The term papers are considered thesis papers in which a position is taken on an issue and then defended. Think of the term paper as an argument presented to a jury of peers that will then “vote” on your thesis. You should develop what you think is the best position on the issue, carefully explaining and detailing your argument. It is expected that the arguments will be fair, balanced, and clear. Keep the “knuckle-head” factor to a minimum – that is, don’t overstate your argument, don’t draw wild conclusions, don’t slight opposing views by name-calling, don’t ignore what should be obvious points of contention, and so on. Your argument doesn’t need to be invincible, but it should reflect a sincere and critical attempt to come to grips with the topic. Assume that your audience is intelligent, well-read peer, but not necessarily someone who is familiar with the technical details of your topic.

Since this course attempts to combine an understanding of both the science and the ethical/social implications of genetics, the term papers will also reflect this dual approach. Each paper will be expected to include (a) a brief, clear, and accurate description of the relevant technology or science involved in the topic issue, and (b) it should include a brief, clear, and accurate description of the social issues relevant to the chosen topic so that the thesis is placed in the proper context. One successful strategy for a paper like this is to use a real-life case study of an individual involved in the topic. For example, it works well to introduce the story of a person dealing with some genetic issue so that you have to both explain the science and the particular problem facing this individual. Cases can be found in the assigned readings, but are also available in newspaper articles on the topic. A little bit of research on recent articles may reveal an interesting case or two.

**Some Suggested Paper Topics**

1. **Genetic Discrimination:** Genetic tests for early diagnosis of disease promises to improve health care and reduce overall health costs for individuals and insurers alike. It seems clear that people should have some secure privacy regarding the results of their genetic tests, but it also seems clear that insurers and employers also have a legitimate reason for wanting access to this health information from genetic tests. How should this apparent conflict be resolved? Is it likely that this information would lead to ‘genetic discrimination’? Is this a special concern about genetic information, different from other types of discrimination?

2. **PGD Technology:** Pre-implantation genetic diagnosis (PGD) as well as other screening technology are promising technologies that have the potential to screen out embryos for fatal and debilitating diseases, and to select for desirable traits, such as a bone marrow match for needy siblings. Nevertheless, there are some worries about the proper use of this technology. What should PGD be used for, and what should it not be used for? Be sure to defend your answer? Also, does PGD amount to a ‘new eugenics’? Why or why not?

3. **Genetic modification of our children** is one possible way to get rid of some genetic diseases (for some families), but it can also lead to other uses. Assuming the technology is safe enough to use in humans, what restrictions, if any, do you think should be placed on its application? Defend your answer.

4. **Critics of genetic intervention (selection and modification)** point to the ways that using this technology will change fundamental human relationships, such as parent-child, spouse-spouse, family structure, and what society expects from families and the care for children. What are these concerns? Do you think these concerns are warranted? Should we limit how we use certain interventions because of this objection? What effect do you think genetic technologies will have family relationships?

5. **Critics of genetic intervention (selection and modification)** point to the ways that using this technology will change social structures, such as increasing the divide between the rich and the poor. It may even create a “genobility”. What are these concerns? Do you think these concerns are warranted? Should we limit how we use certain interventions because of this objection? What effect do you think genetic technologies will have on the way society is organized?
6. Currently there are laws prohibiting the use of germline genetic modifications in humans and prohibitions on the use of reproductive cloning. What are the reasons for these prohibitions, legal or otherwise? Are they convincing? Also, if these objections could be overcome (e.g., if safety became a non-issue), would it be ethically acceptable to use these technologies on humans? Defend your view.

7. Some people object that using genetic technologies to alter the way we reproduce is unnatural or playing god, and thus should be stopped or limited in some way. Explain what this objection is and how it is applied to a specific genetic application. Then evaluate the objection. Is it persuasive? Does one have to be religiously inclined to accept the objection as valid? What questionable assumptions does it rely on? Is there some limit we should apply to our use of genetic technology that appeals to this ‘playing god’ type of criticism?

8. Green has pointed to a “status quo bias” as a problem for many of the objections to reproductive applications of genetic technology. What is the status quo bias and how does Green use it to criticize commentators? Is this a legitimate criticism? Is the “status quo bias” argument unduly self-serving; that is, might it not make some sense to judge the future on the basis of present values – maybe there is something right about the status quo?

9. Green has argued that most views about genetic futures rely too heavily on negative accounts, dystopian accounts, of the implications for genetic science (e.g., Brave New World, Gattaca, etc.). As an alternative Green provides a more positive picture of our genetic future, one that is not cataclysmic or doom-and-gloom. He sees the benefits of genetic interventions as possibly overcoming some of our more serious social and biological problems. Find an example of Green’s more optimistic alternative and provide a critical appraisal of its effectiveness in combating the negative images related to that specific issue. Why would we need this alternative vision? How does it counter-balance the negative visions?

10. Pick a genetic technology (or scientific account) we have discussed and some application for this technology. Answer some of the following questions: What will be the likely benefit or risks involved in this application? Should we use it? Why or why not? What alternative methods for addressing this problem exist? Is genetics the better alternative? Does the fact that the application involves genetics give it some special or unique ethical feature that we should be interested in?

Specific Requirements

- The paper must have:
  - A clear and focused thesis, with at least 2-3 points of support, and address at least one serious objection or alternative to the thesis (identify and answer the objection);
  - Written in an organized and clear fashion, using grammatically correct sentences and conforming to standards of a good paper. (See sample grading rubric below.)
  - Include a brief description of the central topic in order to place your thesis in context;
  - Include an adequate description of the relevant technology or science involved in the issue;
  - Be no longer than 2,500 words (~10 pages single-sided, plus bibliography), typed, double spaced, 1 inch margins, 12 point standard font (e.g., Times, Times New Roman), etc.;

- Keep quotes to a minimum, but when you quote or paraphrase another’s ideas use proper citations. The format may be MLA, APA, or any other recognized style format you are familiar with. Just be consistent;

- Sample Grading Rubric: Before turning in you final draft of the paper, ask your self the following questions. Ultimately, each question should be answered with an unequivocal ‘Yes.’
  - Does the paper have a clear and focused thesis?
  - Is the thesis adequately supported or illustrated by several facts, reasons, and/or examples?
  - Does the paper have an identifiable structure that successfully guides the reader?
  - Does the paper make use of clear and concrete language to articulate the ideas of expressed in the paper?
  - Does the paper employ proper spelling and grammar?