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** Oct24 | **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 Demo  Work 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 | |