1. Course overview
    a. This course isn't meant to deceive you - it is a straightforward introduction to general physics. After completing this course, you should be able to
        i. Answer general questions about physical systems, such as what principles, forces, measurements, and uncertainty are at play.
        ii. Answer questions about what conservation laws are at play in a physical system.
        iii. Be able to solve for final positions, velocities, and changes in position and velocity given an inertial set up.
        iv. Be able to quickly answer questions from memory such as *if you drop a ball from a height h, how long till it hits the floor?*
        v. Use calculus to solve for equations of motion
2. Textbook
    a. Our book will be *Fundamentals of Physics* by Halliday & Resnick, 10th edition, Wiley and Sons.
3. Homework
    a. The homework is essential to the class. If you think you can simply absorb everything without working through the problems, you are wrong! The homework helps you make connections, crank through the calculations, and master the material. You'll be a phys pro in no time once you do the hw.
4. Schedule
    a. This is an asynchronous class, but you ultimately need to get through it; whether you're taking it as part of a high school grad requirement, taking it because youre a phys major in college, or youre just taking it for fun, you will be happy once you finish it. You'll learn a ton, and you can talk to people about phys.
    b. You can find the schedule at the end of the syllabus. You can even print it.

5. Participation
    a. Post on the discussion boards! If you need help, then get it. There are many resources for you. You can go back to the textbook, back to the lectures, back to the course notes, ask for help on a discussion post, or if you still cant figure it out even reach out to the admin themselves. You have to work hard, but you dont have to be stuck forever.
6. Exams
    a. There are four.
    b. Exam 1 covers Halliday 1 - 6
    c. Exam 2 covers Halliday 7 - 10
    d. Exam 3 covers Halliday 11 - 17
    e. Final exam covers Halliday 1 - 20
7. Grades
    a. Grade consists of
        i. Module homeworks - 25 %
        ii. Module quizzes - 10 %
        iii. Exam 1 - 12 %

iv. Exam 2 - 13 %
v. Exam 3 - 15 %
vi. Final exam - 25 %
vii. Extra credit paper (possible + 5%)

b. The breakdown for grades is as follows
i. A >= 93%
ii. 90 % <= A - < 93 %
iii. 87 % <= B + < 90 %
iv. 83 <= B < 87 %
v. 80 % <= B - < 83 %
vi. 77 % <= C + < 80 %
vii. 73 <= C < 77 %
viii. 70 <= C - < 73 %
ix. F < 70 %

8. Community
    a. Physics is hard, but its fundamental to our world. If you go through the class, work hard, ask questions, are nice, and have fun, you will contribute to the physics community. Also you'll be cooler!
9. Statements
    a. Everyone can access this course. If you need help accessing it, please let us know! We will make it work.

Abbreviations

H: Halliday & Resnick
H 2.3 - 3.1 means Halliday chapter 2 module 3 through chapter 3 mod 1

			Class intro
Units, coordinates, vectors Module 1	H 1.1	H 1.2	H 1.3
Motion in 1 dimension Module 2	H 2.1 - 2.2	H 2.3 - 2.4	H 2.5 - 2.6
Motion in 2 and 3 dimensions Module 3	H 3 - 4.1	H 4.2 - 4.4	H 4.5 - 4.7
Newton's laws of motion Module 4	H 5.1 - 5.2	H 5.3 - 6.1	H 6.2 - 6.3
Work and kinetic energy Module 5	H 7.1 - 7.2	H 7.3 - 7.4	H 7.5 - 7.6
Potential energy and energy conservation Module 6	H 8.1 - 8.2	H 8.3 - 8.4	H 8.5
Momentum, impulse, collisions Module 7	H 9.1 - 9.3	H 9.4 - 9.6	H 9.7 - 9.9
Rotational motion Module 8	H 10.1 - 10.3	H 10.4 - 10.6	H 10.7 - 10.8
Dynamics of rotational motion Module 9	H 11.1 - 11.3	H 11.4 - 11.7	H 11.8 - 11.9

Equilibrium Module 10	H 12.1	H 12.2	H 12.3
Math detour, taylor expansion Module 11	Math background	Math background	Math background
Gravity Module 12	H 13.1 - 13.3	H 13.4 - 13.5	H 13.6 - 13.8
Fluids Module 13	H 14.1 - 14.2	H 14.3 - 14.4	H 14.5 - 14.7
Wave motion Module 14	H 15	H 16	H 17
Temperature and heat Module 15	H 18.1 - 18.2	H 18.3 - 18.4	H 18.5 - 18.6
Kinetic theory of gases Module 16	H 19.1 - 19.3	H 19.4 - 19.6	H 19.7 - 19.9
First law of thermodynamics Module 17	Supplemental read	s.r.	s.r.
Second law of thermodynamics Module 18	H 20.1	H 20.2 - 20.3	H 20.4
	Review of H 1 - 10	Review of H 11 - 20	Final Exam