IB Physics

Chapter 3 Syllabus: Two Dimensional Kinematics - Vectors and Projectile Motion

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| Block | Class  | On this class: |
| 1**Sept 30/ Oct 1** | -Hand out *Vector Sheet* -"Where am I?" lab-Finding vector components-Adding vector component vectors-Making angle magnitude vectors -Adding two angle magnitude vectors -Work on vector sheet in class 1-14 | **Video: B, C, D****Turn in:** *Air rocket* Lab**Turn in:**  *Plot Matching* lab **Turn in:** *Moving Plots* lab**Turn in:** *Where am I* lab (in class) |
| 2Oct 2/3 | -Multiplying vectors by scalars-Work on vector sheet in class 15-18, 19, 20-The principles of projectile motion -Hand out Cliff Problem Noteguide | **Video: F****Practice:** Vector Sheet: 1-14**Read:** 3.1-.4 |
| 3Oct 6/7 | -Hand out PM and 2DM worksheet-Cliff Quizlette -Work on 2DM 1, 2, PM 1-Hand out Arc Problem Noteguide  | **Video Flip: Cliff Problems (G)****Practice:** Vector Sheet: 15-20**Read:** 3.5 |
| 4**Oct 8/9** | -Arc Quizlette -Work on PM 3, 2, 4-Projectile motion demos | **Video Flip: Arc Problems (H)****Read:** 3.6-.7**Practice:** 2DM 1, 2, PM 1 |
| 5Oct 13/14 | -Work on PM 5, 6, 2DM 10-14-Description of Air rocket competition-Plan for air rocket competition | **Video Flip: The Range Equation (I)****Practice:** Projectile Motion: 2, 3, 4**Turn in:** Cliff and Arc Quizlettes |
| 6**Oct 15/16** | -Rocket launch competition **(Outdoors)**-Demo of boat crossing river in class | **Practice:** Projectile Motion: 5, 6, 2DM 10-14**Bring:** A warm or rain coat |
| 7Oct 17/20 | -Work on FA 3.4 - Boat Crossing River-Introduction of Vernier Trajectories lab-Hand out FA 3.1, 3.2, 3.3 | **Video Flip: Boat Crossing River (J)****Read:** 3.8 |
| 8**Oct 21/22** | -In class time to work onVernier Trajectories labFA 3.1, **3.2**, **3.3**, 3.4 | **Practice:** 2DM 7, 8, SO2DM 7, PM 7, 8 |
| 9**Oct 27/28** | **Summative assessments on:****-SA 3.1 Vectors****-SA 3.2 Cliff Problems****-SA 3.3 Arc Problems** In class time to work on Lab | **Turn in:** Vernier Trajectories lab**Turn in: FA 3.1 Vectors****Turn in: FA 3.2 Cliff Problems****Turn in: FA 3.3 Arc Problems****Turn in: FA 3.4 Boat Crossing River** |

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| Assignments* 2 Labs: (There is no write up for the rocket competition)
	+ Where am I (Done in class)
	+ Vernier Trajectories (Simulation on computer)
* 4 Formative Assessments
	+ 3.1 – Vectors
	+ 3.2 – Cliff Problems
	+ 3.3 – Arc Trajectories
	+ 3.4 – Boat Crossing River
* 3 Summative Assessments
	+ 3.1 – Vectors
	+ 3.2 – Cliff Problems
	+ 3.3 – Arc Trajectories
 | \*Handouts:Syllabus-2DKinematicsFA03.1FA03.2FA03.3FA03.4Quizlette-CliffQuizlette-ArcNoteguide-ArcNoteguide-CliffWorksheet-VectorSheetWorksheet-ProjectileMotionWorksheet-2DimensionalMotion+SonOf |