AP Biology Bioethics Research Paper / Presentation

Due Date: Wednesday, June 9th

As part of the AP Biology curriculum at North Salem University, all AP Biology students are required to complete a research project on a current bioethical issue which will comprise a big portion of their 4th quarter average. Upon completion of this paper and presentation, your understanding of a biologically based topic and the problems/ concerns it presents human populations will be broadened. Also, you will gain increasing knowledge of how to effectively research, write and present a topic. Furthermore, this project is your chance to show me how much you learned this year and how affectively you can integrate your biological knowledge into a research paper and present this information to your class mates.

Requirements:

- I. Choose a topic from the list given or pick one of your own with teacher approval. Only one student may choose a specific topic in each class. Reserve your topic as instructed.
- II. Complete a working bibliography
 - **A.** Once you have picked a topic, begin to find information.
 - **B.** A working bibliography a list of sources you are using to write your paper. By no means is this a final bibliography. As you progress you may find additional sources or end up not using a source in your paper.
 - C. Look at section **IVf** for a guide as to what sources are acceptable and how many you need. Again, you may have more sources on your working bibliography than you end up using and that's okay.
 - **D.** Use MLA format for creating your bibliography. See *http://owl.english.purdue.edu/owl/* for MLA guidelines.
- III. Develop a question and research your topic so that you can prepare an outline that contains all of the information needed to write a paper.
 - A. Your outline should contain three major sections, as listed below in Part IV Section G.
 - **B.** Make sure to use MLA format for internal citations throughout your outline.

IV. Write a paper that contains the following.

- **A.** A cover page with the title, your name, class period, and date submitted.
- **B.** About 1800 to 2500 words to cover the topic (an "A" level paper will have at least 2000 words or so). This works out to be about 6-7 pages using a word processor's (i.e. Microsoft Word, iWorks Pages) Times Roman, 12-point font, 1 1/2-spaced with 1-inch margins on all sides. However, it's not the quantity but the quality that matters.
- **C.** Keep quotations to a minimum. More is not necessarily better. Although your paper should contain some appropriately placed quotes, it should not consist entirely of someone else's ideas or opinions.
- **D.** Internal citations for quotes and paraphrasing throughout the paper, documented according to MLA format. See for information on MLA format.
- **E.** A "Works Cited" (*reference*) page with references documented according to the MLA format. All "Works Cited" references must have an internal citation in the body of the paper referring back to them. See http://owl.english.purdue.edu/owl/ for information on MLA format.
- **F.** A minimum of 4 reference sources.
 - 1) None may be from a general encyclopedia, or Wikipedia.org. (*Although Wikipedia is not a bad place to start.*)
 - 2) One must be from a printed source other than your textbook,
 - 3) One from the digital library resources (See <u>www.uhlibrary.net</u>)
 - **4**) One from an open access Scientific Journal (*See <u>http://www.doaj.org/</u> for a listing of appropriate journals*),
 - 5) The others may be from any of the above, or an appropriate internet site. You may have more than 4 references. Be careful about the sources you choose to use; some of them are not carefully edited or contain false information.
- **G.** Your paper should include the following information:
 - 1) A section introducing the bioethical question and containing scientific background information and a historical perspective. The biological basis of the topic must be addressed and explained in this section.
 - 2) The viewpoints about the bioethical issues with a substantive section explaining the various perspectives. Discuss each viewpoint and describe the arguments supporting that viewpoint. Do not argue for any one perspective, yet. (*Make sure the citations are complete and correct*).
 - 3) Take an ethical stand, and argue the ethical viewpoint constructively. Back your argument with ethics supporting your viewpoint. Your argument should be scholarly, not based on an emotional response. Cite any sources you use and base your response in ethics.

On the due date of Wednesday, June 9th you will,

- 1. Hand in <u>TWO</u> copies of the finished paper and power point presentation. One will be a hard copy the other will be an electronic copy either emailed or shared with me ahead of time. Your final paper includes a cover page, the body of the paper, and your "works cited" page after your last page of text. The paper will not be accepted without a "works cited" page attached to each copy. If there is no title/cover sheet, you will be docked points. Print the whole paper at least the day before it is due. I will not grant you a "computer problem," or a "Wifi issue" extension. If your printer doesn't work, you need to figure out how to get the copy printed. You can always print at school (i.e. library or computer lab...ahead of time!!!). I will help you figure out strategies to make sure that you get your paper printed, but only if you tell me a day or two ahead of time...last minute problems are your problem, not mine. It is really smart to have your paper completed 2 days ahead of time so that you have time to look at it one more time to be sure that it meets the requirements, check grammar and spelling (and word usage!!) before you need to print it. Do not wait until the last minute. It is will be very obvious if you rush to finish your paper and careless mistakes can really hurt your final grade.
- **2.** Hand in edited copies of your online sources (*only 1 or two pages that you actually used*). Make sure to highlight the sections that you are paraphrasing, quoting, or using for ideas. The research paper portion of this final bioethics project will be submitted to Turnitin.com.

AP 2021: **Class ID** – _____ Password – **Photo51**

3. Everyone will be responsible to be ready to present their topic and main arguments on Wednesday, June 9th. Attendance and participation in the presentations is MANDATORY.

Before picking a topic ask yourself the following:

- What are the issues behind this topic?
- Why do we have the problem?
- What is the technology/science?
- How does it work?
- What are some approaches to understanding/solving the problem?
- Is it safe/tested?

Then:

- What are the ethical questions that arise from these issues?
- Should we use it/should it be done? How? Why?
- What happens if we do/don't?

After picking a topic:

- Develop an understanding of the topic.
- Form a question,
- Decide what the future of the technology should be or be used for.

Approximate Timeline:

Background Research	5 hours
Compiling Notes/Thoughts/Outline	3 hours
Draft #1	3 hours
Editing Draft	2 hour
Final Presentation	2 hours
Presentation	<u>5-10 minutes</u>
Total Time Investment	20.0 hours
<u>.</u>	- 16.0 hours of classwork
	4.0 hours of homework

Your presentation should be between 15 - 20 slides and should:

- Identify and define the issue.
- □ <u>Describe</u> and <u>explain</u> the science.
- Discuss both sides of the issue
- □ Take a stance

Performance Enhancing Drugs

- □ Support your stance
- □ Follow the 4 x 4 Rule

Possible topics include:

Euthanasia Abortion Animal Rights/Animal Testing Genetically Modified Organisms Nature vs. Nurture Embryonic Stem Cell Research Homosexuality InVitro Fertilization Intelligence Hormone Replacement Therapy **Athletics** Climate Change Pre-natal Genetic Testing Transgenic Species Public Access to Genetic Testing Results Genetic selection Gene Patenting Medical Marijuana

(I am open to just about any topic, especially if it is something you're passionate about!)