

# AUGUST 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	First Day of Class 17 Matrices and Matrix Addition	18	Rotation Matrices 19 and Matrix Multiplication  Quiz: Matrices and Matrix Addition	20
21	Elementary Row 22 and Column Operations  Quiz: Rotation Matrices and Matrix Multiplication	Group Work: 23 Matrix Operations	The Method of 24 Gaussian Elimination in Linear Systems  Quiz: Elementary Row and Column Operations	25	Invertible Matrices 26  Quiz: the Method of Gaussian Elimination in Linear Systems	27
28	Vector Spaces 29  Quiz: Invertible Matrices	Group Work: 30 Gaussian Elimination and Matrix Inversion	Span and Linear 31 Independence  Quiz: Vector Spaces			

# SEPTEMBER 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	Vector Space Dimension 2 Quiz: Span and Linear Independence	3
4	Labor Day 5	Group Work: Vector Spaces, Bases, and Dimension 6	Matrix Rank 7 Quiz: Vector Space Dimension	8	Linear Transformations 9 Quiz: Matrix Rank	10
11	Kernels and Images of Linear Transformations 12 Quiz: Linear Transformations	Group Work: Rank and Nullity of a Linear Transformation 13	The Rank-Nullity Theorem 14 Quiz: Kernels and Images of Linear Transformations	15	Composition and Inversion of Linear Transformations 16 Quiz: the Rank-Nullity Theorem	17
18	Matrices of Linear Transformations 19 Quiz: Composition and Inversion of Linear Transformations	Group Work: Polynomials of Matrices 20	Change of Basis 21 Quiz: Matrices of Linear Transformations	22	Exam I Review 23 Quiz: Change of Basis	24
25	Exam I 26	Group Work: the Smith Normal Form of a Matrix 27	Determinants of $2 \times 2$ Matrices 28	29	Determinants of $n \times n$ Matrices 30 Quiz: Determinants of $2 \times 2$ Matrices	1

# OCTOBER 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<i>2</i>	The Adjugate of a Matrix <i>3</i> <i>Quiz: Determinants of <math>n \times n</math> Matrices</i>	Group Work: Determinants <i>4</i>	Polynomials Associated to Matrices <i>5</i> <i>Quiz: the Adjugate of a Matrix</i>	<i>6</i>	<i>Fall Break</i> <i>7</i>	<i>8</i>
<i>9</i>	Eigenvalues and Eigenvectors <i>10</i> <i>Quiz: Polynomials Associated to Matrices</i>	Group Work: the Characteristic and Minimal Polynomials <i>11</i>	Eigenspaces <i>12</i> <i>Quiz: Eigenvalues and Eigenvectors</i>	<i>13</i>	Upper-Triangular Matrices <i>14</i> <i>Quiz: Eigenspaces</i>	<i>15</i>
<i>16</i>	The Spectral Theorem I <i>17</i> <i>Quiz: Upper-Triangular Matrices</i>	Group Work: Eigenvalues, Eigenvectors, and Eigenspaces <i>18</i>	The Spectral Theorem II <i>19</i> <i>Quiz: the Spectral Theorem I</i>	<i>20</i>	The Rational Canonical Form <i>21</i> <i>Quiz: the Spectral Theorem II</i>	<i>22</i>
<i>23</i>	The Jordan Canonical Form <i>24</i> <i>Quiz: the Rational Canonical Form</i>	Group Work: Computing the Canonical Forms <i>25</i>	Exam II Review <i>26</i> <i>Quiz: the Jordan Canonical Form</i>	<i>27</i>	<b>Exam II</b> <i>28</i>	<i>29</i>
<i>30</i>	Real Vector Spaces <i>31</i>					

# NOVEMBER

## 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		Group Work: Real Vector Spaces 1	The Dot Product 2 Quiz: Real Vector Spaces	3	Parametric Equations 4 Quiz: the Dot Product	5
6	Lines and Planes 7 Quiz: Parametric Equations	Group Work: Lines and Planes 8	Inner Products 9 Quiz: Lines and Planes	10	Orthogonal Bases 11 Quiz: Inner Products	12
13	The Orthogonal Complement of a Vector Space 14 Quiz: Orthogonal Bases	Group Work: the Gram-Schmidt Process 15	Linear Functionals 16 Quiz: the Orthogonal Complement of a Vector Space	17	The Dual Space 18 Quiz: Linear Functionals	19
20	Exam III Review 21 Quiz: the Dual Space	<b>Exam III</b> 22	<i>Thanksgiving Break</i> 23	24	<i>Thanksgiving Break</i> 25	26
27	Final Exam Review: Matrices and Vector Spaces 28	Group Work: Final Exam Review 29	Final Exam Review: Canonical Forms of Matrices 30			

# DECEMBER

## 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	Final Exam Review: Inner Product Spaces2	3
4	Final Exam Week5	Final Exam Week6	Final Exam Week7	Final Exam8 1:00 to 4:00 PM	Final Exam Week9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31