**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

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| B/A | | Class | Due | | If you miss this class: |
| 1  Feb  6/7 | | -A Veritable Quandary  -Centripetal acceleration vs Linear  -Centripetal Force  -Friction and Centripetal Force |  | | **Read:**  7.2 (starting at page 257), 7.3  **Watch:** Videos A, B |
| 2  Feb  8/9 | | -Centripetal vs. Centrifugal  -Centripetal Force Quizlette | **Check:** P7.1 #1  **Turn in:** Centripetal QL | |  |
| 3  Feb  12/13 | | -Motion in a vertical circle (g force)  -Rollercoaster loops  -Mythbusters and Swingsets | **Check:** P7.1 #2-3  **Turn In:** P7.1 #1-3 | | **Read:** p. 260-2  **Watch:** Videos C |
| 4  Feb  14/15 | | -Vertical Circle Quizlette | **Check:** P7.2 #1c-e  **Turn in:** Vertical Circle QL | |  |
| 5  Feb  16/20 | | -Fundamental forces in Physics  -Universal Gravitation  -Work on 7.2:1-3ab | **Check:** P7.2 #2-3c-e  **Turn In:** P7.2 #1-3 | | **Read:** p. 263-5  **Watch:** Videos D, E |
| 6  Feb  21/22 | | -Work On Orbit Problems 7.3:1-6  -Hand out FA 7.1, 7.2, 7.3 | **Video Flip: F –Orbit (≈22 min)**  **Turn In:** 7.3 #1-6 | | **Watch:** Videos F |
| 7  Feb  23/26 | | -Banked Corners  -Gravity in Space  -Kepler's Laws  -Models of orbital mechanics  -Escape Velocity  -Orbit lab intro |  | | **Read:** p. 266-7  **Watch:** Videos G, H |
| 8  Feb 28/  Mar 1 | | -Time to work on problems and lab |  | | **Read:** p. 266-7  **Read:** p. 268-9 |
| 9  Mar  2/5 | | Summative Assessments:  **7.1 - Circular Motion**  **7.2 - Gravity and Vertical Circle**  **7.3 - Orbit** | **Turn In:** 7.3  **Turn In:** Orbit Lab  **Turn in:** FA 7.1, 7.2, 7.3 | |  |
| Assignments:   * 1 Lab:   + *Orbit lab* – (Simulation on computer) /25 pts * 3 Formative/Summative Assessments:   + 7.1 - Circular Motion   + 7.2 - Gravity and Vertical Circle   + 7.3 - Orbit * 3 Formative Homework sets   + P7.1: 1-3 /30 pts   + P7.2: 1-3 /30 pts   + P7.3: 1-6 /30 pts | | | Handouts: | |