

COURSE CALENDAR

ELEMENTS OF PHYSICS

SPRING 2022

Last modified: April 18, 2022

Section and page numbers in the table below refer to the course textbook: L. D. Kirkpatrick and G. E. Francis, *Physics: A Conceptual World View*, 7th edition

All times in the table are US Eastern Time, EDT or EST, whichever is active on the specified date.

MONDAY	WEDNESDAY	FRIDAY
<div>Jan 17th</div> MLK Day – No classes	<div>Jan 19th</div> Lecture 1 Course logistics	<div>Jan 21st</div> Lecture 2 Units, converting units Scientific notation for big and small numbers Average speed
<div>Jan 24th</div> Lecture 3 Velocity and Acceleration Free Fall Q1 up; due by 1/27/2022, 11:59 PM due by 1/27/2022, 11:59 PM	<div>Jan 26th</div> Lecture 4 Concept of force Newton's First Law of Motion	<div>Jan 28th</div> Lecture 5 Newton's Second Law of Motion Nonfree fall; terminal velocity
<div>Jan 31st</div> Lecture 6 Newton's Third Law of Motion Momentum Q2 up; due by 2/3/2022, 11:59 PM	<div>Feb 2nd</div> Lecture 7 Kinetic Energy Work	<div>Feb 4th</div> Classes canceled
<div>Feb 7th</div> Lecture 8 Potential Energy Conservation of energy Q3 up; due by 2/10/2022, 11:59 PM	<div>Feb 9th</div> Lecture 9 Power Efficiency Circular motion	<div>Feb 11th</div> Lecture 10 Newton's Law of Universal Gravitation
<div>Feb 14th</div> Lecture 11 Acceleration of gravity revisited The gravitational field Q4 up; due by 2/17/2022, 11:59 PM	<div>Feb 16th</div> Lecture 12 Kepler's Laws	<div>Feb 18th</div> Midterm I
<div>Feb 21st</div> Lecture 13 Atoms and Molecules Pressure Boyle's Law	<div>Feb 23rd</div> Lecture 14 Temperature Q5 up; due by 2/28/2022, 11:59 PM due by 3/3/2022, 11:59 PM	<div>Feb 25th</div> Classes canceled

MONDAY	WEDNESDAY	FRIDAY
<div>Feb 28th</div> <div>Lecture 15</div> <div>Kelvin temperature scale</div> <div>Ideal gas laws</div>	<div>Mar 2nd</div> <div>Lecture 16</div> <div>Density</div> <div>Atmospheric pressure</div>	<div>Mar 4th</div> <div>Lecture 17</div> <div>Pressure in Fluids</div>
<div>Mar 7th</div> <div>Lecture 18</div> <div>Buoyancy. Archimedes Principle</div> <div>Q6 up; due by 3/10/2022, 11:59 PM</div>	<div>Mar 9th</div> <div>Lecture 19</div> <div>Internal energy. Specific heat.</div> <div>First Law of Thermodynamics</div>	<div>Mar 11th</div> <div>Lecture 20</div> <div>Change of State, Phase transitions</div> <div>Conduction, Convection, Radiation</div>
<div>Mar 14th</div> <div>Spring recess – No classes</div>	<div>Mar 16th</div> <div>Spring recess – No classes</div>	<div>Mar 18th</div> <div>Spring recess – No classes</div>
<div>Mar 21st</div> <div>Classes canceled</div> <div>Q7 is up</div>	<div>Mar 23rd</div> <div>Lecture 21</div> <div>Electric Charge. Charge Conservation</div> <div>Coulomb's Law.</div> <div>Conductors and Insulators</div> <div>Q7 is due by 3/24/2022, 11:59 PM</div>	<div>Mar 25th</div> <div>Midterm II</div>
<div>Mar 28th</div> <div>Lecture 22</div> <div>Electric Field</div> <div>Electric Potential Energy</div> <div>Electric Potential.</div> <div>Q8 up; due by 3/31/2022, 11:59 PM</div>	<div>Mar 30th</div> <div>Lecture 23</div> <div>Electric charges in motion</div> <div>Voltage sources</div> <div>Series connection of batteries</div>	<div>Apr 1st</div> <div>Classes canceled</div>
<div>Apr 4th</div> <div>Lecture 24</div> <div>Electrical circuits</div> <div>Electrical Resistance. Ohm's law</div> <div>Q9 up; due by 4/9/2022, 11:59 PM</div>	<div>Apr 6th</div> <div>Lecture 25</div> <div>Series and Parallel circuits</div>	<div>Apr 8th</div> <div>Lecture 26</div> <div>Electrical Power</div> <div>Electrical Shock</div>
<div>Apr 11th</div> <div>Lecture 27</div> <div>Magnetism. Magnetic Fields</div> <div>Magnetization. Magnetic Force</div> <div>Q10 up; due by 4/14/2022, 11:59 PM</div>	<div>Apr 13th</div> <div>Lecture 28</div> <div>Transformers</div> <div>Current and Power in Transformers</div>	<div>Apr 15th</div> <div>Lecture 29</div> <div>Vibrations</div> <div>Waves</div>
<div>Apr 18th</div> <div>Lecture 30</div> <div>Electromagnetic Waves</div> <div>Standing Waves</div> <div>Q11 up; due by 4/21/2022, 11:59 PM</div>	<div>Apr 20th</div> <div>Lecture 31</div>	<div>Apr 22nd</div> <div>Midterm III</div>
<div>Apr 25th</div> <div>Lecture 32</div> <div>Q12 up; due by 4/28/2022, 11:59 PM</div>	<div>Apr 27th</div> <div>Lecture 33</div>	<div>Apr 29th</div> <div>Lecture 34</div> <div>Q13 up; due by 5/2/2022, 11:59 PM</div>
<div>May 2nd</div> <div>Week of Finals</div>	<div>May 4th</div> <div>Week of Finals</div>	<div>May 6th</div> <div>Week of Finals</div>

