

Honors Biology Research Project Options List

Spring Semester 2016

***Note: This is just a summary list of options. You must download full instructions for whatever topic you pick from the teacher's website. On this website you will also find all the rubrics you need so that you may earn the best grade possible.**

Research Project Type	Brief Description
Home Lab Project	The student will obtain a Lab Manual from Ms. Jenkins to decide which home lab they wish to perform from 4 or more options. (See teacher website for a list of possible labs to do)They will then conduct background research on the topic, develop a hypothesis from this research, write and conduct an experiment to test this hypothesis, and form a conclusion based on data they collect. . The finished project will consist of a research paper that incorporates a formal lab report of this experiment; and a trifold board display of their home lab that represents all parts of the scientific method.
Plant Project	The student will select a type of plant from a list. The student will then research the plant and write a research paper covering all aspects of the plant's anatomy and physiology, classification, lines of evolutionary descent, life style, habitat and behavioral adaptations. For a full list of plants to choose from, and for complete instructions for this project you must go to the NPHS webpage for Honors Biology. The finished project will consist of the research paper AND a creative presentation of the paper. The creative component may take the form of a comic book about the plant, a children's book about the plant, a puppet show about the plant, a recorded series of songs about the plant, etc.
Biology Career Exploration	The student will research a biology related career they are interested in possibly pursuing after high school. They will research educational requirements, schools that offer that course of study, salary, hours, working conditions, etc. They will also conduct an interview with a person who currently is employed in that career, and job shadow them for a minimum of 2 hours. The finished project will consist of a research paper detailing their findings with a transcript of their interview AND a tri-fold backboard presentation with career brochure handouts they design and print.
Bioethical Issue	The student will research a controversial issue in the area of Bioethics. They will research both the pros and cons of the issue, and present both sides of the debate equally in the research paper. The student must reserve the issue they wish to research with the instructor BEFORE they begin their research. For a full list of options for this project, and for complete instructions on what is required for this project, students should go to the NPHS webpage for Honors Biology. The finished project will consist of a research paper fully discussing the issue, and a trifold backboard presentation of the issue OR a student created documentary DVD about the issue.
Vertebrate Animal Project	The student will select a vertebrate animal from a list. The student will then research the animal and write a research paper covering all aspects of the animal's anatomy and physiology, classification, lines of evolutionary descent, life style, habitat and behavioral adaptations. For a full list of animals to choose from, and for complete instructions for this project you must go to the NPHS webpage for Honors Biology. The finished project will consist of the research paper AND a creative presentation of the paper. The creative component may take the form of a documentary video about the animal, a comic book about the animal, a children's book about the animal, a puppet show about the animal, a recorded series of songs about the animal, etc..