

MATH 3530: Elementary Differential Equations

Fall 2026

University of Mississippi

Instructor: Yunfeng (Walt) Zhang

Tentative Course Schedule

The schedule may be adjusted according to the pace and needs of the class.

Date	Section	Topic
Tue. Aug. 25	1.1	Definitions and terminology
Thu. Aug. 27	1.2	Initial-value problems
Tue. Sept. 1	1.3	Differential equations as mathematical models
Thu. Sept. 3	2.1	Solution curves without a solution
<i>Sept. 4: Last day to withdraw with a refund</i>		
Tue. Sept. 8	2.2	Separable variables
Thu. Sept. 10	2.3	Linear equations
Tue. Sept. 15	2.4	Exact equations
Thu. Sept. 17	2.5	Solutions by substitutions
Tue. Sept. 22	3.1	Linear models
Thu. Sept. 24	3.2	Nonlinear models
Tue. Sept. 29	Catch-up / Review	
Thu. Oct. 1	Test 1	Test 1
Tue. Oct. 6	4.1	Preliminary theory: linear equations
Thu. Oct. 8	4.2	Reduction of order
<i>Oct. 12: Last day to withdraw without a refund</i>		
Tue. Oct. 13	4.3	Homogeneous linear equations with constant coefficients
Thu. Oct. 15	4.4	Undetermined coefficients
Tue. Oct. 20	4.6	Variation of parameters
Thu. Oct. 22	5.1	Linear models: initial-value problems
Tue. Oct. 27	Catch-up / Review	
Thu. Oct. 29	Test 2	Test 2
Tue. Nov. 3	7.1	Definition of the Laplace transform
Thu. Nov. 5	7.2	Inverse transforms and transforms of derivatives
Tue. Nov. 10	7.3	Operational properties I
Thu. Nov. 12	7.4	Operational properties II
Tue. Nov. 17	Catch-up / Review	
Thu. Nov. 19	Test 3	Test 3
Tue. Nov. 24	—	Thanksgiving Break — No Class
Thu. Nov. 26	—	Thanksgiving Break — No Class
Tue. Dec. 1	Review	Comprehensive Review I
Thu. Dec. 3	Review	Comprehensive Review II

The comprehensive final examination will be given at the date and time specified by the University of Mississippi final examination schedule.