**IB Physics**

Linear Kinematics (Chapter 2) Syllabus

Text: *Physics* 6th edition by Douglas Giancoli

|  |  |  |  |
| --- | --- | --- | --- |
| Block | In Class | Due on this class | If you miss this class: |
| 1  **Sept**  **5/6** | -Hand out Syllabus/Course Policy  -Speed Trap lab outside  **DI**-Calculating Speed/Sig Figs  -Check out textbooks?  -Information card  -Video Flip 1B-1E/Noteguide | Bring a calculator, a writing utensil, and paper  **Turn in:** Completed information card | -Get Speed Trap data from someone  -Do the lab  **Watch:** Videos 1A (sig figs?) |
| 2  **Sept**  **7/10** | -Seating in Quad Pods  -Speed Trap Example  **GW**-Uncertainty worksheet, Speed Trap Lab, FA 1.1 | **Video - Tour of the website**  (I will email you a link)  **VF: 1A Sig Figs (optional)**  **VF: 1B-1E Uncertainty**  Practice: Uncertainty Worksheet | **Watch:** Video Tour  **Watch:** Videos 1B-1E  **Read:** 2.1-5 |
| 3  **Sept**  **11/12** | **SA 1.1 Uncertainty (first 30? minutes)**  **VF**-2C-Acceleration  **DI**-Vector Nature of Velocity | **Turn in:** FA 1.1 | Make up the SA 1.1  **Watch:** Videos 2C |
| 4  **Sept**  **13/14** | **DI**-Example Kinematics  **GW**-Solving Kinematics Problems P2.3  **GW**-FA 2.3  -suvat flashcards/Data Packets | **VF: 2D Kinematics**  Practice: Practice for 2.3 | **Watch:** Videos 2D |
| 5 Sept **17/18** | **DI**-Demos for Free Fall  **GW**-Solving Free Fall problems | **VF: 2H Free Fall Problems**  Practice: Practice for 2.3 | **Watch:** Videos 2H  **Read:** 2.7 |
| 6  **Sept**  **19/20** | **SA 2.3-Kinematics (first 30 minutes)**  **VF**-2F-Displacement Graphs  **DI**-Tangent Lines for slopes | **Turn in:** FA 2.3  Practice: Practice for 2.3 | Make up the SA 2.3  **Watch:** Videos 2F  **Read:** 2.8 |
| 7  **Sept**  **21/25** | **GW**-Work on Graphs of motion  -Demo of Plot Matching lab  **Lab**-Get tapes for Moving Plots  **DI**-How to analyze your tapes | **VF: 2G Velocity Graphs**  Practice: Practice for 2.4 | **Watch:** Videos 2G  Get a demo tape to analyze |
| 8  **Sept**  **26/27** | **Lab**-Air Rocket data gathering  **GW**-Labs | Practice: Practice for 2.4 | Get the Rocket lab data |
| 9  **Sept 28/**  **Oct 1** | **SA 2.4-Free Fall (first 30 minutes)**  **GW**-Labs | **Turn in:** FA 2.4 | Make up the SA 2.4 |
| 10  **Oct**  **2/3** | **GW**-Labs |  |  |
| 1  **Oct**  **4/5** | **DI**-Vector Components  **GW**-Labs or VF |  |  |
| 2  **Oct**  **8/9** | More on Vectors! | **VF: 3C, 3D, 3E**  **Turn in:** Moving Plots lab  **Turn in:** Air Rocket lab |  |

|  |  |
| --- | --- |
| Assignments   * 4 Labs:   + Speed Trap Lab – done the first day of class, written up the second day. No handout   + Air Rocket Lab-outdoors   + Moving Plots Lab – tape timer dots thingy   + Plot Matching Lab – matching the plots on the computer/written note saying you did it. No handout * 3 Formative/Summative Assessments:   + 1.1 Propagation of Uncertainty   + 2.3 Basic Kinematics   + 2.4 Free Fall Kinematics | Handouts |