**COURSE OUTLINE FALL 2017:**

September 15 – *Nature of Science & Engineering: Conducting a Scientific Investigation*

We will go over the scientific method, make observations outside, come up with a hypothesis based on these observations, and design an experiment to test this hypothesis.

September 22 – *Nature of Science & Engineering: Contributions to Science*

We will learn about the little talked about contributions from women, Native Americans and local Minnesotans to the scientific community. You will give a short presentation (3 to 5 minutes) on your observational study.

September 29 – *Ecology: Food Webs & Trophic Levels*

This week we will review basic ecology terms about food webs and design a MN food web. There will be time to collect data for your experiment.

October 6 – *Presentations*

This class will be devoted to individual presentations about your experiment. Be prepared to present on this day! We will also have time to discuss an article from National Geographic.

October 13 – *Ecology: Minnesota Biomes*

We will do a group activity to see how rainfall effects what can grow in certain regions. We will learn about Minnesota’s four unique biomes.

October 20 – *Ecology: Populations & Carrying Capacity*

We will participate in a group activity all about carrying capacity and limiting factors. Afterwards, we will have a group discussion on wildlife management.

October 27 – *Ecology: Symbiosis*

We will learn about native Minnesota organisms that harm, benefit or coexist with each other without harm through an activity. We will also take a closer look at goldenrod galls through dissection.

November 3 – *Plants: Flower Parts*

After defining terms and discussing the evolution of plants, we will dissect flowers sketching and labeling their parts in our notebooks. There will be an open note quiz next class!

November 10 – *Plants: Fruits*

 Open note quiz this week!! After the quiz, we will dissect, sketch and label fruits! Come hungry!!

November 17 – *Animals: Classification & Invertebrates*

This will be a note intensive class to go over the many different kinds of invertebrates in the world! We will have a chance to choose an organism to research for a presentation at the end of the semester.

December 1 – *Animals: Vertebrates*

 Another note intensive class to learn about the many different kinds of vertebrates in the world!

December 15 – *Presentations*

 Our final class of the semester will be for presentations! Come ready to present!!