

# FALL 2020 — MAT 2250-03

## Tentative Course Calendar

MONDAY	WEDNESDAY	FRIDAY	
17th NO CLASS	19th NO CLASS	21st <i>1.1 System of Linear Equations</i>	Aug
24th <i>1.2 Row Reduction and Echelon Form</i>	26th <i>1.3 Vector Equation</i> <i>1.4 The Matrix Equation <math>Ax = b</math></i>	28th <i>1.5 Solution Sets</i> QUIZ 1	
31st <i>1.7 Linear Independent</i>	2nd <i>1.8 Linear Transformation</i> <i>1.9 Matrix of a Linear Transformation</i>	4th <i>2.1 Matrix Operations</i> QUIZ 2	Sep
7th NO CLASS	9th <i>2.2 Inverses</i>	11th <i>2.3 Characterization of Invertible Matrices</i> QUIZ 3	
14th <i>3.1 Introduction to Determinants</i>	16th <i>3.2 Properties of Determinants</i>	18th <i>4.1 Vector Spaces and Subspaces</i>	
21st Review	23rd <b>Midterm #1</b>	25th <i>4.2 Null Spaces, Column Spaces</i>	
28th <i>4.3 Linear Independent Sets; Basis</i> QUIZ 4	30th <i>4.4 Coordinate Systems</i>	2nd <i>4.5 Dimension of a Vector space</i>	Oct
5th <i>4.6 Rank</i> QUIZ 5	7th <i>4.7 Change of Basis</i>	9th <i>5.1 Eigenvectors and Eigenvalues</i> <i>5.2 The Characteristic Equation</i>	
12th <i>5.3 Diagonalization</i> QUIZ 6	14th <i>A1.1 Introduction to Differential Equations</i> <i>A1.2 Solutions and Initial Value Problems</i>	16th <i>A2.1 Motion of a Falling Body</i> <i>A2.2 Separable Equations</i>	
19th <i>A2.3 Linear Equations</i>	21st <i>A3.2 Compartmental Analysis (mixing problems and population growth)</i>	23rd <i>A3.2</i>	
26th Review	28th <b>Midterm #2</b>	30th <i>A4.1 The Mass-Spring Oscillator</i>	

MONDAY	WEDNESDAY	FRIDAY	
2nd <b>31</b> <i>A4.2 Homogeneous Linear Differential Equation</i> <i>A4.3 Auxiliary Equation with Complex Roots</i> QUIZ 7	4th <b>32</b> <i>A4.4 Methods of Undetermined Coefficients</i>	6th <b>33</b> <i>A4.5 The Superposition Principal and Undetermined Coefficients</i>	Nov
9th <b>34</b> <i>A4.9 A Closer Look at Free Mechanical Vibration</i> QUIZ 8	11th VETERANS DAY NO CLASS	13th <b>35</b> <i>A6.1 Basic Theory of Linear Differential Equations</i> <i>A6.2 Homogeneous Linear Equations</i>	
16th <b>36</b> <i>A9.1 Introduction to Systems of DE's</i> <i>A9.4 Linear Systems in Normal Form</i>	18th <b>37</b> <i>A9.5 Homogeneous Linear Systems with Constant Coefficients</i>	20th <b>38</b> <i>A9.5 Homogeneous Linear Systems with Constant Coefficients</i> QUIZ 9	
23rd <b>39</b> <b>Review</b>	25th <b>40</b> <b><i>Midterm #3</i></b>	27th THANKSGIVING NO CLASS	
30th <b>41</b> <i>11.7 Non-Homogeneous Linear Systems</i>	2nd <b>42</b> <i>11.8 The Matrix Exponential Functions</i>	4th <b>43</b> <b>Review</b>	Dec

**FINAL EXAM: WEDNESDAY, DEC 9<sup>TH</sup> , 11:00AM–1250PM**