

# March 2021

Sunday	Monday	Tuesday	Wednes	Thursday	Friday	Saturda
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b>	<b>9</b> <b>Lects.</b> <b>1-3</b>	<b>10</b>	<b>11</b> <b>Lects.</b> <b>4-6</b>	<b>12</b>	<b>13</b>
<b>14</b> <b>HW#1 due</b>	<b>15</b>	<b>16</b> <b>Lects.</b> <b>7-9</b>	<b>17</b> Last day to drop for 50% Tuition Refund	<b>18</b> <b>Lect. 10</b> <b>Lab. #1</b>	<b>19</b>	<b>20</b>
<b>21</b> <b>HW#2 due</b>	<b>22</b>	<b>23</b> <b>Lects.</b> <b>11-13</b>	<b>24</b>	<b>25</b> <b>Lect. 14</b> <b>Lab. #2</b>	<b>26</b>	<b>27</b>
<b>28</b> <b>HW#3 due</b>	<b>29</b> <b>SPRING</b> <b>BREAK</b>	<b>30</b> <b>SPRING</b> <b>BREAK</b>	<b>31</b> <b>SPRING</b> <b>BREAK</b>	<b>1</b> <b>SPRING</b> <b>BREAK</b>		

# April 2021

Sunday	Monday	Tuesday	Wednes	Thursday	Friday	Saturda
				<b>1</b> <b>SPRING</b> <b>BREAK</b>	<b>2</b> <b>SPRING</b> <b>BREAK</b>	3
<b>4</b>	<b>5</b>	<b>6</b> <b>Lects.</b> <b>15-17</b>	<b>7</b>	<b>8</b> <b>Lect. 18</b> <b>Lab. #3</b>	<b>9</b>	10
<b>11</b> <b>HW#4 due</b>	<b>12</b>	<b>13</b> <b>Lects.</b> <b>19,20</b> <b>Study S.</b>	<b>14</b>	<b>15</b> <b>Catch up</b> <b>Exam #1</b>	<b>16</b>	17
18	<b>19</b>	<b>20</b> <b>Lects.</b> <b>21-23</b>	<b>21</b>	<b>22</b> <b>Lect. 24</b> <b>Lab. #4</b>	<b>23</b>	24
<b>25</b> <b>HW#5 due</b>	<b>26</b>	<b>27</b> <b>Lects.</b> <b>25-27</b>	<b>28</b>	<b>29</b> <b>Lect. 28</b> <b>Lab. #5</b>	<b>30</b>	

# May 2021

Sunday	Monday	Tuesday	Wednes	Thursday	Friday	Saturda
						1
2 HW#6 due	3	4 Lects. 29-31	5	6 Lect. 32 Lab. #6	7	8
9 HW#7 due Mother's Day	10	11 Lects. 33-35	12	13 Lects. 36-38	14	15
16 HW#8 due	17	18 Lects. 39,40 Study S	19	20 Catch up Exam #2	21	22
23 HW#9 due	24	25 Lects. 41-43	26	27 Lect. 44 Lab. #7	28	29
30 HW#10 due	31 Memorial Day					

# June 2021

Sunday	Monday	Tuesday	Wednes	Thursday	Friday	Saturda
		<b>1</b> <b>Lects.</b> <b>45-47</b>	<b>2</b>	<b>3</b> <b>Lects.</b> <b>48-50</b>	<b>4</b>	5
<b>6</b> <b>HW#11 due</b>	<b>7</b>	<b>8</b> <b>Reading</b> <b>Day</b>	<b>9</b>	<b>10</b> <b>Study S</b> <b>Catch up</b>	<b>11</b>	12
13	<b>14</b>	<b>15</b> <b>Exam #3</b>	<b>16</b> <b>Grades</b> <b>Due by 4</b> <b>pm</b>	<b>17</b>	<b>18</b>	19
<b>20</b>  <b>Father's Day</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	26
<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>			

- Lec. #01:** Introduction. Wave motion.
- Lec. #02:** Wavelength, frequency, speed of wave.
- Lec. #03:** Wave speed on a stretched string.
- Lec. #04:** Interference. Standing waves.
- Lec. #05:** String with fixed ends.
- Lec. #06:** Sound waves. Speed of sound.
- Lec. #07:** Intensity and sound level.
- Lec. #08:** Doppler effect.
- Lec. #09:** Electric charge. Conductors and Insulators.
- Lec. #10:** Coulomb's law. Examples.
- Lec. #11:** Electric field. Lines of Electric field.
- Lec. #12:** Electric field due to a charge distribution.
- Lec. #13:** Conductors. Potential energy and electric potential.
- Lec. #14:** Potential due to a charge distribution.
- Lec. #15:** Equipotential surfaces. Relationship between E and V.
- Lec. #16:** Capacitance. Charge and Energy stored.
- Lec. #17:** Parallel plate capacitors. Dielectric constant.
  
- Lec. #18:** Current. Ohm's law. Resistance. Power.
- Lec. #19:** Resistors in parallel and series.
- Lec. #20:** Effective resistance.
- Lec. #21:** Kirchhoff's rules.
- Lec. #22:** Kirchhoff's rules.
- Lec. #23:** Capacitors in parallel and series.
- Lec. #24:** RC circuits: charging and discharging.
- Lec. #25:** Magnetic field.
- Lec. #26:** Magnetic force.
- Lec. #27:** Ampere's law.
- Lec. #28:** Current loops.
- Lec. #29:** Magnetic flux. Induced emf.

- Lec. #30:** Faraday's law and Lenz's law.
- Lec. #31:** Faraday's law and Lenz's law.
- Lec. #32:** Generators and Motors.
- Lec. #33:** Transformers. Inductors.
- Lec. #34:** Energy stored in B-field. RL circuits.
  
- Lec. #35:** AC circuits. AC with R; AC with L; AC with C.
- Lec. #36:** Electromagnetic waves. Plane waves. Speed and Spectrum.
- Lec. #37:** Interference. Double-Slit Interference.
- Lec. #38:** Diffraction. Thin films.
- Lec. #39:** Special relativity. Historical introduction and the main experiments.
- Lec. #40:** Time dilation effect. Michelson experiment.
- Lec. #41:** Length contraction.
- Lec. #42:** Relativistic energy and momentum. Rest energy and  $m=E_0/c^2$ .
- Lec. #43:** Blackbody Radiation. Stefan-Boltzmann laws.
- Lec. #44:** Wien's displacement. Photoelectric effect.
- Lec. #45:** Photons (energy and momentum).
- Lec. #46:** Particle-wave duality. De Broglie wavelength.
- Lec. #47:** Bohr model. Hydrogen Spectrum. Emission of light.
- Lec. #48:** Nuclear structure. Nuclear Notations. Nuclear reactions (notations).
- Lec. #49:** Half-life and radioactive dating.
- Lec. #50:** Nuclear binding energy. Fission, fusion nuclear reactions (energy released).