MAT 154: Calculus II
FL 2017 Course Calendar

Date	Topic	Textbook Reference
M 8-28	Course Introduction	
T 8-29	Review of Basic Integration including U-Substitution	4.9, 5.3, 5.5
UNIT ONE: GEOMETRIC APPLICATIONS OF THE INTEGRAL		
W 8-30	Area Between Curves	6.2
R 8-31	Volumes of Solids of Revolution – Disk Method	6.3
T 9-5	Volumes of Solids of Revolution – Washer Method	6.3
W 9-6	Volumes of Solids of Revolution – Shell Method	6.4
R 9-7	Volumes of Solids of Revolution – mixed practice	6.3-6.4
F 9-8	Length of a Curve	6.5
M 9-11	Surface Area of a Solid of Revolution	6.6
T 9-12	Review Unit One	6.2-6.6
W 9-13	Test: Unit One	6.2-6.6
UNIT TWO: PHYSICAL APPLICATIONS OF THE INTEGRAL		
R 9-14	Motion: Position-Velocity-Acceleration	6.1
F 9-15	Net Change	6.1
M 9-18	Mass, Center of Mass	6.7
T 9-19	Work	6.7
W 9-20	Fluid Pressure	6.7
R 9-21	Extra Practice	6.1, 6.7
F 9-22	A Little Math Theory Exploration	6.8
M 9-25	Natural Log and Exponential Functions	6.8
T 9-26	Exponential Growth and Decay	6.9
W 9-27	Hyperbolic Trig Functions	6.10
R 9-28	Calculus and Applications of Hyperbolic Trig Functions	6.10
F 9-29	Review Unit Two	6.1, 6.7-6.10
M 10-2	Test: Unit Two	6.1, 6.7-6.10
UNIT THREE: TECHNIQUES OF INTEGRATION (ANALYTIC)		
T 10-3	Basic Approaches	7.1
W 10-4	Integration by Parts	7.2
R 10-5	Integration of Trig Functions: Powers of Sine and Cosine	7.3
F 10-6	Integration of Trig Functions: Tangent, Cotangent, Secant, Cosecant	7.3
M 10-9	Integration Using Trig Substitutions: Sine and Tangent Substitutions	7.4
T 10-10	Integration Using Trig Substitutions: Secant Substitution; mixed practice	7.4
R 10-12	Integration by Partial Fractions: Linear Factors	7.5
F 10-13	Integration by Partial Fractions: Quadratic Factors	7.5
M 10-16	Integration Methods: Tricks and Tips, Mixed Review	7.1-7.5
T 10-17	Review Unit Three	7.1-7.5
W 10-18	Test: Unit Three	7.1-7.5
UNIT FOUR: ADDITIONAL INTEGRATION TOPICS		
R 10-19	Integration Using Tables	7.6
F 10-20	Integration Using Numerical Methods/Technology	7.7
T 10-24	Review Limits; Indeterminate forms 0/0 and ∞ / ∞ and L'Hopital's Rule	Chapter 2, 4.7

W 10-25	Indeterminate Forms $\infty - \infty$, $0 \bullet \infty$, 1^{∞}, 0^{0}, ∞^{0} and L'Hopital's Rule	4.7
R 10-26	Improper Integrals: Discontinuity at Endpoints	7.8
F 10-27	Improper Integrals: Discontinuity within Interval	7.8
M 10-30	Introduction to Differential Equations: Separable Equations	7.9
T 10-31	Review Unit Four	4.7, 7.6-7.9
W 11-1	Test: Unit Four	4.7, 7.6-7.9
	UNIT FIVE: SEQUENCES AND SERIES	
R 11-2	Introduction to Sequences	8.1
M 11-6	Convergence of Sequences	8.2
T 11-7	Convergence of Sequences	8.2
W 11-8	Infinite Series	8.3
R 11-9	Convergence of Series: Divergence Test, Integral Test	8.4
F 11-10	Convergence of Series: Ratio Test, Root Test	8.5
M 11-13	Convergence of Series: Comparison Test, Limit Comparison Test	8.5
T 11-14	Convergence of Series: Alternating Series	8.6
W 11-15	Convergence of Series: Mixed Practice	8.3-8.6
R 11-16	Review Unit Five	8.1-8.6
M 11-20	Review Unit Five	8.1-8.6
T 11-21	Test: Unit Five	8.1-8.6
	UNIT SIX: POWER SERIES	
M 11-27	Approximating Functions with Polynomials	9.1
T 11-22	Properties of Power Series	9.2
M 11-28	Properties of Power Series	9.2
T 11-29	Taylor Series	9.3
W 11-30	Taylor Series	9.3
R 12-1	Calculus of Power Series	9.4
F 12-2	Review Unit Five	9.1-9.4
M 12-5	Test: Unit 5	9.1-9.4
	UNIT SEVEN: PARAMETRIC AND POLAR EQUATIONS	
T 12-6	Parametric Equations: Lines and Circles	10.1
W 12-7	Parametric Equations: Other	10.1
R 12-8	Polar Coordinate System	10.2
M 12-12	Equations in Polar Coordinates	10.2
T 12-13	Calculus in Polar Coordinates	10.3
W 12-14	Calculus in Polar Coordinates	10.3
R 12-15	Conic Sections	10.4
M 12-19	Review – Whole Course	Chapters 6-10
T 12-20	Final Exam Part A	Chapters 6-10
W 12-21	Final Exam Part B	Chapters 6-10
R 12-22	Receive Final Grades	

IMPORTANT NOTE: The above calendar is intended to give you an idea of how the semester may progress. However, it is subject to change as needed. The instructor will inform you of changes or updates as they occur; it is important that you attend class each day in order to be sure that you have the most up-to-date information