Phil/ Psy. 377: Brain, Technology and Values Dr. Jacquelyn Kegley

Winter, 2006- Tuesday, 3:30-6, AE 105 Faculty Towers 103D

Office: Tues, Thurs: 1-3; Mon. 9-11 654-2249/ 654-2291

Course Description

Course Goals

1. **To become acquainted with various neurotechnologies used to study, treat, engineer and enhance the brain and thus various mental phenomenon.**
2. **To examine and comprehend some of the psychological, philosophical, ethical, legal and societal implications of the use of these technologies.**
3. **For each of us to reflect upon, develop and/or refine one’s own view of self, mind, body,**

**brain and their various interrelationships.**

Teaching Objectives

1. **To refine critical thinking skills, especially the ability to analyze and create arguments and to provide evidence for one’s claims and conclusions.**
2. **To learn when, where, and how to apply what we have learned.**
3. **To increase reflection on personal values, beliefs and motivations and attention to why others think and act as they do.**
4. **To encourage co-operative learning and the ability to work with each other in order to achieve common goals and shared understanding.**
5. **To increase abilities to effectively communicate in various modalities.**
6. **To increase reflective, critical and sensitive reading skills.**
7. **To encourage tolerance and respect for diversity of ideas, beliefs, values and lifestyles.**

Course Requirements

1. **Attendance and participation in class activities including graded small group**

**discussions- 30% of the final grade.**

1. **Summary-commentaries on the readings that are due for each class meeting. – 40% of**

**the final grade.**

1. **A 5-6 page reflective issue paper on a topic covered in the course. - 30% of the final grade.**

**Letter Grades and Equivalents**

A= 93-100% B- = 80-82% D+ = 67-69%

A- = 90-92% C+ = 77-79% D = 63-65

B+ = 87-89% C = 73-76% D- =60-62%

B = 83-86% C- = 70-72% F = 59% and below

1. **Academic dishonesty:** Utilizing another person’s work on exams or other class assignments without due credit will result in an F in the course and a report to the appropriate Dean.

Required Texts

1. Judy Illes, Editor, **Neuroethics: Defining the Issues in theory, practice, and policy,** Oxford University Press, 2006. ISBN: 0 19 856720-2 (pbk)
2. Michael S. Gazzaniga**, The Ethical Brain.** Dana Press, 2005. ISBN: 1-932594-01-9.
3. Several selected essays will be provided including a section from: **Beyond Therapy: Biotechnology and the Pursuit of Happiness. A Report of the President’s Council on Bioethics.** Dana Press, 2003. ISBN: 1-932594-05-1.

**COURSE OUTLINE & READING SCHEDULE**

**DATE TOPIC READING ASSIGNMENTS, VIDEOS.**

**1/02/07 What is this field of neuroethics?**

**What are some views of mind, body, brain, person relationships?**

**What should we know about autonomy, beneficence, confidentiality, and**

**privacy?**

**Donald Kennedy, Neuroethics: mapping a**

**new discipline,” pp.313-320, Neuroethics.**

**1 Michael S. Gazzaniga, The Ethical Brain,**

**“Preface,” xiii-xix.- Summary-commentary to**

**be handed in by 1/17/07.**

**1/09/07 What are the technologies Martha J. Farrah, “Emerging Ethical Issues in**

**and issues? Neuroscience,” Nature, handout-on-line.**

**Illes, Racine, Kirschen, “A picture is worth 1000**

**2 Words, but which 1000?,” in Neuroethics, 151-5.**

**Summary-commentary on Farrah and Illes*, et. al.* Due today.**

**Small group discussion # 1- review study questions for both articles.**

**The lecture will also draw on the essay by Ronald M. Green, “From genome to brainome: charting the lessons learned,” in Neuroethics, 106-121.**

**1/16/07 Are we autonomous and Patricia Smith Churchland, “Moral Decision-**

**independent moral agents? Making and the brain,” In Neuroethics, 3-16.**

**Adina Roskies, “A Case Study of Neuroethics:**

**3 The Nature of Moral Judgment,” 17-32.**

**Summary-commentary is due on both articles.**

**Small group discussion # 2–review study questions for both articles.**

**1/23/07 Can We Be Legally & Michael Gazzaniga, Chapter 6: My Brain Made**

**Morally Responsible? Me Do It,” 87-102 in Ethical Brain.**

**Tom Buller, “Brains, Lies & Psychological 4 Explanations,” in Neuroethics, 51-60.**

**Summary-commentary is due on both articles.**

**General class discussion – Review study questions.**

**1/30/07 Does privacy have any Michael Gazzaniga, Chapter 7: “Antiscocial**

**any meaning? Thoughts and the Right to Privacy?”in Ethical**

**Brain, 105-119.**

**5 Henry Greely, “The Social Effects of advances in**

**Neuroscience: legal problems, legal perspectives,” in Neuroethics, 245-63.**

**Summary-commentary is due on each article.**

**Small group discussion # 3- Review study questions and your own questions.**

**2/6/07 6How reliable is our Michael Gazzaniga, Chapter 8: “The Brain memory and if not then Produces a Poor Autobiography,” Ethical Brain,**

**who are we? Laurie Zoloth, “Being in the World:**

**neuroscience and the ethical agent,”**

**Neuroethics, 61-74.**

**Summary-commentary is due on each article.**

**General class discussion – review study questions and your own issues.**

**2/13/07 Should we aim to be Michael Gazzaniga, Chapter 4: “Training the more than we are? Brain,” and Chapter 5: “Shaping the Brain with**

**Drugs,” Ethical Brain, 55-84.**

**7 Erik Parens, “Creativity, gratitude and the**

**Enhancement debate,” Neuroethics, 76-101.**

**Summary-commentary due on all three articles.**

**Small group discussion #4- Review study questions and your own issues.**

**2/20/07 What about brain Kenneth S. Foster, “Engineering the Brain,” prostheses and brain- Neuroethics, 185-200.**

**stimulation? Megan S. Stevens and Alvaro Pascual-Leone,**

**“Transcranial magnetic stimulation and the**

**8 human brain,” Neuroethics, 201-212.**

**Summary-commentary is due on each article.**

**General class discussion- review study questions and own issues.**

**2/27/07 How should we handle the Michael Gazzaniga, Chapter 3: “The Aging**

**aging process? Brain,” Ethical Brain, 19-55.**

**Angnieszka Jaworska, “Ethical dilemmas in**

**9 Neurodegenerative disease: respecting patients**

**at the twilight of agency,” Neuroethics, 87-101.**

**Summary-commentary on each article is due.**

**Small group discussion # 5- Review study questions.**

**Lecture will focus on Beyond Therapy: Biotechnology and the Pursuit of Happines: A Report of the President’s Council on Bioethics, especially Chapter 1:”Biotechnology and the Pursuit of Happiness,” and Chapter 4: “Ageless Bodies.”**

**3/6/07 What impact will the Michael Gazzaniga,” Chapter 9: “The Believing**

**advances in neuroscience Brain,” Ethical Brain, 245-164.**

**have on religious belief? Paul Robert Wolpe, “Religious responses**

**to neuroscientific questions,” in Neuroethics, 10 289-296.**

**Summary-commentary on both articles is due.**

**Small group discussion # 6- Review study questions.**

**3/15/07 NO EXAM Issue Papers Due on this day, March 15, 2007**

**Overview of Group Discussion**

**A good group discussion brings forth ideas and information on the topic in an organized fashion and achieves a useful synthesis. Think of your group as having a collective thought process that should be superior to the thinking of individual group members. Your personal task in the discussion is to facilitate the collective thought process and to actively avoid subverting that process.**

**Tips and Pitfalls in Discussion**

**1. Do participate, contributing ideas, information and analysis to the discussion.**

**2. Do not state a strong position on the issue at the beginning of the discussion.**

**3. It is as valuable a contribution to help other members to participate as to have your say.**

**4. Listen to try to understand what others have to say.**

**5. Do not play “devil’s advocate,” that is, arguing a position that you do not hold.**

**Structure for Discussion**

**The class will be divided into small groups which will remain intact throughout the quarter. Each discussion will be set up as follows.**

**1. Small group discussion. (45 minutes) For each discussion a different person will be a facilitator and recorder-reporter.**

**2. Group reports. (25-30 minutes) The recorder for each group will summarize the discussion of the group.**

**Assessment of Discussion**

**Each person will receive a single composite score for each discussion day from the following equally weighed components:**

**1. Your own self-assessment. Taking into account the Tips and Pitfalls, you will rate your own discussion performance.**

**2. Assessment by other group members. Each group member rates every other group member, using the same criteria as for self-assessment.**

**3. Instructor assessment of the group. Each group will be assessed as an entity and all group members will receive an identical score on this component.**

**4. All three scores will be averaged to produce the score for that discussion day.**

Issue Paper- Due March 15, 2007

The paper should be 5-6 pages in length. Footnotes should be cited at the end and a bibliography presented.

**In this paper you will need to take a position on an issue discussed in class or in the material cited for the class. You will need to present your argument for that position, drawing on the material in the text and any other material you wish to bring into the paper. You can cite various forms of evidence and/or reasons including neuroscientific research, and ethical and other philosophical positions.**

**The paper should have a clear thesis, e.g. memory enhancement via drugs should be pursued. Then you should present your argument for your thesis, taking into account the points of the counter-argument.**

**Possible issues to address:**

1. **Do the advances in neuro-science go against any notion of “free will?”**
2. **Can neuro-scientific evidence demonstrate “diminished responsibility?”**
3. **Is “brain reading” the same as “mind reading?”**
4. **What should be the role of neuro-scientific evidence in the courts?**
5. **Should eye-witness testimony continue to be allowed in the courts?**
6. **What kind of ethical guidelines should govern neuro-surgery?**
7. **Do advances in neuroscience change our notions about religious belief?**
8. **How should advances in neuroscience be utilized in education?**
9. **Should drugs be used to enhance memory?**
10. **Should drugs be used to enhance attention and concentration?**
11. **Should “brain death” continue to be the standard in legally declaring death in the United States?**
12. **What protections so persons need for the utilization of neuroscientific evidence in health care?**

Phil/Psy 377.2- Research Component- worth 2 additional units of credit.

2 additional units of credit may be earned in conjunction with this course by pursuing a research project. If you are interested, consult the instructor and sign up for Phil/Psy 277.2

The 12- 15 pages research project will be due on March 15, 2007. Those pursuing this option need not write an issue paper.

**RESEARCH PAPER:**

**THIS IS DUE ON March 15, 2007, AND SHOULD BE at least twelve TYPED DOUBLE--SPACED PAGES. I will be glad to read rough drafts handed in anytime during the quarter before the paper is due.**

Purpose: To study, understand, and critically reflect on the use of a very specific neuro-technology and the social, ethical, philosophical, legal issues implied.

General Format

1. The paper will address a specific technology from a critical point of view and in terms of its ethical, legal, social, political and policy implications.

2. **The paper should be organized around a thesis about the technology.**

**The paper should argue the thesis.**

Two sample theses are as follows:

Thesis: “Neuro-imaging techniques used to determine employability violates several basic ethical principles; is not a reliable indicator of desirable employee traits and thus it should be legally prohibited in the United States.

Thesis: “Enhancing memory through drug technology used for purposes other than therapy violates basic rules of equity and fair competition and should not be pursued.

3. **There is a sample evaluation sheet for the paper that has been handed out and is on WebCT.**

Evaluation will consider: (1) the clear statement and development of the thesis; (2) a clear

Exposition of the technology, how it works and proposed goals and purposes; (3) an

argument for and defence of the thesis with clear supporting material;

and (3) good grammatical construction, spelling, proof-reading, and correct uses

of sources.

**Possible topics**

1 Should neuro-enhancement drugs be allowed in competition? –pick a kind of

competition, e.g. sports or academic.

2.Should brain scan evidence be used in hiring and firing and/or in determining educational achievement?

3. Should memory-enhancement via neuro-technologies be pursued for all who seek

to fight the aging process?

**Other topics may be discussed with the instructor.**