Math 16B: Short Calculus: Second Quarter
Spring Quarter 2023 at UC Davis

(Tentative) Schedule:
Disclaimer: The following schedule is tentative, and there may be changes. I will send an announcement on Canvas to notify students of any changes.

Also see the department syllabus for Math 16B (https://www.math.ucdavis.edu/courses/syllabus_detail?cm_id=11).

Lecture 1: Exponential Functions and their Derivatives. *(Sections 4.1, 4.2, and 4.3)*

Lecture 2: Logarithmic Functions. *(Section 4.4)*

Lecture 3: Derivatives of Logarithmic Functions. *(Section 4.5)*

Lecture 4: Exponential Growth and Decay. *(Section 4.6)*

Lecture 5: Antiderivatives and Indefinite Integrals. *(Section 5.1)*

Lecture 6: Integration by Substitution and the General Power Rule. *(Section 5.2)*

Lecture 7: Simple Trigonometric Integrals. *(Section 8.5, first part)*

Lecture 8: Exponential and Logarithmic Integrals. *(Section 5.3)*

Lecture 9: Definite Integrals and the Fundamental Theorem of Calculus. *(Section 5.4)*

Lecture 10: Area of a Region Bounded by Two Graphs. *(Section 5.5)*

Lecture 11: Catch-up/Review.

MIDTERM 1

Lecture 12: Volumes of Solids of Revolution (disk/washer method). *(provided notes, not in textbook)*

Lecture 13: Integration by Parts: Part 1. *(Section 6.1)*

Lecture 14: Integration by Parts: Part 2. *(Section 6.1)*

Lecture 15: Trigonometric Integrals. *(Section 8.5, remainder of section)*

Lecture 16: Partial Fractions. *(provided notes, not in textbook)*

Lecture 17: Improper Integrals. *(Section 6.4)*

Lecture 18: Discrete Probability. *(Section 9.1)*

Lecture 19: Continuous Random Variables. *(Section 9.2)*

Lecture 20: Mean and Median; Variance and Standard Deviation. *(Section 9.3)*

Lecture 21: Uniform, Normal, and Exponential Probability Density Functions. *(Section 9.3)*

Lecture 22: Catch-up/Review.

MIDTERM 2

Lecture 23: The Definite Integral as the Limit of a Sum, and the Midpoint Rule. *(Section 5.6)*

Lecture 24: The Trapezoidal Rule and Simpson's Rule. *(Section 6.3)*

Lecture 25: Integration Tables and Completing the Square. *(Section 6.2)*

Lecture 26: Catch-up/Review.

FINAL EXAM

APRIL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3 Lecture 1	4	5 Lecture 2	6	7 Lecture 3	8
9	10 Lecture 4 Homework 1 due by 10:00pm (on Gradescope) Technology Assignment (optional) due by 10:00pm (on Gradescope)	11	12 Lecture 5	13	14 Lecture 6	15
16	17 Lecture 7 Homework 2 due by 10:00pm (on Gradescope)	18	19 Lecture 8	20	21 Lecture 9	22
23	24 Lecture 10 Homework 3 due by 10:00pm (on Gradescope)	25	26 Lecture 11	27	28 **MIDTERM 1**	29
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MAY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Lecture 12 Homework 4 due by 10:00pm (on Gradescope)	2	3 Lecture 13	4	5 Lecture 14	6
7	8 Lecture 15 Homework 5 due by 10:00pm (on Gradescope)	9	10 Lecture 16	11	12 Lecture 17	13
14	15 Lecture 18 Homework 6 due by 10:00pm (on Gradescope)	16	17 Lecture 19	18	19 Lecture 20	20
21	22 Lecture 21 Homework 7 due by 10:00pm (on Gradescope)	23	24 Lecture 22	25	26 **MIDTERM 2**	27

28	29 HOLIDAY	30	31 Lecture 23 Homework 8 due by 10:00pm (on Gradescope)			

JUNE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2 Lecture 24	3
4	5 Lecture 25 Homework 9 due by 10:00pm (on Gradescope)	6	7 Lecture 26	8	9 **FINAL EXAM** 10:30am-12:30pm	10