The Honors Project for will focus on the topic of Epigenetics.

is to research the topic of Epigenetics as outlined below (Honors Reports 1-3) and is encouraged to use all possible resources that may be at her disposal. She should attempt to weigh more heavily in favor of peer-reviewed journal articles (both original research articles and review articles). Online sources are not encouraged unless they are online versions of peer-reviewed journal articles, or they are from sites allied with major research laboratories or universities. College-University level textbooks are also encouraged for background research. The text of each Honors Report will cite research sources appropriately (APA style) when necessary.

Honors Report 1. Foundations of Epigenetics. This initial report should define epigenetics. It should seek to document the history of epigenetics and (in a most general sense) connect it to practical biology. Finally, the report should make a case for epigenetics as an important tool in improving human quality of life. Due: 100417 (W)

Honors Report 2. Mechanisms of Epigenetics. This second report will focus on the specific mechanisms of epigenetics, which are somewhat variable. The report will strive to list and describe these mechanisms in great detail. **Due 110117 (W)** 

Honors Report 3. Research in Epigenetics. This concluding report will provide summaries of at least four research articles that document original research in epigenetics. Each summary should (in the student's own words) document the context of the research, background, purpose, methodology (general), results (general) and conclusion. The full literature citation (APA style) should preface the summary for each research article. Due: 112917 (W)

Honors Report 4. Personal Reflections on Epigenetics. At this point, the student has had enough exposure to the topic to reflect on what she found interesting. Moreover, she might be able to comment on the potential of epigenetics for the future. This should not be a long essay, but should focus on the student's personal opinions and knowledge of the topic. Due: at Final Exam 121817 (M)

Format: Each Honors Report must be submitted in hard copy form. Printed in 14 pt Calibri font with standard margins. Literature citations and bibliographic references must be in APA format. Figures and illustrations are permitted only if they contribute to the reader's understanding of the report; they should be cited and accompanied by a legend (APA format). There is no minimum length for any one report. It should be understood that the length and level of detail should be commensurate with the student's obligation to fully meet the expectations documented above.

## **MEETING DATES**

100417 110117 112917

## JUSTIFICATION OF THE HONORS PROJECT FOR

The Honors Project for was conceived out of her interest in the topic of Epigenetics. The project is tangential to content covered in BIOL 2107; epigenetics is not specifically treated in course content, but is relevant to specific course topics of genetic and molecular biology. The Honors Project (see attached Description) is a series of four reports that are increasingly detailed and sophisticated in their treatment of the topic. Will exercise skills in scholarly research and critical evaluation of her resources. She will have to maintain sufficient focus to meet each report's content requirements. The final report demands a greater amount of engagement and analysis in that Haydn will be required to reflect personally on the topic of epigenetics.