HMWK: 1.)		**HMWK:** 1.) do Prob's 28.32 and 28.42; 2.) EXTRA STUFF: Fletch's video on Kirchoff's Law at zPoly: 40 (Kirchoff's Law) www.youtube.com/watch?v=KmIJMgsvFSI	**HMWK:** 1.) write up RC Circuits Lab (due Thursday, 3/10); 2.) do course self-evaluation	**HMWK:** 1.) do Prob's 28.34; then, an initially uncharged cap C1 is in parallel with a second uncharged cap C2, where C2 is itself in series with an open switch S2; the cap combination is in series with a resistor R, an open switch S1 and a DC power supply Vo; a.) draw the circuit with the switches open. Proceeding, S1 is closed at t = 0. b.) Sketch the current vs time graph through R; c.) sketch C1's "charge on plates" graph as a fct of time; d.) after a long period of time, S1 is opened and S2 is closed. e.) sketch the current vs time graph for the current in the cap's parallel circuit.
3/7	3/8	3/9	3/10	3/11
CLASS: 1.) talk about meters; 2.) take time to review and answer questions	**CLASS:** **TEST 3** (DC circuits)	**Day 6**	**CLASS:** 0.) begin new section; 1.) what magnetic effect really are; 2.) Magnetic Fields & Forces--magnetic field lines; 3.) Motion of a Charged Particle in a Uniform Magnetic Field (qvxB). 4.) Demo: Magnetic Force on moving charge. 5.) book sections 11.1, 11.2 and 11.3	**last day of 3rd qutr** **CLASS:** 1.) Applications Involving charged Particles Moving in a Magnetic Field; 2.) Magnetic Force Acting on a Current-Carrying Conductor. Demo: Force on current-carrying wire 3.) book sections 11.4 and 11.5
HMWK: 1.) prepare for test; 2.) possibly **Chipotle night** from 5:00 to 7:00 pm if not done Sunday night	**HMWK:** 1.) relax		**HMWK:** 1.) do Prob's 29.2, 29.6, 29.8, 29.9,	**HMWK:** 1.) do Prob's 29.13, 29.15, 29.19

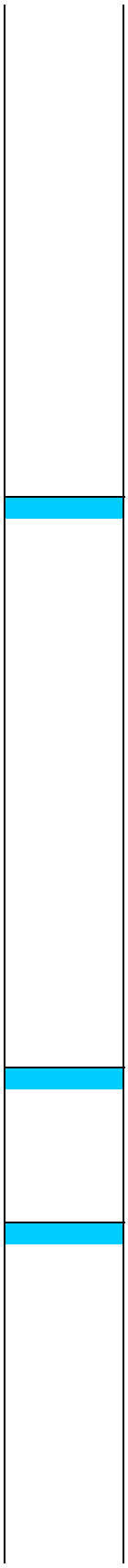
Fourth Quarter, 2021-2022

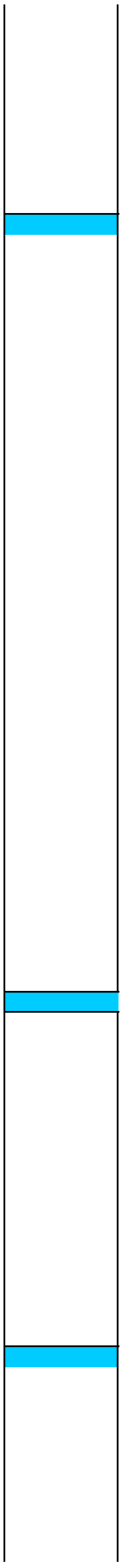
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	S A T
3/14	3/15	3/16	3/17	3/18	
L-day 3 **CLASS:** 1.) Torque on a Current Loop in a Uniform Magnetic Field; 2.) galvanometers; 3.) book section 11.5; 4.) do self-survey	**CLASS:** 1.) lab: do drawing Magnetic Field lines or e/m lab (helmholtz coil) (if the latter, do "back of the envelope" write-up due after holiday); 2.) talk about the direction of B generated by a current-carrying wite	**CLASS:** 1.) Hall Effect; 2.) rod down incline prob; 3.) devices based on B-flds; 4.) talk about Biot Savart 5.) book sections 11.6 and 11.7	**Day 6**	**L-day 1** **CLASS:** 1.) Magnetism in Matter; 2.) reiterate law of Biot-Savart; 3.) The Magnetic Force Between Two Parallel Conductors; 4.) book sections 12.1, 12.2, 12.3 and 12.4	
HMWK: 1.) do Prob's 29.24, 29.29, 29.35, 29.37; 2.) EXTRA STUFF: Fletch's video zPoly: 43 (B-fields and current-carrying wires) at https://www.youtube.com/watch?v=0Z2ku_T-0GE	**HMWK:** 1.) do Prob's 29.44, 29.47, 29.51, 30.2, 30.3 2.) EXTRA STUFF: Fletch's video zPoly: 50 (mass spectrometer) at https://youtu.be/mnhh0uRvQ2o	**HMWK:** 1.) do Prob's 30.13, 30.4, 30.4 (the hard way)		**HAVE A GREAT SPRING BREAK**	
3/21	3/22	3/23	3/24	3/25	
Spring Break	**Spring Break**	**Spring Break**	**Spring Break**	**Spring Break**	
3/28	3/29	3/30	3/31	4/1	
Spring Break	**Spring Break**	**Spring Break**	**Spring Break**	**Spring Break**	

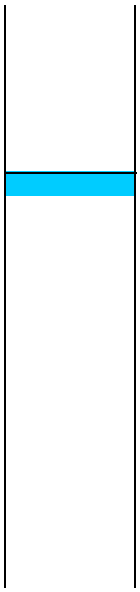
4/4	4/5	4/6	4/7	4/8
CLASS: 1.) Ampere's Law (do solenoid and toroid as examples); 2.) Gauss's Law in Magnetism; 3.) book sections 12.5, 12.6 and 12.7**;**	**L-day 3** **CLASS:** 1.) review	**CLASS:** 1.) revisit velocity trap in all its iterations; 2.) review questions? 3.) do preliminary exercises for Magic Mountain trip	**CLASS:** **Test 4** (Magnetism)	**Day 6**
HMWK: 1.) do Prob's 30.5, 30.23, 30.29, 30.32, 30.34 and 30.45	**HMWK:** 1.) do practice test; 2.) Chipotle night	**HMWK:** 1.) prepare for test	**HMWK:** 1.) relax	
4/11	4/12	4/13	4/14	4/15
CLASS: MAGIC MOUNTAIN trip	**CLASS:** 1.) island series--induction; 2.) intro to induction; 3.) Lab--Faraday's Law	**L-day 3** **CLASS:** 1.) do Faraday's Law lab	**CLASS:** 1.) motional EMF's; 2.) induced electric fields; 3.) book section 13.3 and 13.4	**CLASS:** 1.) Eddy currents; 2.) electric generation and back EMF's; 3.) applications of electromagnetic induction 3.) book section 13.5 and 13.6
HMWK: 1.) write up Magic Mountain problem (due Tuesday, 4/19)	**HMWK:** 1.) do Prob's 31.6, 31.9, 31.14; 2.) EXTRA STUFF: Fletch's video zPoly: 45 (motional EMS's) at https://youtu.be/SK2CraiWk0U	**HMWK:** 1.) write up Faraday's Law Lab (due Tuesday, 4/19)	**HMWK:** 1.) do Prob's 31.20, 31.23	**HMWK:** 1.) do Prob's 31.25, 31.30
4/18	4/19	4/20	4/21	4/22
Day 6	**CLASS:** 1.) mutual inductance; 2.) self inductance; 3.) inductors and RL circuits; 4.) book section 14.1 and 14.2	**CLASS:** 1.) energy in a Magnetic Field; 2.) book section 14.3	**CLASS:** 1.) review	**L-day 3** **CLASS:** 1.) demos 2.) review for test
	HMWK: 1.) do Prob 31.44	**HMWK:** 1.) do Prob's 32.3, 32.7, 32.10, 32.14	**HMWK:** 1.) do Prob's 32.16, 32.17, 32.21	**HMWK:** 1.) prepare for test
4/25	4/26	4/27	4/28	4/29
CLASS: **TEST 5** (Faraday's Law)	**Day 6**	**CLASS:** 1.) begin reviewing for AP test--Mechanics Multiple Choice	**CLASS:** 1.) Mechanics Multiple Choice	**L-day 3** **CLASS:** 1.) Mechanics Free Response
HMWK: 1.) look at the video on vector fields st https://www.youtube.com/watch?v=rB83DpBJQsE		**HMWK:** 1.) --	**HMWK:** 1.) --	**HMWK:** 1.) --
5/2	5/3	5/4	5/5	5/6
Spanish Lit **CLASS:** 1.) Mechanics Free Response	**CLASS:** 1.) E&M Multiple Choice	**Day 6** **English Lit** **Comp Sci**	**CLASS:** 1.) E&M Multiple Choice	**CLASS:** 1.) E&M Free Response
HMWK: 1.) --	**HMWK:** 1.) --		**HMWK:** 1.) --	**HMWK:** 1.) --
5/9	5/10	5/11	5/12	5/13
Calculus **Comp Sci Principles** **L-day 3** **CLASS:** 1.) E&M Free Response	**AP Physics** **CLASS:** AP Physics C exam	**Chinese Lang** **Spanish Lang** **CLASS:** 1.) TBA	**Day 6** **French Lit**	**Latin** **CLASS:** 1.) TBA
HMWK: 1.) get ready for AP tests	**HMWK:** 1.) --	**HMWK:** 1.) --		**HMWK:** 1.) --

5/16	5/17	5/18	5/19	5/20
CLASS: 1.) senior week	**L-day 3** **CLASS:** 1.) senior week	**CLASS:** 1.) senior week	**CLASS:** 1.) senior week	**Day 6**
HMWK: 1.) --	**HMWK:** 1.) --	**HMWK:** 1.) --	**HMWK:** 1.) --	
5/23	5/24	5/25	5/26	5/27
CLASS: **SENIOR TRIP**	**CLASS:** 1.) **SENIOR TRIP**	**BLOCK DAY n** **SENIOR TRIP**	**BLOCK DAY n** **SENIOR TRIP**	**BLOCK DAY n** **SENIOR TRIP**
HMWK: 1.)	**HMWK:** 1.)			
5/30	5/31	6/1	6/2	6/3
Memorial Day Holiday SENIOR TRIP	**BLOCK DAY**	**last day of classes**		**US Honors Day,** **Commencement**

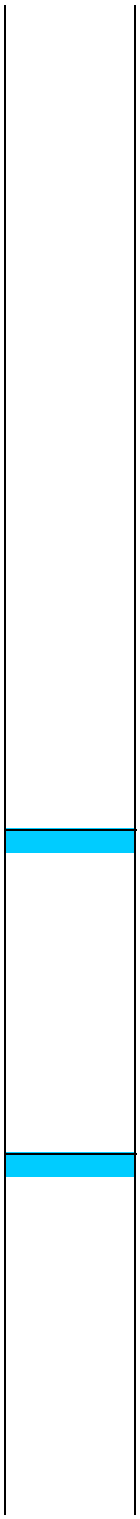
NOTES



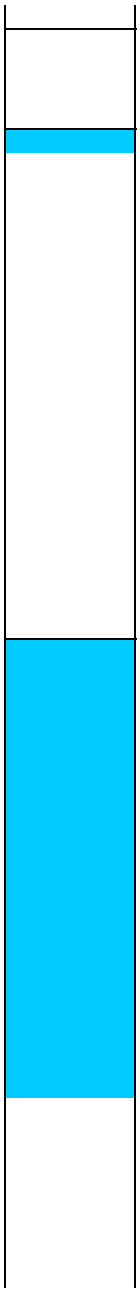




NOTES



Week 16



NOTES

NOTES