 6.1			
	6.4	Work	April	27	28	29	30	1	
	6.5	Average Value of a Function	May Wk3	6.2 Quiz 6.2		6.3, 6.4 Quiz 6.3			
Techniques of Integration	7.1	Integration by Parts	May	4	5	6	7	8	
	7.2	Trigonometric Integrals							
	7.3	Trigonometric Substitution	Wk4	Exam 1 4-5:30 pm		6.4, 6.5 Quiz 6.4			
	7.4	Integration of Rat'l Funct'ns by Partial Fractions	May	11	12	13	14	15	
	7.5	Strategy for Integration	Wk5	7.1 Quiz 7.1		7.2, 7.3 Quiz 7.2			
	7.7	Approximate Integration							
	7.8	Improper Integrals	May Wk6	18 7.3, 7.4 Quiz 7.4	19	20 7.5, 7.7 Quiz 7.5, 7.7	21	22	
Further Applications	8.1	Arc Length							
	10.2	Arc Length of Parametric Equations	May	25	26	27	28	29	
	8.3	Applications to Physics and Engineering	Wk7	Holiday Memorial Day		7.8 Quiz 7.8			
	8.5	Probability	June	1	2	3	4	5	
Differential Equations	9.1	Modeling with Differential Equations						last day to drop w/W	
	9.2	Direction Fields and Euler's Method	Wk8	8.1, 10.2 Quiz 8.1, 10.2		8.3 Quiz 8.3			
	9.3	Separable Equations	June	8	9	10	11	12	
All homework assignments and due dates are listed on WebAssign. These are the least amount of exercises you need to do. If you don't master the material well afterdoing WebAssign, work with more of the similar problems in the text.			Wk9	Exam 2 4-5:30 pm		8.5 Quiz 8.5			
			June	15	16	17	18	19	
			Wk10	9.1, 9.2 Quiz 9.1, 9.2		9.3 Quiz 9.3			
			June	22	23	24	25	26	
			Wk11	Reivew		Final 4:00 – 6:00p			

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.