Syllabus

Bioethics: Biology, Technology, and Society

Andrea Panagakis
Princeton High School
Princeton, NJ
a_panagakis@hotmail.com
Bioethics: Biology, Technology, and Society Course Outline

I. Ethical Theory and Bioethics
A. Introduction: Integrating Scientific Content with Critical and Ethical Reasoning
   • Rationale
   • Critical Reasoning
   • Ethical Reasoning
   • Ethical Decision-making Model
   • Evaluating an argument

B. Science's role in society
   • scientific method
   • technology

II. Biomedical Research (2 presentations)
A. Human experiments: Informed consent
   • Historical perspective: past abuses
   • What biomedical research entails
B. Animal Experiments: Animal rights/welfare

III. Reproduction (3 presentations)
A. Reproductive technology (parental age, sex selection, egg/sperm selling, anonymity)
B. Maternal/fetal conflicts: Abortion
C. Reproductive Cloning and Therapeutic Cloning (stem cell tissue research)

IV. Genetics (1 presentation)
A. Gene therapy/genetic enhancement
   • Historical perspective: eugenics

V. Health Care (2 presentations)
A. Access/rationing: organ transplants
B. Physician-assisted suicide and euthanasia
Assessment

Biology, Technology, and Society is a one semester course worth 2.5 credits. Goals of the course include scientific literacy concerning the biological concepts discussed, an understanding and appreciation of the complex nature of different viewpoints in a democratic society, and going beyond emotional responses in order to address issues by following a rigorous, systematic approach. To this end, students will be expected to complete the following:

Presentation-25%

Students will be assigned a topic in pairs. The pair will devote one class period to describing the factual background and ethical problems raised by the topic; it should be a balanced overview of both sides of the issue. A bibliography and outline of the presentation will be due 2 days before the presentation is given. Facts and ideas from the assigned readings should be incorporated into the presentation. Copies of the outline will be handed out to the class. Students are encouraged to meet with me prior to submission of the bibliography and outline for any questions that come up. Visuals such as overheads (see me if you need some), short video clips, your own video, or posters are necessary. The inclusion of skits (e.g a TV show, talk show interview with an “expert”), role play, short class activities, Q+A, quizzes, or a class/school poll/survey, should also be used to enhance the presentation. Class interaction is a necessity. In addition to the outline, other handouts for the class may be helpful (I can photocopy them, but need them 2 days in advance). Students listening to the presentation should take notes and ask questions when appropriate.

Stance paper-25%

A 5-page stance paper on each students assigned topic is due one week after the presentation; see your assignment sheet for exact dates. The structure of the paper is similar to the one-page position papers due for weekly homework assignments, but the depth is greater. Each paper is an individual effort, in contrast to the presentation. The student must take a side on the issue involved, using the ethical decision-making model as a framework. Providing sound justification for the stance is essential. Richard Paul's elements of critical thinking, universal intellectual standards, and intellectual traits should underlie the reasoning used to present and shape your argument. Papers should be typed, double-spaced, with a suitable font (e.g. Times). Author-date citations and a bibliography should be included (in addition to the bibliography that is submitted for your presentation outline; the bibliography is not counted in the 4-6 pages). Papers without them will be marked down a full grade (e.g. A → B). Late papers will be graded down one full grade for each day that they are late.
Homework-25%
- Weekly readings- See “Bioethics Homework” sheet for details.
- Worksheets- These will be given on occasion to clarify concepts.
- Debate: Two debates will take place during the semester. The class will be divided into 4 groups: pro/con, on two issues. Students not taking part in the debate will evaluate the debate and provide constructive feedback. Details of the necessary preparation and the debate format will be given.
- Senate Committee Hearing: One Senate Committee on Health, Education, Labor, and Pensions Hearing on Stem Cell Research will be conducted. Everyone will be assigned a role and be expected to participate. The homework for this topic will be the testimony.
- Each assignment will receive either a 0 (not handed in), √- (6 points-work is unsatisfactory), √ (8 points-work is satisfactory) or √+ (10 points-work is above satisfactory.) Late homework will drop down by one point for each day late (e.g. √ 8 points to √-/√ 7 points) and will not be accepted after three days.
- The lowest homework grade from each quarter will be dropped.
- Students should have a 3-ring binder for handouts and notes.

Participation-25%
Students will discuss the issues in both small and large groups. Students are expected to be active participants in all discussions, as well as be active listeners (what you don’t say can be just as important as what you do). Each speaker will be allowed to present ideas in an open, respectful environment, and any opposition to ideas should be expressed constructively, without interruption of the speaker. While some of the topics may provoke emotional responses, remember that one of the goals of the class is to provide valid reasoning behind one's position, without simply relying on emotional appeals, as well as viewing an issue through multiple perspectives.

*** Unverified absences and lateness to class will have a negative effect on your participation grade.