IB Physics

Electrostatics and Field Theory - Chapter 16 & 17 Syllabus

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| Block | In Class: | Due on this class: |
| **1****Oct** **14** | **GW**-Vector Forces (16.1)**DI**-Conductors/Stupid Van de Graaff tricks | **VF 16A, 16B, 16D1, 16D2 (Forces)** |
| **2****Oct** **16** | **GW**-Vector Fields (16.2, 16.1)**DI**-Charging | **VF 16E, 16F, 16G1, 16G2 (Fields)** |
| **3****Oct** **18** | **SA16.1 - Vector Force (First 30 minutes)****VF**-16H-Simple Voltage**DI**-Potential and distance (16I) | Turn in FA 16.1 - Vector Forces |
| **4****Oct** **22** | **GW**-Voltage (16.2, 17.1) | **VF 16K, 16L, 16M (Point voltages)** |
| **5**Oct 24 | **SA-16.2 - Vector Fields (First 30 minutes)****VF**-16J-Accelerated Ions**DI**-Conservation of energy | Turn in FA16.2 - Vector Fields |
| **6****Oct** **29** | **GW**-Conservation of energy (17.1) | **VF 16Q** |
| **6¾****Oct 31** | **Definitely not a party** | Bring a Ceramic Mug |
| **7****Nov** **4** | **SA17.1-Voltage (First 30 minutes)****VF**-16O-Capacitors**DI**-RC Circuits | Turn in FA 17.1 - Energy |
| **8****Nov** **6** | **DI**-Millikan Prep**DI**-EFM lab, RC lab | **VF-Millikan Prep parts 1, 2, 3**Turn in Millikan Prep |
| **9****Nov****12** | Work on Labs/IA/IB Questions |  |
| **10****Nov** **14** | **DI**-CRT DemoWork on Labs/IA/IB Questions |  |
| **11****Nov** **18** | Work on Labs/IA/IB Questions | **VF-16N CRT problems** |
| **12****Nov** **20** | Work on Labs/IA/IB Questions/Mock Test | Turn in FA 17.2 - CRT |
| **13****Nov****22** | **IA Show and tell day** **Present your data graphs** |  |
| **14****Dec** **3** | **IB Field Theory Test** | **Turn in IB Field Theory Questions** |
| **15****Dec** **5** | **GW**-Current, Voltage, Power | **VF 18A, 18B, 18C, 18D, 18E**Turn in Electric Field Mapping (1), Millikan Oil Drop (4), and RC Circuits Labs (2) |
| **3****Dec** **9** | **GW**-Solving Series and Parallel circuits | **VF 18F, 18G** |
| Assignments* 4 Labs:
	+ Electric Field Mapping – mapping with voltmeters (individual) /30 pts
	+ Millikan Prep – take home practical analysis (individual) /30 pts
	+ Millikan Oil Drop Lab – simulation on the computer (groups of 4) /40 pts
	+ RC Circuits Lab - a capacitor discharging (groups of 2) /30 pts
* 4 Formative/3 Summative Assessments:
	+ 16.1 – Coulomb’s law, electric field, net force
	+ 16.2 – Vector electric field
	+ 17.1 – Voltage due to point sources, work.
	+ 17.2 – CRTs and Capacitors (no summative)
* 1 Big @$$ test on IB Questions - Study pls.
 | Handouts |