**IB Physics - Add 13 C videos and flip - maybe an FA13.2 with kinetics**

Fluid Mechanics and Gas Laws Syllabus

Chapters 10 and 13

|  |  |  |
| --- | --- | --- |
| Block | Class  | Due on this class: |
| 1**Sept** **10** | -Density-Pressure/Conversions/Gauge Pressure | **Read:** 10-1 through 10-4**Practice:** 10: 1,2,3,5,7,8,9,11,12,13,14 |
| 2**Sept 14** | -Hydrostatic Pressure -Pascal's Principle-Demos | **Read:** 10-5 through 10-8**Practice:** 10: 22,23,25,27,29 |
| 3**Sept 16** | -More Pascal-Buoyant Forces -Demos |  |
| 4**Sept 18** | -Continuity -Bernoulli's equation | **Read:** 10-9 through 10-10**Practice:** 10: 36,38,39,41,43,44 |
| 5Sept 22 | -More Bernoulli-Viscosity-Stokes' law-Reynolds numbers and turbulence | **Read:** 10-11 through 10-13 |
| 6**Sept 24** | -Surface tension-More Demos -Work on Temperature, pressure, pressure conversions, and basic Ideal Gas Law problems.-Work on W13: 5,6,12,14,15-18,23-29, 30-38 | **Video Flip: 13: A-F (≈30 minutes)****Read:** 13.1-3,5,6-8 |
| 7**Sept 29** | -Work on FA-Finish Ideal Gas, work on Combined Gas Law problems-**Absolute zero practical lab.** -Work on W13: 39-48 | **Video Flip: 13: A-F (≈30 minutes)****Check Formative:** W13 30-38 |
| 8**Oct 1** | -Research Project-Work on FA-Viscosity of a fluid lab | **Check Formative:** W13 39-48 |
| 9**Oct 5** | Summative Assessments on:10.1 - Fluid Statics10.2 - Fluid Dynamics13.1 - Ideal Gas Law | **Turn in:** FA 10.1, 10.2, 13.1**Turn in:** Absolute Zero Lab |
| **Oct 7** | **Chapter 14!!!!!!!!!** | **Turn in:** Viscosity of a fluid lab |

|  |  |
| --- | --- |
| Three Formative/Summative Assessments: (10 pts)* 10.1 - Fluid Statics
* 10.2 - Fluid Dynamics
* 13.1 - Ideal Gas Law

Two Labs:* Absolute Zero (20 pts)
* Viscosity of a fluid (30 pts)
 | Handouts:* Worksheet-13-PressureTemperatureIdealGasLaw
* FA10.1
* FA10.2
* FA13.1
 |