

Bioethics & the Human Cyborg

Syllabus DRAFT

Spring 2011

Course Description

The ever-accelerating growth of science and technology present possibilities both exciting and frightening, among them a myriad of ways that we can and might technologically extend and enhance our abilities and ourselves. Cyborgs are no longer the stuff of science fiction, but are now the realm of human reality and short-term possibility. We face issues of modifying our bodies and minds through prosthetics, implants, drugs; we are faced with questions about genetic testing, prenatal screening, and perhaps designer babies. Can we push towards human perfection? Should we even try? In this course, we will focus on ethical and philosophical understanding, reflection, and evaluations of scientific research and technological innovation related to human enhancement.

This course is integrated with the Center for Values in Medicine, Science, and Technology's Spring Lecture Series: Exploring Human Enhancement. Students will be required to attend three Wednesday evening lectures and a discussion forum. They will also have the opportunity for focused meetings with the speakers, and will present their work at the Center for Values' first annual symposium.

Textbooks and Materials

Required Texts

- Weston, A Practical Companion to Ethics
- Kitcher, The Lives to Come
- Skloot, The Immortal Life of Henrietta Lacks
- Clark, Natural-Born Cyborgs
- Gattaca (movie)

Recommended Texts

- Godfrey-Smith, Theory and Reality
- Dusek, Intro to Philosophy of Technology

Plus a number of articles and chapters that can be found via Google Docs (emailed out to you at the beginning of the semester).

Course Schedule (Tentative)

Organized by week:

1. Philosophy of Science and Technology - A Rapid (Re-)Introduction (Dusek, Lowrance, Rec: Godfrey-Smith)
2. Basic Ethics - A Rapid (Re-)Introduction (Weston, esp 1–2, 5, skim 3)
3. Socially Responsible Science & Technology (Janet Kourany) - Speaker
4. Genetics, Medicine, & Healthcare (Kitcher 1–7, esp 1, 3, 6)
5. Genetics & Enhancement (Kitcher “Interlude,” 8–14 esp 8, 9, 13, 14; Gattaca)
6. Disability, Eugenics, and Designer Babies (Kittay) - Speaker
7. Human Perfection (Sandel, Kamm, Mehlman)
8. Sports and Biotechnology (Pistorius, Doping)
9. Medical Ethics (Skloot)
10. **Spring Break**
11. Cyborg Theory I - Natural-Born Cyborgs? (Clark)
12. Cyborg Theory II - The Cyborg Manifesto (Haraway)
13. **Enhancement Symposium** (Mehlman, Hogle)
14. Cognitive Enhancement: Modifying Our Minds (Bostrom, ??)
15. Life Extension (de Grey, Fukuyama)
16. Is Technological Progress Inevitable?

Final Papers Due (probably): W May 11

Grading

Lecture Attendance

All seminar participants must attend *all* 3 lectures, the discussion forum, and the symposium keynote addresses, no exceptions.

Assignments

1. Classroom citizenship - Attendance, participation, & proper courtesy - 10 points
2. Blog posts - Responses to speakers, forums, the symposium, or readings - 1 point / post, up to 5 points
3. Meetings w/ speakers on Thursday (morning or afternoon) - 2 points / meeting, up to 6 points
4. Registering & attending all symposium sessions - 2 points
5. In-class presentation - 1 point / presentation, up to 2 points
6. Poster session presentation (alone or in pairs) - 8 points
7. Research paper - 12 points

Final Grades

Final grade will be calculated on a 4.0 scale by taking your points divided by ten. So, for example, 41+ points is an A+, 38–40 points is an A, 35–37 points is an A-, 32–34 is a B+, 28–31 is a B, 25–27 is a B-, etc.

Baseline classroom citizenship score is a 5. Frequent, appropriate, quality participation will increase that score up to 10. Each class missed and each class period where you show poor classroom citizenship will subtract 1 point.

Blog posts, meeting attendance, in-class presentations will be all-or-nothing scores (based on effort and quality). Poster presentation and research paper will be graded on a 4.0 scale (suitably multiplied) as follows:

- An **A** grade indicates *excellent* work. **A** work has something to say and says it well. It displays a subtle and nuanced understanding of the text, develops arguments clearly and effectively, and reflects insightfully on the course material. It often rises above other work in terms of creativity and sophistication, or it may add something valuable to the discussion that goes beyond merely fulfilling the letter of the requirements. Only few, minor mistakes are present.

- A **B** grade indicates *good* work. Such work displays a clear understanding of the text, develops arguments consistently towards a clear claim, and is thoughtful and careful. The presence of serious errors must not impair the clarity of an argument or the overall understanding of a text. **B** work is in many ways successful, but lacks the sophistication or originality of **A** work.
- A **C** grade indicates *adequate* work. It shows an adequate understanding of the key parts of the text. Arguments aim at a central claim, though they may rely on unsupported or insufficiently developed ideas. More serious errors may be present, so long as the central claims and basic understandings are not undermined.
- Work which deserves a grade less than **C** will display some of the following problems: it fails to show adequate understanding of the text; it fails to understand the assignment; it fails to articulate a coherent or adequate argument; it fails to reflect on the content of the course; it displays such pervasive grammatical errors as to be highly obscure in meaning.

Course Policies

Email Policy

You are expected to check your official UTD email account regularly for announcements related to the course. You may request to use a different address for basic announcements, but grade-related emails must be conducted via UTD email. Crucial information will be emailed out at least 24 hours prior.

Email is the best way to contact me. I will generally try to return your emails within 24 hours (often sooner) Monday through Thursday, and within 48 hours on the weekends. You are welcome to email me a followup or reminder *if* I have not done so within this time frame. You should not count on being able to get in touch with me less than 24 hours before a major assignment is due.

Classroom expectations

You are expected to have read the assignments *before* class, and it would be to your benefit to also read them again after class. You are expected to bring *all* of the texts assigned for each day's class, and have them available to refer to. You are expected to listen respectfully to the professor, your fellow students, and guest speakers, and to participate in class discussions and activities while allowing room for others to do so as well. You should not show up to class very late or leave early.

Note-taking Suggestions & Laptop Policy

Extensive note-taking in class is strongly discouraged, especially in those parts of class meetings that are not primarily lecture-based (which is most of them). Taking good notes is no guarantee of good performance in the course, and taking extensive notes can interfere with activities that make a greater contribution to your performance: listening, consulting the text, and participating in class discussion.

For this reason, there should be no reason to bring laptop or handheld computers to class. Extensive laptop use in any particular class session will count as an absence.

Exceptions: You are welcome to bring laptops to any of the guest lectures, *if* you are doing so in order to take notes on the lecture in order to write a blog post. In that case, you must email your notes to me *immediately* after the lecture and post to the course blog within 48 hours. I am willing to consider arrangements for further exceptions on a case-by-case basis.

Why the policy?

Recent studies suggest that students who bring laptops to class perform worse (on average) than their non-laptop using peers, and are much less likely to pay attention in class.¹ Laptops can also be a distraction for other students. The main uses of laptops are generally unnecessary for this type of course (e.g., note-taking), can be satisfied in equally adequate ways without the temptations (e.g., printing readings), or would be better pursued as part of class discussion (e.g., finding the meaning of a confusing term).

¹e.g., <http://ssrn.com/abstract=1078740> or any of the vast literature on the detriments of multitasking for performance.