**Physics G**

Two-Dimensional Motion and Vectors Syllabus (Chapter 3)

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| Block | In Class: | Due on this class: | If you miss this class: | |
| 1  Nov  7/8 | -Introduction to vectors "Where am I?"  -Rules of vectors  -Finding vector components |  | **Read:** 3.1[[1]](#footnote-1)3.2  **Watch:** Videos B | |
| 2  Nov  13/14 | -Making angle magnitude vectors  -Adding vector component vectors  -Adding two angle magnitude vectors | **Check:** VS: 1-4 | **Watch:** Videos C, D  **Read:** 3.2 | |
| 3  Nov  15/16 | -Work on Vector QL  -Work on VS 15,16  -Hand out FA 3.1 | **Check:** VS: 5-14  **Turn in:** Vector QL | **Watch:** Videos for FA 3.1  **Read:** 3.3 | |
| 4  Nov  17/20 | -Principles of projectile motion  -Simple Cliff Problem solved  **-Summative Assessment:**  **-SA 3.1 Vector Addition** | **Turn in:** VS: 1-16  **Turn in:** FA 3.1 | **Watch:** Videos F, G  **Read:** 3.3 | |
| 5  Nov  21/22 | -Solving Cliff problems |  | **Watch:** Videos F, G | |
| 6  Nov  27/28 | -Cliff Quizlette  -Work on 3.2 practice | **Check:** P3.2 #1  **Turn in:** Cliff Quizlette | **Watch:** Videos F, G | |
| 7  Nov  29/30 | -Solving Arc problems  -The Range Equation part II | **Check:** P3.2 #2-4  **Turn in:** P3.2 #1-4 | **Watch:** Videos H  **Watch:** Video I | |
| 8  Dec  1/4 | -Work in groups on Arc QL  -Work on 3.3 practice  -Projectile Motion Demos | **Check:** P3.3 #1, 6a, 7a  **Turn in:** Arc Quizlette | **Watch:** Videos H | |
| 9  Dec  5/6 | -Solving boat crossing river problems  -Boat Crossing River QL  -Work 3.4 practice | **Check:** P3.3 #2-4, 6bcd, 7bcd  **Turn in:** P3.3 #1-4, 6bcd, 7bcd  **Turn in:** Boat crossing river QL | **Watch:** Video J  **Read:** 3.4 | |
| 10  Dec  7/8 | -Introduction of *Vernier Trajectories* lab  -Demonstration of *Trajectory of a Marble* lab  -Hand out FA 3.2, 3.3, 3.4  -Work time for labs and FAs | **Check:** P3.4 #1  **Video Flip:** Trajectory of a Marble lab | **Read:** 3.4  **Watch:** Video J  **Watch:** Marble Lab Videos | |
| 11  Dec  11/12 | -Work time for labs and FAs  -Reminder about HW review for next time | **Check:** P3.4 #2-4  **Turn in:** Practice 3.4#1-4 | **Watch:** Video J  **Watch:** Marble Lab Videos | |
| 12  Dec  13/14 | -Work time for labs and FAs | **Check:** P3.2 #5, P3.3#5, 6f, 7f, P3.4#5  **Turn in:** P3.2 #5, P3.3#5, 6f, 7f, P3.4#5 | You might need to come in and make up the lab before or after school | |
| 13  Dec 15/  Jan 2 | **-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 | **You will need to come in and make up the assessments on a makeup day** | |
|  | Newton's Laws!!!!!! |  |  | |
| 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 * 4 Quizlettes (done in class as a group)   + Vector QL (20 pts)   + Cliff QL (20 pts)   + Arc QL (20pts)   + Boat x River QL (20 pts) * 5 Homework assignments   + VS 1-16 (32 pts)   + Practice 3.2 1-4 (32 pts)   + Practice 3.3 1-4 6a-d, 7a-d (48 pts)   + Practice 3.4 1-4 (40 pts)   + Review: P3.2 #5, P3.3#5, 6f, 7f, P3.4#5 (34 pts) * 4 Formative/ Summative assessments:   + 3.1 - Adding Two Vectors   + 3.2 - Cliff Problems   + 3.3 - Arc Problems   + 3.4 - Boat Crossing River | | | Handouts: |

1. Chapter 3 starts on page 84 [↑](#footnote-ref-1)