DATE	DUE	TOPIC
M 8.28		§1.1: Course introduction; vocabulary related to ODEs
W 8.30		§1.2: What makes a differential equation "linear"
F 9.1	1-20	§1.2: More on linearity
M 9.4	*No class - Labor Day*	
W 9.6	*Mathematica* demonstration	
F 9.8		§1.3-1.4: Exponential growth and decay
M 9.11	21-31	§1.4: Slope fields for first-order ODEs
W 9.13		§1.5-1.6: Euler's method; existence/uniqueness
F 9.15		§1.6-1.7: Introduction to autonomous equations
M 9.18	32-39	§1.7: Classification of equilibria
W 9.20		§2.1: First-order homogeneous linear equations
F 9.22		§2.2: Integrating factors
M 9.25	40-53	§2.3: Undetermined coefficients
W 9.27		Review of first-order linear equations
F 9.29	54-60	§2.4: Separation of variables
M 10.2		§2.5: Compartmental models
W 10.4		§2.5: Heating and cooling models; RL and RC circuits
F 10.6	61-74	Review
M 10.9	**EXAM 1 (covers Chapters 1 and 2)**	
W 10.11		§3.1-3.2: Introduction to systems of ODEs
F 10.13	75-86	§3.3-3.4: Existence/uniqueness for systems; matrix operations
M 10.16		§3.4-3.5: Inverses and determinants
W 10.18		§3.6: Characterization of linear systems
F 10.20	87-98	§3.6: Theoretical solution of first-order linear systems
M 10.23		§3.7: Autonomous systems; analysis of phase planes
W 10.25		§4.1: Matrix exponentials
F 10.27	99-111	§4.1: The meaning of eigenvalues and eigenvectors
M 10.30		§4.2: Introduction to complex numbers
W 11.1		§4.2-4.3: Solving systems with complex eigenvalues
F 11.3	112-120	§4.3: More on systems with complex eigenvalues
M 11.6		§4.4-4.5: Repeated eigenvalues
W 11.8	121-127	§4.6: Non-homogeneous systems
F 11.10		§4.7: Classification of equilibria
M 11.13	128-136	§4.8: The trace-determinant plane
W 11.15		§4.9: Interconnected tanks
F 11.17		§4.9: SIR models
M 11.20	137-141	Review
W 11.22	*No class - Thanksgiving break*	
F 11.24	*No class - Thanksgiving break*	
M 11.27	**EXAM 2 (covers Chapters 3 and 4)**	
W 11.29		§5.1: Higher-order linear equations; reduction of order
F 12.1	142-144	§5.2: Constant-coefficient higher-order equations
M 12.4		§5.3: Mass-spring systems
W 12.6	145-152	§5.3: Pendulums and/or electrical circuits
F 12.8		Review
T 12.12	153-159	**FINAL EXAM (cumulative)** 10-11:40 AM in STR 137