

Physics 538: AP Physics 2

Summer Work 2017

Teacher:

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Textbook:

Etkina, College Physics AP® Edition, 1st Edition ©2014

Course Overview:

AP Physics is a second year physics course structured to provide instruction in content areas outlined by the College Board for the **physics 2** curricula. Those areas and the corresponding textbook chapters are:

Fluids	Chapters 10, 11
Thermodynamics	Chapters 12, 13
Electric Force, Field and Potential	Chapters 14, 15
Electric Circuits	Chapter 16
Magnetism and Electromagnetic Induction	Chapters 17, 18
Geometric and Physical Optics	Chapters 21-23
Quantum, Atomic, and Nuclear Physics	Chapters 26-28

For more details and lots of other good information, go to the College Board AP website:

<https://advancesinap.collegeboard.org/stem/physics>

Objectives for the Summer:

- Students will check out the College Board website and get an idea of the demands of the Physics Course 2 curriculum. Students should also look over the Physics Course 1 Curriculum as they may be interested in preparing for and taking that exam in addition to the Course 2 Exam.
- Students will take the time to familiarize themselves with format and features of the Etkina textbook. This textbook is very different from traditional textbooks and has several recurring question types that correlate well with the inquiry-based nature of the revised AP physics curriculum.
- Students will complete the ten question problem set pulled from the chapters in the book that overlap most with the freshman honors physics curriculum. Please put some thought into these challenging questions and *do your own work*. You will get a chance to discuss the questions with your peers the first week of school as we all get acquainted with each other.

Assigned Problems:

CHAPTER	PAGE	PROBLEM
1	37	12
1	39	52
2	78	27
3	116	60
4	146	18
5	181	50
6	224	43
14	527	42
16	616	32
20	770	12