

PHYSICS C

<u>Kinematics</u>		
Chapter 2 (ignore calculus)		
Chapter 3 (ignore calculus)		
K1	1D Motion	http://hyperphysics.phy-astr.gsu.edu/hbase/mot.html#mot1 http://hyperphysics.phy-astr.gsu.edu/hbase/relmot.html#c1
K2	Racetrack	
K3	Graphs of Motion	http://hyperphysics.phy-astr.gsu.edu/hbase/acons.html#c1 http://hyperphysics.phy-astr.gsu.edu/hbase/mechanics/motgraph.html#c1
K4	Tables, Graphs and Ramps	http://hyperphysics.phy-astr.gsu.edu/hbase/mincl.html#c1 (just mass on a frictionless incline)
K5	Dart Gun Lab	http://hyperphysics.phy-astr.gsu.edu/hbase/traj.html#tra11
K6	2D Motion	http://hyperphysics.phy-astr.gsu.edu/hbase/coord.html#c2
<u>Dynamics</u>		
Chapter 4 – ALL		
Chapter 5 – Omit Sections 4 & 5		
D1	Newton's Laws	http://hyperphysics.phy-astr.gsu.edu/hbase/newt.html#ntcon
D2	Inclines	http://hyperphysics.phy-astr.gsu.edu/hbase/mincl.html#c1
D3	Atwood Machine	http://hyperphysics.phy-astr.gsu.edu/hbase/atwd.html#c1
D4	Friction	http://hyperphysics.phy-astr.gsu.edu/hbase/frict.html#fri
D5	Circular Motion	http://hyperphysics.phy-astr.gsu.edu/hbase/cf.html#cf
D6	Hooke's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/permot2.html#c3
<u>Work and Energy</u>		
Chapter 6 – Omit Section 5		
Chapter 7 – Omit Sections 4 & 5		
W1	Work, Energy, Power	http://hyperphysics.phy-astr.gsu.edu/hbase/work.html#wep
W2	Conservation of Energy	http://hyperphysics.phy-astr.gsu.edu/hbase/conser.html#coneng
W3	Elastic Potential Energy	http://hyperphysics.phy-astr.gsu.edu/hbase/pespr.html#pe2
<u>Momentum</u>		
Chapter 5 – Section 5		
Chapter 6 – Section 5		
Chapter 8 – Omit Section 5		
M1	Center of Mass	http://hyperphysics.phy-astr.gsu.edu/hbase/cm.html#cm
M2	Conservation of Momentum	http://hyperphysics.phy-astr.gsu.edu/hbase/conser.html#conmom
M3	Impulse	http://hyperphysics.phy-astr.gsu.edu/hbase/impulse.html#c1
<u>Rotation</u>		
Chapter 9 – ALL		
Chapter 10 – Omit Section 4		
R1	Angular Velocity	http://hyperphysics.phy-astr.gsu.edu/hbase/rotq.html#avel
R2	Angular Acceleration	http://hyperphysics.phy-astr.gsu.edu/hbase/rotq.html#avel
R3	Rotational Equations	http://hyperphysics.phy-astr.gsu.edu/hbase/rotq.html#drot
R4	Torque	http://hyperphysics.phy-astr.gsu.edu/hbase/torq.html#torq
R5	Moment of Inertia	http://hyperphysics.phy-astr.gsu.edu/hbase/mi.html#mi

R6	2 nd Law for Rotation	http://hyperphysics.phy-astr.gsu.edu/hbase/n2r.html#n2r
R7	Linear-Rotation Parallels	http://hyperphysics.phy-astr.gsu.edu/hbase/mi.html#rin
R8	Rotational Energy	http://hyperphysics.phy-astr.gsu.edu/hbase/rke.html#rke
R9	Angular Momentum	http://hyperphysics.phy-astr.gsu.edu/hbase/amom.html#am
R10	Conservation of Angular Momentum	http://hyperphysics.phy-astr.gsu.edu/hbase/conser.html#conamo
Statics, Gravity and SHM		
Chapter 11 – ALL		
Chapter 12 – Omit Section 7		
Chapter 14 – Omit Section 5		
S1	Equilibrium	http://hyperphysics.phy-astr.gsu.edu/hbase/torq.html#equi
S2	Kepler's Laws	http://hyperphysics.phy-astr.gsu.edu/hbase/kepler.html#c1
S3	Gravity	http://hyperphysics.phy-astr.gsu.edu/hbase/grav.html#grav
S4	Gravitational Potential Energy	http://hyperphysics.phy-astr.gsu.edu/hbase/gpot.html#mgh
S5	SHM	http://hyperphysics.phy-astr.gsu.edu/hbase/shm.html#c1
S6	Pendulum	http://hyperphysics.phy-astr.gsu.edu/hbase/pend.html#c1
Electric Fields		
Chapter 21 – ALL		
Chapter 22 – Section 1		
E1	Coulomb's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elefor.html#c1
E2	Electric Field	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elefie.html#c1
E3	Multiple Point Charges	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/mulpoi.html#c2
E4	Electric Field - Finite Line	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elelin.html#c1
E5	Electric Field - Ring	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elelin.html#c2
E6	Electric Field - Disk	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elelin.html#c3
Electric Potential		
Chapter 22 – Sections 2, 3, 4, & 5		
Chapter 23 – ALL		
P1	Electric Flux	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/gaulaw.html#c3
P2	Gauss' Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/gaulaw.html#c1
P3	Application of Gauss' Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/gaulaw.html#c4
P4	Point Charge Potential	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/potpoi.html#c1
P5	Potential Derivations	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elepote.html#c1
Capacitance		
Chapter 24 - ALL		
C1	Capacitance	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capac.html#c1
C2	Combination of Capacitors	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capac.html#c2
C3	Energy	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capeng.html#c1
C4	Parallel Plate Capacitor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/pplate.html#c1
C5	Cylindrical Capacitor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capcyl.html#c1
C6	Spherical Capacitor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capsph.html#c1
C7	Dielectric	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/dielec.html#c1
Circuits		
Chapter 25 – ALL		
V1	Resistance	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/resis.html#c1
V2	Resistivity and Conductivity	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/resis.html#c2
V3	Resistor Combinations	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/resis.html#c3
V4	Ohm's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/ohmlaw.html#c1

V5	Power	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/elepow.html#c1
V6	Charging a Capacitor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capchg.html#c1
V7	Discharging a Capacitor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capdis.html#c2
V8	Derived Expressions	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/capdis.html#c1
V9	Time Constant	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/filter.html#c2
<u>Magnetic Fields</u>		
Chapter 26 – ALL		
Chapter 27 – Omit Section		
B1	Magnetic Force	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/magfor.html#c1
B2	Interactions	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/magint.html#c1
B3	Biot-Savart	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/biosav.html#c1
B4	Ampere's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/amplaw.html#c1
B5	Applications of Ampere's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/amplaw.html#c2
<u>Inductance</u>		
Chapter 28 – Omit Section 9		
Chapter 29 – Section 4		
Chapter 30 – Sections 1 & 2		
I1	Magnetic Flux	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/fluxmg.html#c1
I2	Faraday's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/farlaw.html#c1
I3	Lenz's Law	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/farlaw.html#c2
I4	Inductance	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/induct.html#c1
I5	Inductance of a Coil	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/indcur.html#c2
I6	Energy of an Inductor	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/indeng.html#c1
I7	Derived Expressions	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/indra.html#c1
I8	Time Constant	http://hyperphysics.phy-astr.gsu.edu/hbase/electric/filter.html#c2
I9	Transformer	http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/transf.html#c1