ShareWorld Learning Center 2023 06/19~08/09 Calculus AB & BC

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Textbook:

FINNEY DEMANA WAITS KENNEDY CALCULUS A COMPLETE COURSE SECOND EDITION ISBN 0-201-44140-3, 0-2014-4140-3

Date	Syllabus	Date	Syllabus
06/19	Chapter 1: Prerequisites for Calculus	06/21	Chapter 2: Limits and Continuity
	1.1 Lines		2.1 Rates of Change and Limits
	1.2 Functions and Graphs		2.2 Limits Involving Infinity
	1.3 Exponential Functions		2.3 Continuity
	1.4 Parametric Equations		2.4 Rates of Change and Tangent
	1.5 Functions and Logarithms		Lines
	1.6 Trigonometric Functions		Homework: TBD
	Homework: TBD		
06/26	Chapter 3: Derivatives	06/28	Continue Chapter 3: Derivatives
	3.1 Derivative of a Function		3.1 Derivative of a Function
	3.2 Differentiability		3.2 Differentiability
	3.3 Rules for Differentiation		3.3 Rules for Differentiation
	3.4 Velocity and Other Rates of		3.4 Velocity and Other Rates of
	Change		Change
	3.5 Derivatives of Trigonometric		3.5 Derivatives of Trigonometric
	Functions		Functions
	3.6 Chain Rule		3.6 Chain Rule
	3.7 Implicit Differentiation		3.7 Implicit Differentiation
	3.8 Derivatives of Inverse		3.8 Derivatives of Inverse
	Trigonometric Functions		Trigonometric Functions
	3.9 Derivatives of Exponential and		3.9 Derivatives of Exponential and
	Logarithmic Functions		Logarithmic Functions
	Homework: TBD		Homework: TBD
07/03	Chapter 4: Applications of	07/05	Continue Chapter 4: Applications of
	Derivatives		Derivatives
	4.1 Extreme Values of Functions		4.1 Extreme Values of Functions
	4.2 Mean Value Theorem		4.2 Mean Value Theorem
	4.3 Connecting f' and f" with the		4.3 Connecting f' and f' with the
	Graph of f		Graph of f
	4.4 Modeling and Optimization		4.4 Modeling and Optimization
	4.5 Linearization and Newton's		4.5 Linearization and Newton's
	Method		Method
	4.6 Related Rate		4.6 Related Rate
	Homework: TBD		Homework: TBD

07/10	Chapter 5: The Definite Integral	07/12	Continue Chapter 5: The Definite
	5.1 Estimating with Finite Sums		Integral
	5.2 Definite Integrals		5.1 Estimating with Finite Sums
	5.3 Definite Integrals and		5.2 Definite Integrals
	Antiderivatives		5.3 Definite Integrals and
	5.4 Fundamental Theorem of		Antiderivatives
	Calculus		5.4 Fundamental Theorem of
	5.5 Trapezoidal Rule		Calculus
	Homework: TBD		5.5 Trapezoidal Rule
			Homework: TBD
07/17	Continue Chapter 5: The Definite	07/19	Continue Chapter 5: The Definite
	Integral		Integral
	5.1 Estimating with Finite Sums		5.1 Estimating with Finite Sums
	5.2 Definite Integrals		5.2 Definite Integrals
	5.3 Definite Integrals and		5.3 Definite Integrals and
	Antiderivatives		Antiderivatives
	5.4 Fundamental Theorem of		5.4 Fundamental Theorem of
	Calculus		Calculus
	5.5 Trapezoidal Rule		5.5 Trapezoidal Rule
	Homework: TBD		Homework: TBD
07/24	Chapter 6: Differential Equations and	07/26	Continue Chapter 6: Differential
	Mathematical Modeling		Equations and Mathematical
	6.1 Antiderivatives and Slope Fields		Modeling
	6.2 Integration by Substitution		6.1 Antiderivatives and Slope Fields
	6.3 Integration by Parts		6.2 Integration by Substitution
	6.4 Exponential Growth and Decay		6.3 Integration by Parts
	6.5 Population Growth		6.4 Exponential Growth and Decay
	6.6 Numerical Methods		6.5 Population Growth
	Homework: TBD		6.6 Numerical Methods
			Homework: TBD
07/31	Chapter 7: Applications of Definite	08/02	Continue Chapter 7: Applications of
	Integrals		Definite Integrals
	7.1 Integral as Net Changes		7.1 Integral as Net Changes
	7.2 Areas in the Plane		7.2 Areas in the Plane
	7.3 Volumes		7.3 Volumes
	7.4 Lengths of Curves		7.4 Lengths of Curves
	7.5 Applications from Science and		7.5 Applications from Science and
	Statistics		Statistics
	Homework: TBD		Homework: TBD
08/07	Chapter 8: L'Hopital's Rule	08/09	Continue Chapter 8: L'Hopital's
	8.1 L'Hopital's Kule		Kule $0.1 \pm 211 + 1^{2} + 1^{2} + 1^{2} + 1^{2} + 1^{2}$
	8.2 Relative Rates of Growth		8.1 L'Hopital's Kule
	8.3 Improper Integrals		8.2 Relative Rates of Growth
	8.4 Partial Fractions and Integral		8.3 Improper Integrals
	l'ables		8.4 Partial Fractions and Integral
	Homework: TBD		Tables
			Homework: TBD