Student Syllabus Kinetics IB HL Year 2

NOTE: The days are a bit of an estimate. If student understanding is such that more or less time is needed on a topic, this syllabus can be adjusted accordingly. Items marked with a \* mean that a formative assessment will be given on or near the day.

Day Topic

1 & 2. Day 1 and 2 serve as an introduction to the school year.

3. Review of Year 1 material.

 Students should come prepared with questions.

 Topics to be stressed are Chemical Mathematics and Gases

4. Carry on with review as needed.

 Start Kinetics

 Using Graphing Data Maxwell – Boltzmann Diagrams \*

 Factors Affecting Rate of Reaction \*

5. Rate Equations

 Nature of a Rate Law \* How to Read a Rate Equation \*

 Starting to solve Rate Law Equations \*

6. Different Orders of a Rate Law Equation and what makes them unique Special case of Half-lives \*

7. Mechanisms – The steps taken in a Chemical Equation \*

 Activity – Looking at Rate Determining Steps

 Multi-step Mechanisms

 How to determine if a mechanism is proper

8. Working Problems all period ***Binders Due***

9. Activation Energy \*

 Arrhenius Constant

10. Review for Kinetics Summative Assessment

11. Assessment on Kinetics ***Binders Due***