IB Physics

Chapter 8 Syllabus

Angular Mechanics

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| B/A | In Class: | Due on this class: | If you miss this class: |
| 1Mar 3/6 | -Radians, angles, circles-Tangential relationships-Centripetal acceleration revisited-Relationship between linear and angular kinematics | **Turn In:** 8.0 Conversions Worksheet | **Read:** 8.1-3**Watch:** Videos A, B, C, E |
| 2Mar7/8 | -Angular Force: Torque-Angular Mass: Moment of Inertia | **Check:**  **8.1:** 1,2,6,7,11,12, 16,17, 21,22**Turn In:** 8.1 | **Read:** 8.4-6**Watch:** Videos F, G, H |
| 3Mar9/10 | -Solving rolling problems-Angular Work and Power-Rotational KE-Solving problems with rotational KE | **Check: 8.2:** A,B, 1,2, 6,7, 11,12, 16,17**Turn In:** 8.2 | **Read:** 8.7**Watch:** Videos I, J, K, L, M |
| 4Mar13/14 | -Angular momentum-Gyroscopes-Conservation of angular momentum  | **Check: 8.3:** A1,2,3,4,5 B1,2  | **Read:** 8.8**Watch:** Videos N, O, P |
| 5 Mar15/16 | -Work in groups on FAs and problems-Hand out FA review-Hand out FA8.1, 8.2, 8.3 | **Check: 8.3:** C1,2,3,4,5,6 D1,2**Turn In:** 8.3**Turn In:** FA Review | -Get the FAs from me, or print them off the website |
| 6 Mar 17/20 | -Net Angular displacement-Coriolis Effect-Demos-Meet the Governor-Vector Cross Product-Gyroscopic precession |  | **Read:** 8.9, Appendix C (p. A-16)**Watch:** Videos Q, R |
| Mar 21/22 | -Gyroscope investigation intro-Work on Gyroscope investigation | **TAG challenge: Ch 8: 67** |  |
| 7 Mar 23/24 | Summative Assessments:**SA 8.1 – Rotational Kinematics****SA 8.2 – Rotational Dynamics****SA 8.3 – Rotational Energy and Momentum** | **Turn In:** Gyroscope Investigation**Turn In:** FA8.1, 8.2, 8.3**Turn In:** Any other formative work you want credit for... |  |
| 8 Apr3/4 | Statics! |  |  |

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| 1 Lab:* Gyroscope Investigation

3 Formative/Summative Assessments* 8.1 – Rotational Kinematics
* 8.2 – Rotational Dynamics
* 8.3 – Rotational Energy and Momentum

3 Homework sets:* 8.1: 1,2,6,7,11,12, 16,17, 21,22 /20 pts
* 8.2: A,B, 1,2, 6,7, 11,12, 16,17 /20 pts
* 8.3: A1,2,3,4,5 B1,2, C1,2,3,4,5,6 D1,2 /28 pts
 | Handouts: |