

# **IDIS 232 and WOST 232 ETHICS AND REPRODUCTIVE BIOTECHNOLOGIES**

**Fall 2007**

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**Course description:** This is an interdisciplinary course which addresses both the scientific and societal aspects of reproductive biotechnologies. The topics include biotechnologies associated with (a) pregnancy, birth and the newborn (b) infertility and assisted reproductive technologies and (c) diagnostic and treatment technologies associated with reproductive disease (including reproductive cancers). The course form is interactive using situational examples and discussion. There are two required papers and an involvement in a group presentation. In addition there are a mid-term and final exam. This course satisfies the Ui LinC graduation guideline.

Time: Tuesday and Thursday .3b (10:20 - 11:30 AM)

Texts: BIOETHICS AND THE NEW EMBRYOLOGY by Scott F. Gilbert, Anna L. Tyler, and Emily J. Zackin, 2005 (main text)

ANGEL OF ASHLAND by Vincent Genovese, 2000

AS NATURE MADE HIM: THE BOY WHO WAS RAISED AS A GIRL by John Colapinto, 2000

<u>Date</u>	<u>Topic</u>	<u>Assignment</u>
<b>Week 1: Question .When Does Human Life Begin?</b>		
Aug 28 .Tue	Early human development/birth Who are Scott Gilbert and Lee Silver? What is ethics (individual and societal)?	Gilbert Ch 1
Aug 30 .Thr	Philosophical, theological, and scientific arguments for when life begins.	Gilbert Ch 2

**Week 2: Question .How Should Assisted Reproductive Technologies Be**

Regulated?

Sept 4- Tue Fertilization Gilbert Ch 3

Sept 6 .Thr ARTs: Safety and Ethical Issues Gilbert Ch 4

**Week 3: Question .Should We Select the Sex of Our Children?**

Sept 11 -Tue Perinatal screening technologies Gilbert Ch 5

Sept 13 .Thr Arguments for/against sex selection Gilbert Ch 6 Group

1

**Week 4: Should We Allow Humans to Be Cloned?**

Sept 18 .Tue The Science of Cloning Ch 7

Animal cloning

Human cloning

Sept 20 .Thr Ethics and Policies of cloning Ch 8 Group

2

**Week 5: Should Stem Cells Be Developed To Repair the Body?**

Sept 25~ Tue Stem cell technology Ch 9

Sept 27 .Thr Stem cell ethical dilemmas Ch 10 Group

3

**Week 6: Should We Modify the Human Genome?**

Oct 2 .Tue Gene therapy/enhancement Gilbert Ch 11, 12 “What is normal?”

Oct 4- Thr Importance of animal studies Gilbert Ch 13, 14

Classical ethical story: Tuskegee experiment

**Week 7: Spring Break and Midterm Exam**

Oct 9 .Tue Fall break

Oct ii .Thr MIDTERM EXAM . Gilbert’s book

**Week 8: New perspectives on old issue**

Oct 16- Tue *In utero* diagnosis and surgery

Oct 18 .Thr Ethical issues related to surgical manipulation of sexual organs Group 4

manipulation of sexual organs

male/female circumcision episiotomy/hysterectomy

vasectomy/tubal ligation intersexual surgery

Week 9: **What is the priority reproductive issue for our planet?**

Oct 23 .Tue Human population growth and birth control technologies

Oct 25 .Thr Ethical issues related to birth control technologies Group 5

**Week 10: Multiple dimensions of abortion**

Oct 30 - Tue Abortion (philosophical views/positions) Assigned readings

Nov 1 - Thr Class discussion on **Angel of Ashland** and the DVD **Vera Drake**

**VERA DRAKE** DVD is on reserve at the library. This is a multiple award winning video (2004) concerning a woman who was a wife, mother and societal criminal. It is a sensitive story about a woman who routinely performs abortions during a time when this was illegal. You may observe this video on a 24 hour check out basis or attend a scheduled "out of class" showing.

**Paper 1 due. Focus on the ethical dilemmas of the book and the movie as they relate to individuals and to society. This paper should include reactions and reflections concerning the related medical biotechnology, legal rights, and other societal "spinoffs".**

**Week 11: How do sex hormones influence the mind and body?**

Nov 6 - Tue Hormones/drugs related to sexuality, pregnancy and childbirth

Nov 8 - Thr Technologies related to hormonal imbalance or Group 6

manipulations: premenstrual syndrome, postpartum depression, endometriosis, fibroid tumors, etc

**Week 12: Why is hormone replacement (HRT) still considered to be an experiment in progress?**

Nov 13 -Tue The dilemmas of menopause and HRT Woman's Health Initiative Study

Nov 15 - Thr What types of ethical issues relate to menopausal Group 7 problems and their treatment?

**Week 13: Why are we concerned about sexually transmitted diseases?**

Nov 20 -Tue HIV readings and discussion

-research/exploitation

-responsibility and confidentiality

-vaccine development HIV scenarios

Nov 22 - Thr      Thanksgiving

**Week 14: What causes cancers of the reproductive system?**

Nov 27 - Tue      Ethical issues and concerns related to HPV vaccine  
(and possibly other vaccines)      Group 8

Nov 29 - Thr      Ethical issues related to diagnosis and treatment  
of reproductive cancers      Group 9

**Paper 2 due Focus on the ethical implications of a reproductive topic (biotechnology) of your choice. This paper MUST have internal references and a complete bibliography. Word of caution-be sure your topic is not too extensive and that you use resources in addition to “on-line” entries. Grade will be based on content, references, bibliography, and class sharing.**

**Week 15: What factors determine sexual identity and orientation?**

Dec 4 - Tue      Ethical issues related to gender (sexual identity, orientation, and attraction.      Group 10

Dec 6 - Thr      Discussion of book **AS NATURE MADE HIM:  
THE BOY WHO WAS RAISED AS A GIRL**  
Share highlights of 2nd paper.

**Final exam::** This exam will focus on the material covered since the mid-term and the book **AS NATURE MADE HIM: THE BOY WHO WAS RAISED AS A GIRL**

## **Grade**

**Based on the following:**

- 1. Class attendance and participation      200 pts**
2. Exam on Gilbert book      200 pts
3. Class presentation      200 pts  
Class and self evaluations will assist in determining this grade.
4. Paper 1- video and book (plus course information) 200 pts
5. Paper 2 selected topic (or optional book) 200 pts
6. Final exam      200 pts

Earned points/possible points = % grade

90-100 =A

80-89 =B

70-79 =C

60-69 =D

below =F

**Contract option:** You may also contract for additional work such as an optional additional book or other type of course-related involvement (pt value from 100 to 200 pts). (Note: The contract can be evaluated on a written or verbal format - to instructor or to class).

### Possible Optional Contract Books

THE HUMAN CLONING DEBATE by Arthur Caplan and Glenn McGee (editors), 2006

TRANSGENDER WARRIORS: Making History From Jon of Arc to Dennis Rodman by Leslie Feinberg, 1996 (Feinberg is a well-known author and speaker. The book is a comprehensive coverage of a challenging topic.) AP -\$15.00

AFTER DOLLY: The Uses and Misuses of Human Cloning by Ian Wilmut and Roger Highfield, 2006 AP \$17.00

PERFECT BABY, 2nd edition Parenthood in the New World of Cloning and Genetics by Glenn McGee .2000

BEYOND CHOICE: Reproductive Freedom in the 21st Century by Alexander Sanger 2005

THE PIVOT OF CIVILIZATION IN HISTORICAL PERSPECTIVE: The Birth Control Classic by Margaret Sanger and Michael Perry 2001

WHO OWNS LIFE by David Magnus, Arthur Caplan, and Glenn McGee 2002

GOD AND THE EMBRYO .Religious Voices on Stem Cells and Cloning by Brent Waters and Ronald Cole-Turner

BAD BLOOD: The Tuskegee Syphilis Experiment, revised ed by James H. Jones 1993

REMAKING EDEN by Lee M Silver, 1998

LIBERAL EUGENICS: In Defense of Human Enhancement by Nicholas Agar,  
2004

REDESIGNING HUMANS: Our Inevitable Genetic Future by Gregory Stock.  
2003 GUARANTEE THE SEX OF YOUR BABY: Choose a Girl or Boy Using  
Today's

99.9% Accurate Sex Selection Techniques by Robin Elise Weiss and  
Jeffrey Steinberg .2006

CHALLENGING NATURE: The Clash of Science and Spirituality at the New  
Frontier of Life by Lee M. Silver, 2006