

## 434 Calendar/Plan

Field Spring 2021

For each day, read the listed section before class and be prepared for class discussion and vocab quiz.

Monday	Wednesday	Friday
<b>Jan 18</b> Martin Luther King Jr. Day	<b>20</b> Logistics Review Notation	<b>22</b> Review of Basic Linear Algebra Read Chapters 0,1,2
<b>25</b> More Review Read Chapters 1,2	<b>27</b> Partitions and Direct Sums Read Section 3.1-3.3	<b>29*</b> Homework 1 due Weekly Quiz 1 on Chapters 0,1,2
<b>Feb 1</b> Determinants of Block Matrices Read 3.4	<b>3</b> Dot Product on $\mathbb{R}^n$ Properties of Dot Product Read 4.1-4.3	<b>5</b> Inner Product Spaces Read 4.4 Weekly Quiz 2 Homework 2
<b>8+<math>\times</math></b> Norms from Inner Products Read 4.5	<b>10</b> More General Norms Read 4.6	<b>12</b> Orthonormal Vectors Read 5.1,5.2 Weekly Quiz 3 Homework 3 due
<b>15</b> Graham Schmidt Read 5.3	<b>17</b> <b>Break Day 1</b>	<b>19</b> <b>BIG QUIZ 1</b> Homework 4 due
<b>22</b> Riesz Representation Theorem Read 5.4	<b>24</b> Adjoins Read 5.5,5.6	<b>26</b> Adjoins and Isometries Read 6.1 Weekly Quiz 4, Homework 5 due
<b>Mar 1</b> Isometries, Unitary Matrices, Permutations Read 6.2,6.3	<b>3</b> Unitary Matrices, QR Factoriza- tion Read 6.2,6.3,6.5	<b>5</b> Weekly Quiz 5 Homework 6 Orthogonal complements Read 7.1-7.2
<b>8</b> Orthogonal Projection Read 7.3	<b>10</b> Invariant Subspaces Read 7.6	<b>12</b> <b>Break Day 2</b>
<b>15</b> Weekly Quiz 6 Applications Read 7.4-7.5	<b>17</b> Review for Midterm	<b>19†</b> Review for Midterm Homework 7 due
<b>22</b> <b>Midterm Week</b> Eigenvalues and Eigenvectors Read 8.1-8.2 watch video	<b>24</b> Eigenvalues and Eigenvectors Read 8.3-8.4	<b>26</b> Weekly Quiz 7 Similarity Read 8.5,8.6 Homework 8 due
<b>29</b> Characteristic Polynomials Read 9.1-9.3	<b>31</b> Diagonalization Read 9.4-9.7	<b>April 2</b> Weekly Quiz 8 Unitary Triangularization Read 10.1-10.2 Homework 9 due
<b>5</b> Caley-Hamilton Theorem Read 10.3	<b>7</b> Applications Read 10.4-10.6	<b>9</b> Weekly Quiz 9 Jordan Canonical Form Read 11.1,11.2 Homework 10 due
<b>12</b> Uniqueness of Jordan Form Read 11.3,11.4	<b>14</b> Applications Read 11.5,11.6	<b>16</b> Applications Read 11.8-11.10
<b>19</b> <b>BIG QUIZ 2</b> Homework 11 due	<b>21</b> Normal Matrices Read 12.1,12.2	<b>23</b> Positive Semidefinite Matrices
<b>26</b> Singular Value Decomposition	<b>28</b> Review for Final Homework 12 due	<b>30</b> Course evaluations due <b>FINAL EXAMS START</b>
<b>May 3</b> individually scheduled	<b>5</b> oral final exams	<b>7</b> <b>FINAL EXAMS END</b>

\*January 29 withdrawal w/o W deadline + February 8 late add deadline  $\times$  February 9 withdrawal from the university deadline †March 19 withdrawal with W deadline

Last updated January 19, 2020