**Physics G**

Chapter 7 Syllabus

Gravity and Circular Motion

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| Block | Class  | Due  |
| 1Mar 18/29 | -A Veritable Quandary-Centripetal acceleration vs Linear -Centripetal Force-RPMs, RPS and velocity | **Read:**  7.2 (starting at page 257), 7.3 |
| 2Mar 30/31 | -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:** 7.1:1-8, 9-14**Read:** p. 260-2 |
| 3Apr 1/4 | -Universal Gravitation-Work on 7.2:1-6 (gravity) | **Check #1[[1]](#footnote-1):** 7.2:1-6 (vertical circle)**Read:** p. 263-5 |
| 4Apr 5/6 | -Work On Orbit Problems 7.3:1-10 | **Check #2:** 7.2:1-6 (gravity)**Video Flip: F –Orbit (≈22 min)**  |
| 5Apr 7/8 | -Banked Corners-Gravity in Space -Kepler's Laws-Models of orbital mechanics-Escape Velocity | **Check #3:** 7.3:1-6 **Read:** p. 266-7 |
| 6Apr 11/12 | -Orbit lab intro-Hand out FA 7.1, 7.2, 7.3-Time to work on problems and lab | **Check #4:** 7.3:7-10 **Practice:** G&O: 19-23 |
| 7Apr 13/14 | -Time For FAs and Lab | **Check #5:** 7.2:8,9,11 (vertical circle) 8,9,10 (gravity)**Read:** p. 268-9 |
| 8Apr 18/20 | Summative Assessments:7.1 - Circular Motion7.2 - Gravity and Vertical Circle7.3 - Orbit | **Turn In:** Orbit Lab**Turn in:** FA 7.1, 7.2, 7.3**Turn in:** Checks 1-5 (above) |
| Apr 19 | ACTACTACTACTACTACTACTACTA | (ACT day) |
| 9Apr 21/22 | Vaves! Jah!!!! |  |
| 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-CircularMotion7.1 Worksheet-VerticalCircleandGravity7.2 Worksheet-Orbit7.3 Noteguide-Orbit Lab-Orbit FA7.1 FA7.2 FA7.3 |

1. Clearly label the checks - Check #1, Check #2, etc Demarcate the problems with a horizontal line in your homework. Have these out at the beginning of class, and I will stamp them. Put them on the board for EC [↑](#footnote-ref-1)