**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

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| 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)