Socratic Seminar on Bioethics & Biotechnology

We will be having a discussion on bioethics & biotechnology in class. This discussion will take place ____________________. The rules for the discussion are as follows:

1. This is a group discussion and we are discussing opinions.
2. One person speaks at a time.
3. You may disagree with the opinion of another student, but do not turn this into a personal attack.
4. Do not use any profane language, even if you are upset.

Procedure
1. You will be assigned a group, and a bioethics topic to research. You will need to do a short amount of research on your own about your individual topic.
2. Whichever group researched the topic will be the ones to introduce it and start its discussion.
3. On the day of the seminar, students will need to arrange themselves in a circle and be prepared to discuss the topics.
4. A group will be chosen to begin the discussion.

What to Research:
1. background on topic
2. moral/ethical issues involved
3. develop an opinion about the topic

Summarize your research in a 1-2 page double spaced paper including sources listed in APA format (www.bibme.org).

Reflection
You will write a 1-2 page double spaced paper to assess the quality of the seminar, how it might have been better, and what you learned from the experience.
Rubric (50 pts)

Your research will be graded out of 15 points (5 points for each of the following):
1. background on topic
2. moral/ethical issues involved
3. develop an opinion about the topic

You will be graded on your participation in the discussion on a 10 point scale. The following scale will be used.

Grading Scale
10 = 100% attention and leader of the discussion
9 = 100% attention and excellent participation in the discussion (8-10 comments)
8 = 100% attention and good participation in discussion (6-7 comments)
7 = 100% attention and made a few comments (4-5 comments)
6 = 100% attention, but spoke very little (1-3 comments)
5 = 100% attention and did not speak at all
4 = 75% attention and did not speak
3 = 50% attention and did not speak
2 = 25% attention and did not speak
1 = did not pay attention
0 = personal attack on a fellow student

Comments made that are not valid to the discussion will result in the loss of points.

The Reflection paper will be graded out of 15 points (5 points for each of the following):
1. Quality of the seminar
2. How it might have been better
3. What you learned
Bioethic & Biotechnology Issues

Genetic Testing: Genetic Testing includes a wide range of topics including the following:

Fetal Genetic Testing: This technology tests developing fetus for chromosomal abnormalities and hereditary conditions. Down's Syndrome, Huntington's Disease, Cystic Fibrosis and Tay Sach's Disease are all examples.

Pre symptomatic Genetic Testing: This technology tests an individual for a genetic condition/hereditary condition before the individual shows symptoms of the condition. It also establishes a risk factor for the likelihood a person will develop a condition in their life time. This technology also allows individuals to asses the risk of passing on an affected gene to their offspring. Familial Breast Cancer, Huntington's Disease, Cystic Fibrosis and Tay Sach's are examples.

Human Cloning: This technology includes both the potential for cloning an entire human, and/or cloning organs( skin, heart etc.). Should we clone humans? Why? Cloning of organs holds the promise of overcoming organ rejection and organ shortage? Is it worth it?

Stem Cell Research: Stem Cell Research has been all over the news in the last several years. This technology allows stem cells which are embryonic undifferentiated primitive cells which can develop and multiply into any other cell type including nerve cells. This technology has given hope to families with Alzheimer's, Parkinson's Disease, MS and Spinal Cord Injuries. Much of the controversy has arisen from what is the source of the stem cells.

Online Resources

1. Genetic Science Learning Center: http://gslc.genetics.utah.edu/
   Many helpful resources on stem cells, genetic disorders, and ethical issues.

2. Howard Hughes Medical Center: http://www.hhmi.org/research/bioethics/
   Features research ethics, animal research scientific integrity, and genetic alteration. The HHMI web site also has additional resources related to topics such as stem cells.

   The U.S. Department of Energy (DOE) and the National Institutes of Health (NIH) have devoted 3% to 5% of their annual Human Genome Project (HGP) budgets toward studying the ethical, legal, and social issues (ELSI) surrounding availability of genetic information. This represents the world’s largest bioethics program, which has become a model for ELSI programs around the world.

3. Kennedy Institute: http://www.georgetown.edu/research/kie/
   The Kennedy Institute is a teaching and research center offering ethical perspectives on major policy issues. It is the largest university based group of faculty members in the world devoted to research and teaching in biomedical ethics and other areas of applied ethics.

   A great place to start for background information and various positions on a variety of bioethical issues.