IB Physics

Chapter 8 Syllabus

Angular Mechanics

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| Block | Class  | Due  |
| 1Feb 17/18 | -Radians, angles, circles-Tangential relationships-Centripetal acceleration revisited-Relationship between linear and angular kinematics | **Read:** 8.1-3 |
| 2Feb 19/22 | -Angular Force: Torque-Angular Mass: Moment of Inertia | **Check #1**  **8.1:** 1,2, 6,7 11,12, 16,17, 21,22[[1]](#footnote-1)**Read:** 8.4-6 |
| 3Feb 23/24 | -Solving rolling problems-Angular Work and Power-Rotational KE-Solving problems with rotational KE | **Check #2 8.2:** A,B, 1,2, 6,7, 11,12, 16,17**Read:** 8.7 |
| 4Feb 25/26 | -Angular momentum-Gyroscopes-Conservation of angular momentum  | **Check #3 8.3:** A1,2,3,4,5 B1,2 **Practice:**  |
| 5 Feb 29/Mar 1 | -Work in groups on FAs and problems-Hand out FA review-Hand out FA8.1, 8.2, 8.3 | **Check #4 8.3:** C1,2,3,4,5,6 D1,2**Read:** 8.8**Turn In:** Check 1-4 |
| 6 Mar 2/3 | -Net Angular displacement-Coriolis Effect-Demos-Meet the Governor-Vector Cross Product-Gyroscopic precession | **Read:** 8.9, Appendix C (p. A-16) |
| Mar 4/7 | -Gyroscope investigation intro-Work on Gyroscope investigation | **TAG challenge: Ch 8: 67** |
| 7 Mar 8/9 | $%#&^%$ Oaks testing - Treb Movie | **** |
| 8 Mar 10/11 | 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 14/15 | Statics! | **Practice:** Ch 8: 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 40, Ch 8: 43, 44, 45, 47, 48, 51, 52, 53, 54, 55, 56, 57, 61, 62, (67 = TAG challenge!!) |

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| 1 Lab:* Gyroscope Investigation

1 Formative Problem Set:* Check 1-4

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
* Noteguides 1-4
* Worksheets 8.1, 8.2, 8.3
* FA Review
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1. Label this set of problems clearly "Check #1" and draw horizontal lines to demarcate the different checks. These are not going to be accepted late, you must do them daily to receive credit for them. [↑](#footnote-ref-1)