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

Fluid Mechanics and Gas Laws Syllabus

Chapters 10 and 13

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| 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 |
| 5 Sept 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 Statics  10.2 - Fluid Dynamics  13.1 - 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 |

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| 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 |