IB Physics

Chapter 8 Syllabus

Angular Mechanics

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| Block | Class | Due |
| 1  Feb 12/13 | -Radians, angles, circles  -Tangential relationships  -Centripetal acceleration revisited  -Relationship between linear and angular kinematics | **Read:** 8.1-3 |
| 2  Feb 17/18 | -Angular Force: Torque  -Angular Mass: Moment of Inertia | **Practice:** Ch 8: 4, 5, 6, 7, 8, 11, 12, 15, 16, 17, 18, 19, 20, 21  **Read:** 8.4-6 |
| 3  Feb 19/20 | -Solving rolling problems  -Angular Work and Power  -Rotational KE  -Solving problems with rotational KE | **Practice:** AM: 1-6  **Practice:** Ch 8: 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 40,  **Read:** 8.7 |
| 4  Feb 23/24 | -Work in groups on Problems | **Practice:** Ch 8: 43, 44, 45, 47, 48,  **Practice:** AM:7-9 |
| 5  Feb 25/26 | -Angular momentum  -Gyroscopes  -Conservation of angular momentum | **Practice:** Ch 8: 51, 52, 53, 54, 55, 56, 57, 61, 62, (67 = TAG challenge!!)  **Read:** 8.8 |
| 6  Feb 27/  Mar2 | -Net Angular displacement  -Coriolis Effect  -Demos  -Meet the Governor  -Vector Cross Product  -Gyroscopic precession | **Practice:** Ch 8: 70, 71  **Practice:** AM:10-13  **Read:** 8.9, Appendix C (p. A-16) |
| Mar 3/4 | $%#&^%$ Oaks testing | **** |
| 7  Mar 5/6 | -Gyroscope investigation intro  -Work on Gyroscope investigation | **Practice:**  Ch 8: 77, 78, 86 |
| 8  Mar 9/10 | Summative Assessments: **SA 8.1 – Rotational Kinematics**  **SA 8.2 – Rotational Dynamics**  **SA 8.3 – Rotational Energy and Momentum** | **Turn In:** Gyroscope Investigation |
| 9  Mar 11/16 | 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 | Handouts:   * Lab-GyroscopeInvestigation * FA08.1 * FA08.2 * FA08.3 * Worksheet-AngularMechanics |