MATH 528B - Spring 2020 - Tentative Schedule

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Jan 13 | Jan 14 | Jan 15 <br> JMM <br> First day of classes | Jan 16 | Jan 17 <br> Introduction and 4.1: Basics |
| $\text { Jan } 20$ <br> Martin Luther King Jr. Holiday <br> No Classes | Jan 21 | Jan 22 4.1: Basics (cont.) and 4.2: Bounded Operators | Jan 23 | $\text { Jan } 24$ <br> 4.2: Bounded Operators |
| Jan 27 <br> Examples | Jan 28 <br> Last day to drop <br> with deletion from <br> record | $\text { Jan } 29$ <br> 4.3: Isomorphisms and Completions | Jan 30 | Jan 31 <br> 4.4: Adjoint Operators <br> Homework 1 |
| Feb 3 <br> 4.4: Adjoint Operators (cont.) | Feb 4 | Feb 5 <br> 4.5: On the Uniform Boundedness Principle | Feb 6 | Feb 7 <br> 4.5: Strong and Weak Convergence |
| Feb 10 4.5: Strong and Weak Convergence (cont.) and 4.6: Orthogonal Projections | Feb 11 | Feb 12 <br> 4.6: Orthogonal Projections (cont.) <br> Last day to apply for GRO | Feb 13 | Feb 14 <br> 4.6: Unitary operators and Partial Isometries <br> Homework 2 |
| Feb 17 <br> 5.1: Closed and Closable Operators | Feb 18 | Feb 19 <br> 5.1: Closed and Closable Operators (cont.) | Feb 20 | Feb 21 <br> 5.1: The Closed Graph Theorem <br> Homework 3 |
| $\text { Feb } 24$ <br> 5.2: Resolvents | Feb 25 | Feb 265.2: Spectral Theory <br> Basics (cont.) | Feb 27 | Feb 285.2: Spectral Theory <br> Basics (cont.) |
| Mar 2 <br> 5.3: Symmetric and Self-Adjoint Operators | Mar 3 | Mar 4 <br> 5.3: Symmetric and Self-Adjoint Operators (cont.) | Mar 5 | $\text { Mar } 6$ <br> 6.2: Hilbert-Schmidt Operators |


| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Mar 9 <br> Spring Break | Mar 10 <br> Spring Break | Mar 11 <br> Spring <br> Break | Mar 12 <br> Spring <br> Break | Mar 13 <br> Spring <br> Break |
| Mar 16 <br> 7.1: The Spectral Theorem for Compact Operators | Mar 17 | Mar 18 <br> 7.2: Integration with respect to a spectral family <br> Homework 6 | Mar 19 | Mar 20 <br> 7.3: The Spectral Theorem for self-adjoint operators Homework 4 |
| Mar 23 <br> 7.4: The Spectra of Self-Adjoint Operators | Mar 24 | Mar 25 <br> 7.5: The Spectral Theorem for Normal Operators | Mar 26 | Mar 27 <br> 7.6: One Parameter Unitary Groups <br> Homework 5 |
| Mar 309.1: Relatively Bounded <br> Perturbations | Mar 31 <br> Last day to withdraw with $\mathbf{W}$ using Uaccess | Apr 19.2: Relatively Compact <br> Perturbations | Apr 2 | Apr 3 <br> 9.3: Strong Resolvent Convergence |
| $\text { Apr } 6$ <br> Homework 8 | Apr 7 | Apr 8 | Apr 9 | Apr 10 |
| $\text { Apr } 13$ | Apr 14 <br> Last day to submit petition for late withdrawal | Apr 15 | Apr 16 | Apr 17 |
| Apr 20 | Apr 21 | Apr 22 | Apr 23 | Apr 24 |
| $\text { Apr } 27$ <br> Homework 10 | Apr 28 | Apr 29 | Apr 30 | May 1 |


| May 4 | May 5 | May 6 | May 7 | May 8 |
| :---: | :---: | :---: | :---: | :---: |
| Homework 10 |  | Last day of classes |  |  |
|  |  |  | Reading day |  |

