IB Physics

Chapter 8 Syllabus

Angular Mechanics

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| B/A | In Class: | Due on this class: | If you miss this class: |
| 1  Mar  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 |
| 2  Mar  7/8 | -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 |
| 3  Mar  9/10 | -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 |
| 4  Mar  13/14 | -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  Mar  15/16 | -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  Apr  3/4 | 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: |