**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Block | | Class | Due | |
| 1  **Apr 5/8** | | -Tests back  -A Veritable Quandary  -Centripetal acceleration vs Linear  -Centripetal Force  -RPMs, RPS and velocity | **Read:**  7.2 (starting at page 257), 7.3 | |
| 2  **Apr 9/10** | | -Centripetal vs. Centrifugal  -Motion in a vertical circle (g force)  -Rollercoaster loops  -Going all the way around on a swing set – Mythbusters  -Fundamental forces in Physics | **Check:** CM:1-10  **Read:** p. 260-2 | |
| 3  **Apr 11/15** | | -Universal Gravitation  -Work on Gravity and Orbit 5-9  -**Quiz** on Circular Motion | **Check:** CM:11-15  **Check:** G&O: 1-4  **Read:** p. 263-5  **Turn In:** Circular Motion | |
| 4  **Apr 16/17** | | -Work On Orbit Problems (G&O: 10-18) | **Video Flip: F –Orbit (≈22 min)**  **Check:** G&O: 5-9 | |
| 5  **Apr 18/19** | | -Kepler's Laws  **-PreQuiz 7.2 - Orbit** | **Check:** G&O: 10-18  **Read:** p. 266-7 | |
| 6  **Apr 22/24** | | -Models of orbital mechanics  -Escape Velocity  -Orbit lab intro  -**Skill Set 7.2** | **Check:** G&O: 19-23  **Turn in:** PreQuiz 7.2 | |
| 7  **Apr 25/26** | | -Banked Corners  -Gravity in Space  -Time to work on problems and lab | **Read:** p. 268-9  **Check:** P7G:1,2(11.8 m/s) + P7H:2(84.6 kg),4(35 m/s) | |
| 8  **Apr 29/30** | | -Time For Mock Test and Lab | **Check:** PP 25, 39, 43, 47[[1]](#footnote-1) | |
| 9  **May 1/2** | | -**Test** on Chapter 7 | **Turn In:** Orbit Lab  **Turn In: Turn In:** Gravity and Orbit + PP 25, 39, 43, 47 + P7G:1,2+P7H:2,4[[2]](#footnote-2) | |
|  | | **Oaks Park Week May 6-10** |  | |
| Assignments:   * 2 Worksheets + book problems:   + *Circular Motion* (15)+ 2 stamps /34 pts   + *Gravity and Orbit* (23) PP:25,39,43,47+P7G:1,2+P7H:2,4 (8)+ 6 stamps /74 pts * 1 Lab:   + *Orbit lab* – (Simulation on computer) /25 pts * 1 Quiz:   + Quiz on Circular Motion /10 Quiz Pts * 1 PreQuiz/SkillSet:   + 7.2 - Orbit /10 Quiz Pts/10 Test Pts * 1 Test on Gravity and Circular Motion | | | Handouts:  This Syllabus  Worksheet-CircularMotion  Worksheet-GravityAndOrbit  Noteguide-Orbit  PreQuiz7.2  Lab-Orbit | |

1. These are the practice problems from the end of the chapter. PP 25 is on page 270. Answers are in the back of the book. [↑](#footnote-ref-1)
2. Staple these all together to the back of the Gravity and Orbit work. [↑](#footnote-ref-2)