**MATH 2407VC01 Schedule of Topics**

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| Week 1 | 2.1 - 2.4 |
| Week 2 | 2.5 - 2.8 |
| Week 3 | 3.1 - 3.4 |
| Week 4 | 3.5 - 3.6, 3.9, 3.10 |
| Week 5 | 4.1 - 4.4, Midterm |
| Week 6 | 4.7, 4.9, 5.1, 5.2 |
| Week 7 | 5.3 - 5.5 |
| Week 8 | Final |
|  Content |
| Section 2.1: The Tangent and Velocity Problems |
| Section 2.2: The Limit of a Function |
| Section 2.3: Calculating Limits Using the Limit Laws |
| Section 2.4: The Precise Definition of a Limit |
| Section 2.5: Continuity |
| Section 2.6: Limits at Infinity; Horizontal Asymptotes |
| Section 2.7: Derivatives and Rates of Change |
| Section 2.8: The Derivative as a Function |
| Section 3.1: Derivatives of Polynomials and Exponential Functions |
| Section 3.2: The Product and Quotient Rules |
| Section 3.3: Derivatives of Trigonometric Functions |
| Section 3.4: The Chain Rule |
| Section 3.5: Implicit Differentiation |
| Section 3.6: Derivatives of Logarithmic Functions |
| Section 3.9: Related Rates |
| Section 3.10: Linear Approximations and Differentials |
| Section 4.1: Maximum and Minimum Values |
| Section 4.2: The Mean Value Theorem |
| Section 4.3: How Derivatives Affect the Shape of a Graph |
| Section 4.4: Indeterminate Forms and l’Hospital’s Rule |
| Section 4.5: Summary of Curve Sketching |
| Section 4.7: Optimization Problems |
| Section 4.9: Antiderivatives |
| Section 5.1: Areas and Distances |
| Section 5.2: The Definite Integral |
| Section 5.3: The Fundamental Theorem of Calculus |
| Section 5.4: Indefinite Integrals and the Net Change Theorem |
| Section 5.5: The Substitution Rule |