**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

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| Block | Class  | Due  |
| 1Apr 3/6 | -A Veritable Quandary-Centripetal acceleration vs Linear -Centripetal Force-RPMs, RPS and velocity | **Read:**  7.2 (starting at page 257), 7.3 |
| 2Apr 7/8 | -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 | **Practice:** CM:1-10**Read:** p. 260-2 |
| 3Apr 9/13 | -Universal Gravitation-Work on Gravity and Orbit 5-9 | **Practice:** CM:11-15**Practice:** G&O: 1-4**Read:** p. 263-5 |
| 4Apr **14**/15 | -Work On Orbit Problems (G&O: 10-18) | **Video Flip: F –Orbit (≈22 min)** **Practice:** G&O: 5-9 |
| 5Apr 16/17 | -Kepler's Laws-Models of orbital mechanics-Escape Velocity-Banked Corners-Gravity in Space | **Practice:** G&O: 10-18**Read:** p. 266-7 |
| 6Apr 20/21 | -Orbit lab intro-Hand out FA 7.1, 7.2, 7.3-Time to work on problems and lab | **Practice:** G&O: 19-23 |
| 7Apr 22/23 | -Time For FAs and Lab | **Read:** p. 268-9**Practice:** P7G:1,2(11.8 m/s) + P7H:2(84.6 kg),4(35 m/s) |
| 8Apr 24/27 | Summative Assessments:7.1 - Circular Motion7.2 - Gravity and Vertical Circle7.3 - Orbit | **Practice:** PP 25, 39, 43, 47[[1]](#footnote-1)**Turn In:** Orbit Lab**Turn in:** FA 7.1, 7.2, 7.3 |
| Apr 28 | ACTACTACTACTACTACTACTACTAC |  |
| 9Apr 29/30 | Vaves! Jah!!!! |  |
|  | **Oaks Park Week May 4-8** |  |
| 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
 | Handouts: This Syllabus Worksheet-CircularMotion Worksheet-GravityAndOrbit Noteguide-Orbit Lab-Orbit FA7.1 FA7.2 FA7.3 |

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)