

# GHS Honors Independent Science Research Prospective Incoming Student Assignment

Each student that is interested in taking the Honors Independent Science Research Course for the first time during the 2020-21 academic year is expected to complete the following assignment **on or before April 20, 2020**. Since the enrollment in the Independent Science Research Course is limited, and there are far more interested students than there are spaces, student's response to this assignment, along with evaluation of the student's grades, and recommendation from the student's past & current science teachers, will serve as a basis to select the best students for the upcoming year.

1. Please identify the following:
  - a. Your name and email address, so that I can notify you of your selection decision.
  - b. The class that you will be entering next year (*i.e. sophomore, junior, etc.*)
  - c. Please list those courses which you expect to take during the next academic year, along with science research, should you be granted the opportunity to take the course.
  - d. Please indicate those activities that you intend on taking part in (*i.e. sports, theater, music, etc.*) during the 2019-20 school year.
  - e. Please provide the name(s) of the science teachers that you have had here at GHS, or in middle school (for freshman applicants).
  
2. Please devise an ***experimental-based*** research proposal in an area of science, math, or engineering of your choosing. The research should NOT include human subjects, vertebrate test animals, or dangerous activities. If you need assistance, please see me, or you may refer to the CT Science fair website ([ctsciencefair.org](http://ctsciencefair.org)) for help. This research proposal should include:
  - a. Background information on the underlying problem that is to be investigated.
  - b. A tentative research plan that is attainable in a high school setting, or in a nearby university, government, or industry laboratory. If you are suggesting that the research be carried out in laboratory outside of school, please provide the name, email address, phone number, and institution of the mentors contacted.
  - c. A list of references that show that you have thoroughly investigated the proposal. The majority of these references should not be *web links*, but instead at least half should be journal/magazine articles that discuss the current status of the problem you wish to investigate.
  - d. Please indicate how you plan on forwarding your project over the summer, so that you can start immediately, once the Fall semester begins.
  - e. Identify any special equipment required and estimate the cost of the research project.
  - f. The entire proposal should be at least 5-7 pages, at minimum.

*Please submit your response to Mr. Bramante in the research classroom (Room 932) by the end of school on April 20<sup>th</sup>*