IB Physics

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

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| Block | In Class  | Due on this class: | If you miss this class: |
| 1**Oct** **5/6** | -Hand out *Vector Sheet* (skip) -{"Where am I?" lab} for OR Tech presentation pds 1/2-Finding vector components-Adding vector component vectors-Making angle magnitude vectors -Adding two angle magnitude vectors -Work on vector sheet in class 1-14?? | **Turn in:** *Air rocket* Lab**Turn in:**  *Plot Matching* lab **Turn in:** *Moving Plots* lab**Turn in:** *Where am I* lab (in class) | **Read:** 3.1-.4**Watch:** Videos B-D |
| 2Oct 9/10 | -Multiplying vectors by scalars-Work on vector sheet in class 15,16-The principles of projectile motion -Hand out FA 3.1-Hand out Cliff Problem Noteguide/Explain | Maybe work on as much of the Vector Sheet as you can do. You should be able to do the first section. | **Read:** 3.1-.5**Watch:** Videos F |
| 3Oct 11/12 | -Cliff Quizlette OR Tech presentation pds 7/8-Work on A3.2-Hand out Arc Problem Noteguide  | **Video Flip[[1]](#footnote-1): Cliff Problems (G)****Check and Turn in:** Vector Sheet: 1-16**Practice[[2]](#footnote-2):** A3.2 | **Read:** 3.5-7**Watch:** Videos G |
| 4**Oct** **16/17** | -Mock Cliff Assessment.-Arc Quizlette -Work on A3.3-Projectile motion demos-Heads up on Ch 3 problems | **Video Flip: Arc Problems (H)****Turn in:** Cliff Quizlette**Practice:** A3.3 | **Read:** 3.6-.7**Watch:** Videos H |
| 5Oct 18/19 | -Mock Arc Assessment-Description of Air rocket competition-Heads up on the book problems -Hand out FA 3.2, 3.3, 3.4-Introduction of Vernier Trajectories lab | **Video Flip: The Range Equation (I)****Turn in:** Arc Quizlette**Check:** Ch 3: 20(5.2 m/s),21[[3]](#footnote-3) | **Watch:** Videos I |
| 6**Oct** **20/23** | -Rocket launch competition **(Outdoors)**-Demo of boat crossing river in class | **Video Flip: Boat Crossing River (J)****Check:** Ch 3: 31, 35**Bring:** A warm or rain coat | **Watch:** Videos J**Read:** 3.8 |
| 7Oct 24/25 | -In class time to work onVernier Trajectories labFA 3.2, 3.3, 3.4 | **Check:** Ch 3: 47,67 | **Read:** 3.8 |
| 8**Oct****30/31** | **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:** Ch 3: 20(5.2 m/s),21,31, 35,47,67**Turn in:** FA 3.1, 3.2, 3.3, 3.4**Turn in:** **Any** formative work you want credit for from this unit! |  |
| 83/­4 Nov 1/2 | Demonstrations involving flame and opticsslideshowmusicdancingmagictricksandcelebrityimpersonationsitisnotaparty | **Bring:** A ceramic mug!! |  |
| **Nov** **3/6** | **Newton’s Laws!!!!!!!** | **Turn in:** Vernier Trajectories lab |  |
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| Assignments* 2 Labs: (There is no write up for the rocket competition)
	+ (skip) Where am I (Done in class) /10 pts
	+ Vernier Trajectories (Simulation on computer) /30 pts
* 3 Formative assignments
	+ Vector Sheet 1-20 /40 pts
	+ Cliff Quizlette /20 pts
	+ Arc Quizlette / 20 pts
* 4 Formative Assessments
	+ 3.1 – Vectors
	+ 3.2 – Cliff Problems
	+ 3.3 – Arc Trajectories
	+ 3.4 – Boat Crossing River (no summative)
* 3 Summative Assessments
	+ 3.1 – Vectors
	+ 3.2 – Cliff Problems
	+ 3.3 – Arc Trajectories
 | \*Handouts: |

1. For a video flip, you will take the noteguide home, and fill it in as you watch the videos at home. The next day you will work on group work provided you have filled in your noteguide. (If you do not fill in your noteguide, I will send you to the back to do it) [↑](#footnote-ref-1)
2. "Practice" means this is optional [↑](#footnote-ref-2)
3. On page 66 of your textbook. Check your answer in the back of the book on page A-28. The answer to the even problem is the thing in parenthesis. [↑](#footnote-ref-3)