## STHV: Biotechnology and Ethics (PST 3127-JB) – Fall Semester 2009

Instructor: Dr. Jason Borenstein

**Course Description:** In this course, ethical issues within the realm of biotechnology will be discussed. The primary approach will be to examine key bioethics cases that influenced social and legal policies. Opposing viewpoints on a variety of subjects, including stem cells, cloning, and human subjects research, will be evaluated.

## **Required Text and Readings:**

- Gregory Pence, *Medical Ethics* (5<sup>th</sup> edition), McGraw-Hill, 2008.
- Articles **on reserve** (http://www.library.gatech.edu/services/reserves/index.php)

Grades: There will be two in-class exams; each one will constitute 20% of your final grade. The exams will be drawn primarily from lecture notes, discussions of current ethical issues, and assigned readings. Your answers on each exam must be complete, clear, accurate, and specific to earn full credit. The exam dates are September 29 and December 11. You are expected to be on time for each exam; your grade will be reduced for being tardy to an exam. An absence on the day of the exam is unacceptable and may result in a zero unless permission has been granted by the professor prior to the date of the exam to take a makeup exam. Performing an unacceptable act such as using notes, books, or talking with another student during an exam is a violation of the Academic Honor Code and will result in a zero for the exam. Depending on the severity of the wrongdoing, additional penalties may be enacted by the Office of Student Integrity such as a failing grade for the course, suspension, or expulsion from school.

Each student will be required to write two papers; the primary aim of each paper is to provide an original argument on a currently debated issue at the intersection of biotechnology and ethics. You may not write on the same topic for both papers. Further, you are required to incorporate in each paper one main ethical theory or framework discussed in the course. You must also reference at least one relevant scholarly journal article that is not assigned for class. The article must be from a credible professional journal and should not be dated before 2002. Each paper should be about 4-5 pages long and will constitute 20% of your final grade. The first paper will be due at the beginning of class on **September 17**. The second paper will be due at the beginning of class on **October 29**. Late papers will not be accepted. It is strongly recommended that you discuss your papers with the instructor before starting the assignment. A full citation for each source used must be included in an endnote or a works cited. This typically involves providing the author's name, the article's title, the name of the book or journal, publication date, and page numbers. Any quotations or technical information used must be cited properly. Your own original work is required, which includes explaining ideas and concepts in your own words and limiting the number of quotations used in your paper (roughly meaning no more than a one-two sentence quote per page). Standard paragraph form, grammar, margins, spacing (1.5-2), type font (11-12 point, Arial/Times New Roman), and punctuation are expected. Plagiarism and/or collaboration on papers are violations of the Academic Honor Code and will result in a zero for the assignment. Depending on the severity of the wrongdoing, additional penalties may be enacted by the Office of Student Integrity such as a failing grade for the course, suspension, or expulsion from school. If you have any questions about appropriate writing practices, consult with the instructor as soon as possible. Additional guidelines for the papers will be placed on T-square.

Participation and attendance will constitute 20% of your final grade. Earning an A or B for this portion of your grade requires at a minimum participating on a consistent basis, meaning approximately once per week. In-class activities, such as debates, will provide you with an opportunity to earn credit for participation. It is required that you complete assigned readings before class begins and are able to discuss the material competently. Not being prepared to discuss an assigned reading will result in a reduced grade. More than three unexcused absences or four tardies will cause this portion of your grade to be lowered by at least one letter. Disruptive behavior (such as using an electronic device for non-class purposes) will also result in a reduced grade. Additional guidelines will be placed on T-square.

**Academic Integrity:** Each student in the course is expected to uphold Georgia Tech's Academic Honor Code. This requires of students that they familiarize themselves with the rights and responsibilities contained within the policy. If you have any questions or concerns involving the Academic Honor Code, please consult with the instructor or refer to

http://www.honor.gatech.edu/

Withdrawals: The last day to withdraw from a course with the possibility of receiving a "W" is October 16<sup>th</sup>.

- \* The syllabus provides a general framework for the course; on rare occasions, changes may become necessary.
- \*\* If you have any learning disabilities, contact the ADAPTS office at (404) 894-2564, refer to http://www.adapts.gatech.edu, and/or consult with the instructor as needed.
- \*\*\* If you have any personal or academic difficulties, contact the Counseling Center at (404) 894-2575, refer to http://www.counseling.gatech.edu, and/or consult with the instructor as needed.

## **Course Plan and Topics:**

- Ethical Theory and Bioethics (Pence chapter 8)
- End-of-life: Refusal of Treatment (Pence chapter 2)
- Physician-Assisted Dying (Pence chapter 3)
- Assisted Reproduction (**Pence chapter 5**)
  - Embryos and Stem Cells (**Pence chapter 6**)
  - Cloning (Pence chapter 7)
  - Genetic Enhancement (Silver article "A Glimpse of Things to Come" on reserve)
- Genetic Enhancement continued (Sandel article "The Case Against Perfection" on reserve)
- Biotech and Enhancement (Kass article: http://www.bioethics.gov/background/kasspaper.html)
  - Animal Subjects Research (Pence chapter 10)
  - Human Subjects Research (Pence chapter 11)
- Dual Use (**Resnik article on reserve**)
  - Global Issues and AIDS (Pence chapter 17)
- Ethical Issues and Genetic Disease (Pence chapter 16)