

**GEORGIA INSTITUTE OF TECHNOLOGY**  
**FALL 2014 BIOLOGY 4650-A BIOETHICS**  
Wednesday 3:05 pm – 4:55 pm, Cherry Emerson #204

Learning outcomes: After completing this class, students will be able to: (1) Describe basic ethical theories and principles. (2) Apply ethical thinking to issues in biology and medicine. (3) Describe and evaluate the ethical current and historical challenges and complexity of issues involved in medicine, biological research, and public policy. (4) Synthesize reading, discussion, and writing skills in order to assess bioethical issues.

Instructor: Dr. Shana Kerr (shana.kerr@biology.gatech.edu) 404-385-0065; Cherry Emerson #A114. Office hours by appointment.

TA: Callie Thompson (cthompson67@gatech.edu). Office hours by appointment.

Class organization: This is a two credit course intended for advanced undergraduates. BIOL 1510 or 1511 is a prerequisite. Class will be held Wednesday 3:05 pm – 4:55 pm, August 19 - December 12 in Cherry Emerson #204. This course includes reading assignments, exams, group activities and assignments, quizzes, class discussion, and written reports. Reading, attending, and participating in class is fundamental to this course. Be courteous to your fellow students and do not disrupt class by entering and leaving the room, reading, talking, allowing cell phones to ring, etc.

Required textbook: Lewis Vaughn, “Bioethics: Principles, Issues and Cases” 2nd Edition, Oxford University Press, New York, 2012, ISBN 9780199796236.

Bioethics Advanced Readings: A separate 1 credit class, Bioethics Advanced Readings, BIOL 4801, is being taught concurrently with BIOL 4650. BIOL 4650 is taught separately from BIOL 4801, but is a pre- or corequisite for 4801.

**Assessments:**

Attendance & participation: Attendance and class participation is required for success in this course. *Arriving late will affect your participation score.* Communicate with the course instructor as soon as possible if you have to miss a class for any reason; written confirmation of a legitimate excuse, such as a severe illness, will be required for excused absences. If you miss any part of a class without legitimate excuse, then you will receive no credit for that day’s assignments. There are no make-up assignments. If your absence is excused, your grade will be calculated from the remaining graded assignments.

Class participation in the form of discussing issues, asking questions, and respectful listening will make up a substantial portion of your grade. *You will not be graded, nor will you be judged, on your specific beliefs.* Bioethical discussions often involve questions of values; such discussions can become personal, subjective, and emotional. However, it is essential to understand and develop skills in making rational decisions and arguments, and to remain respectful of others when they speak. *Bioethical discussions in this course are not meant to lead to decisions regarding particular issues. Rather, they should result in understanding and evaluating the perspectives, ideas, and arguments both for and against different viewpoints.*

You will receive participation credit if it is clear that you have thought carefully about the subject matter, applied moral reasoning to the topic at hand, and contributed to the class in a respectful manner. You will be assessed on the quality of your contributions to class and small group activities. A quality comment possesses one or more of the following properties:

- Offers a different, but relevant, perspective
- Contributes to moving the discussion and analysis forward
- Builds on other comments
- Does not rely on “I feel,” statements, but includes *evidence-based arguments*
- Demonstrates reflective thinking

Team activities & evaluations: Students will work in groups to use moral theories, principles, and arguments to assess and evaluate case studies on bioethical topics. These are group assignments and will be turned in at the end of class. Groups will change periodically during the semester, and students will evaluate themselves and their team members on engagement and effectiveness within the team.

Writing assignments: Students will engage in various written activities including reading responses, in-class short papers, or out-of class short reports: Reading responses will be due via t-square by **11:59pm** the day before each class. The reading response should be a brief (1-3 paragraphs) discussion of topics in the reading that you found interesting, confusing, or otherwise noteworthy. The reading response should *not* be simply a summary of the reading, but rather evidence of your critical thinking about the ideas discussed in the reading. In-class short papers may ask you to consider and evaluate ethical positions related to class discussions or readings. Short reports may include comments on topics explored outside of class.

Reading quizzes: Reading quizzes will be unannounced in the first 10 minutes of class, and will generally be based directly on the readings for the week.

Exams: There will be two midterms and one final exam. The exams will be based on the assigned readings and application of ethics principles and theories to bioethical case study analyses, and are meant to test if you have thoroughly understood and followed the subject matter. The exams will also ask you to synthesize materials and test your ability to make coherent bioethical arguments. Exams will typically consist of short answer questions and free response.

Academic Integrity: Academic dishonesty will not be tolerated in any form. This includes cheating, lying about course matters, plagiarism, stealing classroom materials, or helping others commit a violation of the Honor Code. Students are reminded of the obligations and expectations associated with the Georgia Tech Academic Honor Code and Student Code of Conduct, available online at [www.honor.gatech.edu](http://www.honor.gatech.edu). Plagiarizing is defined by Webster's as "to steal and pass off (the ideas or words of another) as one's own; use (another's production) without crediting the source." Plagiarism and other academic integrity violations will be dealt with according to the GT Academic Honor Code. Unless specifically identified as group work, all assignments are to be completed alone. Please ask for help if any part of this policy is unclear.

Learning Accommodations: If needed, we will make classroom accommodations for students with disabilities. These accommodations must be arranged in advance and in accordance with the Office of Disability Services (<http://www.disabilityservices.gatech.edu>).

Late Assignments: In-class group activities are due at the end of class and will not be accepted late. Out of class writing assignments (reading responses and short reports) are due at 11:59pm on their respective due dates (typically the day before class). Late assignments will be accepted with a 10% penalty per day late. Assignments more than 3 days late will not be accepted. Extensions are typically not permitted but will be considered on a case-by-case basis for exceptional circumstances. Please discuss such circumstances with the instructor outside of class as soon as possible.

Final Grade Calculation:

Assessment	Value
Class participation	10%
Team activities & team evaluations	25%
Quizzes and writing assignments (in and out of class)	25%
Midterm exams	20%
Final exam	20%
Total	100%

The most stringent scale used will be 90-100% an A, 80-89% a B, 70-79% a C, 60-69% a D, and 59% or less an F. This scale is subject to adjustment at the discretion of the instructor.

Tentative Schedule (subject to change)

Week	Date	Topic and assigned readings	Pages
1	19-Aug	Introduction and course overview Pre-class survey <b>Begin Part I: Principles and theories in bioethics</b> Introduction to principles and theories in bioethics	NA
2	26-Aug	<i>Moral principles and theories</i> Moral Reasoning in Bioethics Bioethics and Moral Theories Optional: Readings on Bioethics and Moral Theories	3-30 33-51 52-68
3	2-Sep	<b>Begin Part II: Foundations in clinical and research ethics</b> <i>Paternalism and autonomy</i> Paternalism and Patient Autonomy "The Refutation of Medical Paternalism" "Why Doctors Should Intervene"	71-83 93-98 99-103
4	9-Sep	<i>Truth and patient confidentiality</i> Truth-Telling and Confidentiality "Telling the Truth to Patients: A Clinical Ethics Exploration" "On Telling Patients the Truth" "Respect for Patients, Physicians, and the Truth" "Confidentiality in Medicine – A Decrepit Concept"	131-140 141-145 145-147 148-155 161-164
5	16-Sep	<i>Informed consent</i> Informed Consent "The Concept of Informed Consent" "Transparency: Informed Consent in Primary Care" <b>Midterm I: Principles and theories</b>	180-190 190-195 205-211
6	23-Sep	<i>Human research and vulnerable populations</i> Human Research "Racism and Research: The Case of the Tuskegee Syphilis Study" "Protecting Vulnerable Subjects in Clinical Research" Optional: Readings codes of conduct for human research	221-241 266-278 Tsquare 241-248
7	30-Sep	<i>Clinical trials</i> Human Research (review sections on the "Science of Clinical Trials" and "Beneficence, Science and Placebos") "Of Mice but Not Men: Problems of the Randomized Clinical Trial" "A Response to a Purported Ethical Difficulty with Clinical Trials..." "The Ethics of Clinical Research in the Third World" "Ethical Issues in Clinical Trials in Developing Countries"	222-227 254-259 259-263 279-282 283-287
8	7-Oct	<b>Begin Part III: Current issues in clinical and research ethics</b> <i>Off-label prescription, illicit drugs as medicine, and prescription drug abuse</i> "Off-Label Prescribing" "Some Ethical Considerations for the "Off-Label" use of Drugs such as Avastin" "Medical Marijuana: a Primer on Ethics, Evidence, and Politics" "Ethical, Legal... Challenges Posed by "Controlled Medication Seekers"... "	Tsquare Tsquare Tsquare Tsquare

9	14-Oct	<i>Justice and access to healthcare</i> Dividing Up Health Care Resources "The Right to a Decent Minimum of Health Care" "Rights to Health Care, Social Justice, and Fairness in Health Care..." "Health Care Reform: Lessons from Canada"	681-695 703-708 708-716 717-722
10	21-Oct	<i>Justice and allocation of limited resources</i> Allocation of Artificial and Transplantable Organs (Pence Ch. 11) "Which Patients First? Setting Priorities for Antiretroviral Therapy..." "Should patients who use illicit drugs be offered a second heart-valve...?" <b>Midterm II: Foundations in clinical and research ethics</b>	Tsquare Tsquare Tsquare
11	28-Oct	<i>The right to die</i> Euthanasia & Physician-Assisted Suicide "When Self-Determination Runs Amok" "When Abstract Moralizing Runs Amok" "Active and Passive Euthanasia"	594-610 625-630 630-634 649-652
12	4-Nov	<i>Abortion</i> Abortion "An Almost Absolute Value in History" "On the Moral and Legal Status of Abortion" "Abortion and the Concept of a Person"	291-306 329-333 333-343 348-354
13	11-Nov	<i>Reproductive technology, cloning, and surrogacy</i> Reproductive technology "IVF: The Simple Case" "... Respect for Human Life ... and the Dignity of Procreation" "Surrogate Mothering: Exploitation or Empowerment?" "On Surrogacy" "Cloning Human Beings: An Assessment of the Ethical Issues..."	392-410 410-414 438-446 454-463 464-471 499-509
14	18-Nov	<i>Genetic information and testing</i> Genetic choices "Implications of Prenatal Diagnosis for the Human Right to Life" "Genetics and Reproductive Risk: Can Having Children Be Immoral?" "Disowning Knowledge: Issues in Genetic Testing" "Confidentiality, Privacy, and Security of Genetic and Genomic Test..."	518-538 538-542 542-548 563-567 Tsquare
15	25-Nov	THANKSGIVING BREAK – NO CLASS	
16	2-Dec	<i>Gene therapy, therapeutic cloning, and stem cells</i> Genetic choices (review sections on "Gene Therapy" and "Stem Cells" ) "Is Gene Therapy a Form of Eugenics?" "Genetic Enhancement" "Germ-Line Gene Therapy" "... "Respect for Embryos" ... in the Context of Stem Cell Research" "Ethical and Legal Issues in Therapeutic Cloning and the Study of Stem Cells"	526-534 571-577 577-582 582-589 589-592 Tsquare
17	9-Dec	FINAL EXAM-Wednesday 2:50-5:40	NA