**Physics G - Re-work arc part**

Two-Dimensional Motion and Vectors Syllabus

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| Block | Class | Due on this class | |
| 1  Nov 4/5 | -Introduction to vectors "Where am I?"  -Rules of vectors  -Finding vector components |  | |
| 2  Nov 6/9 | -Making angle magnitude vectors  -Adding vector component vectors | **Read:** 3.1-2[[1]](#footnote-1)  **Practice:** VS: 1-6 | |
| 3  Nov 10/16 | -Adding two angle magnitude vectors  -Principles of projectile motion  -Simple Cliff Problem solved  -Explain classroom flip/noteguide | **Practice:** VS: 7-14 | |
| 4  Nov 17/18 | -Work in groups on Cliff Quizlette  -Work on 2DM: 1,2,3  -Explain classroom flip/noteguide  -Hand out FA 3.1 | **Video Flip: Cliff Problem (G)[[2]](#footnote-2)**  **Practice:** VS: 15,16  **Read:** 3.3  **Turn in:** Cliff Quizlette | |
| 5  Nov 19/20 | -Arc Trajectories Example  -Work in groups on Arc Quizlette  -Work on 2DM: 4,5,6 | **Video Flip: Arc Problem (H) and Range Equation (I)** | |
| 6  Nov 23/24 | -Vernier #3 quandary – how far will it land?  -Finish Arc Quizlette  -Deriving the Range Equation  -Projectile motion demos | **Practice:** 2DM: 1-6  **Turn in:** Arc Quizlette | |
| 7  Nov 25/30 | -Solving boat crossing river problems  -Work in groups on 2DM 7- 9, SO2DM 5-7  **-Summative Assessment:**  **-SA 3.1 Vector Addition** | **Practice:** 2DM: 10-15  **Read:** 3.4  **Turn in:** FA 3.1 | |
| 8  Dec 1/2 | -Vernier #1 quandary  -Introduction of *Vernier Trajectories* lab  -Demonstration of *Trajectory of a Marble* lab  -Work time for labs | **Video Flip: Trajectory of a Marble lab**  **Practice:** 2DM: 7-9 | |
| 9  Dec 3/4 | -Hand out FA 3.2, 3.3, 3.4  -Posers from Interactive Physics  -In class time to work on labs | **Practice:** SO2DM: 1,3 | |
| 10  Dec 7/8 | -In class time to work on labs | **Practice:** SO2DM: 2-7 | |
| 11  Dec 9/10 | -Formative Assessments on:  -3.2 Cliff Problems  -3.3 Arc Problems  -3.4 Boat Crossing River | **Practice:** P3D: 1,3 P3E: 1,3,5 | |
| 12  Dec 11/14 | **-Summative Assessments:**  **-SA 3.2 Cliff Problems**  **-SA 3.3 Arc Problems**  **-SA 3.4 Boat Crossing River** | **Turn in:** *Vernier Trajectories* lab  **Turn in:** *Trajectory of a Marble* lab  **Turn in:** FA 3.2, 3.3, 3.4 | |
| Assignments:   * 3 Labs:   + *Where am I?* lab – Drawing in class on graph paper /10 pts   + *Vernier Trajectories* lab – Computer simulation. /30 pts   + *Trajectory of a Marble* lab – In class – hit a target with a marble. /20 pts * 2 Quizlettes – group work on problems (10 formative points each) * 4 Formative/ Summative assessments:   + 3.1 - Adding Two Vectors   + 3.2 - Cliff Problems   + 3.3 - Arc Problems   + 3.4 - Boat Crossing River | | Handouts:  Syllabus-2DMotionAndVectors  Worksheet-Vector Sheet  Worksheet-2DimensionalMotion  Lab-VernierTrajectories  Lab-TrajectoryOfAMarble  Noteguide-Cliff  Noteguide-Arc  Worksheet-SonOf2D  Quizlette-Cliff  Quizlette-Arc  FA 3.1  FA 3.2  FA 3.3  FA 3.4 |

1. Chapter 3 starts on page 84 [↑](#footnote-ref-1)
2. Video Flip means that you must watch the video on line. I will not be teaching the material in class, the only way you will learn it is to view the video… [↑](#footnote-ref-2)