**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

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| B/A | Class  | Due  | If you miss this class: |
| 1Apr 18/20 | -A Veritable Quandary-Centripetal acceleration vs Linear -Centripetal Force-RPMs, RPS and velocity |  | **Read:**  7.2 (starting at page 257), 7.3**Watch:** Videos A, B |
| 2Apr21/24 | -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:** 7.1:1, 2, 4, 5, 10, 13, 14**Turn In:** 7.1 | **Read:** p. 260-2**Watch:** Videos C |
| 3Apr 25/26 | -Universal Gravitation-Work on 7.2:1-6 (gravity) | **Check:** 7.2:1, 2, 6, 7, 9, 10 (vertical circle) | **Read:** p. 263-5**Watch:** Videos D, E |
| 4Apr27/28 | -Work On Orbit Problems 7.3:1-10 | **Check:** 7.2:1-6 (gravity)**Turn In:** 7.2**Video Flip: F –Orbit (≈22 min)**  | **Watch:** Videos F |
| 5skip | -Banked Corners-Gravity in Space -Kepler's Laws-Models of orbital mechanics-Escape Velocity | **Check:** 7.3:1-6  | **Read:** p. 266-7**Watch:** Videos G, H |
| 6May1/2 | -Orbit lab intro-Hand out FA 7.1, 7.2, 7.3-Time to work on problems and lab | **Check:** 7.3:1-10  | **Read:** p. 266-7**Read:** p. 268-9 |
| 7skip | -Time For FAs and Lab | **Check:** 7.2:8,9,11 (vertical circle) 8,9,10 (gravity) |  |
| 8May3/4 | Summative Assessments:7.1 - Circular Motion7.2 - Gravity and Vertical Circle7.3 - Orbit | **Turn In:** 7.3**Turn In:** Orbit Lab**Turn in:** FA 7.1, 7.2, 7.3 |  |
| May8-12 | Oaks Park Week! |  |  |
| 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, 2, 4, 5, 10, 13, 14 /14 pts
	+ P7.2: VC: 1, 2, 6, 7, 9, 10, Gr: 1-6 /24 pts
	+ P7.3: 1-10 /20 pts
 | Handouts:  |