

INTD 105***The Seat of Consciousness: Where Science and Philosophy Meet*****Fall 2000****Class meeting time: T R 11:20am-12:35pm****Classroom: Schrader 4****Telephone: 245-5231 (O)****E-mail: Liu@geneseo.edu****Instructor: Professor JeeLoo Liu****Office hours: M W 1-3 PM****or by appointment****Office location: Welles 103****I. Texts**

1. Francis Crick: *The Astonishing Hypothesis: The Scientific Search for the Soul* [New York: Simon & Schuster], 1994
2. Michael Tye: *Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind* [Cambridge, Massachusetts: The MIT Press], 1996.
3. Diana Hacker: *A Writer's Reference*, fourth edition, [New York: St. Martin's Press], 1999.

* Prepare a (1 inch) three-ring binder and make sure that you have easy access to a three-hole punch.

II. Course Objectives

This course aims to accomplish the intended learning outcomes of INTD 105 defined as follows:

Students who have taken INTD 105 Writing Seminar will demonstrate

1. The ability to read significant texts carefully and critically, recognizing and responding to argumentative positions.
2. The ability to write sustained, coherent, and persuasive arguments on significant issues that arise from the content at hand.
3. The ability to write clearly, following the conventions of Standard English.

III. Course Description

[A] Content: This course is designed as a combination of the training of critical thinking and critical writing skills. The main topic of discussion is the seat of consciousness, which is taken to be in the brain. We will look at two books representative of the scientific approach and the philosophical approach. The first book is by Nobel Laureate Francis Crick. Crick explains recent developments of neuroscientific discoveries of consciousness, and disputes the folk belief that we have a soul separable from our brain. The second book is by philosopher Michael Tye, in which he introduces one of the most popular philosophical theories of consciousness to date. Tye's book and Crick's book will present an

interesting contrast not only in their approaches but also in their conclusions.

- [B] Format:** Students will be asked to write six short papers that include three initial papers and three significant rewrite of the initial papers. With each set of papers, we will do multiple revisions in the following order:
- (1) **First draft:** On the due date of the first draft, students should hand in a **four-page paper**. Each student should prepare **3 copies** of the paper.
 - (2) **Peer Editing:** The class will be divided into several small groups. Students will exchange their first drafts and give comments on their group members' papers. This procedure takes place outside of class and during a weekend.
 - (3) **Discussion Period:** After peer comments are made, we will have a discussion period in class when we examine how everyone's ideas or styles are different, and how each paper can be improved.
 - (4) **Revision of the first draft:** The first draft is given back to the writer to be revised. One of the goals of the revision is to cut down the four-page draft into a **three-page paper**. After the student revises the paper and resubmit it (along with the first draft and all copies with the peers' comments) to the professor, the paper will be graded and be given the professor's comments. **[Papers #1, #3, #5]**
 - (5) **Rewrite of the first paper:** Even though the second paper is a rewrite of the first paper, it should be significantly different from the first paper. It should be an elaboration of the ideas expressed in the initial paper, and it should also be a more scholarly paper (e.g. it should include footnotes and references in the correct format). This paper will be graded as a separate paper. **[Papers #2, #4, #6]**

*In addition, students will be asked to write a one-page homework essay on approximately weekly basis. The purpose of these essays is to facilitate student reading and to promote class discussion. They will be collected on each due date. Each homework essay will be recorded but not assigned a singular grade. At the end of the semester, students should hand in the whole set of homework to receive a total grade for their overall performance.

- [C] Policy:**
- (1) All writing assignments must be handed in on time and in class. No late submission of any of the writing assignments will be accepted without a documented excuse from the Dean's Office.
 - (2) All writing assignments should be word-processed, double-spaced, and free of obvious mechanical and grammatical errors.
 - (3) If you miss any of the six papers, you will not receive a passing grade for the course. If you miss any of the homework essays, your total grade will be deducted in accordance with the appropriate ratio (e.g. 5/6 of 70).
 - (4) No exams will be given. Hence, you can have a more relaxed attitude in reading the texts. You do not need to memorize the details of explanations or arguments, for example. However, if you

don't do the readings, your papers will not meet my level of expectation.

[D] Participation: Active participation in class is highly emphasized. Participation includes the following factors:

- (1) Responsible peer editing (judged by the written comments on peers' papers).
- (2) Active class discussion on the texts.
- (3) Active class discussion on each other's paper.

IV. Grade Distribution:

Average of six short papers (3 full pages each)	60 %
Active class participation	20 %
Five weekly homework essays (1 full page each)	20 %

Numerical Grade Translation: A: 95-100; A-: 90-94; B+: 87-89; B: 84-86; B-: 80-83; C+: 77-79; C: 74-76; C-: 70-73; D+: 65-69; D: 60-64; E: below 60

§ Paper Topics:

Paper #1: Memory and Consciousness. If we do not have any form of memory whatsoever, can we still be conscious of what is going on? Examine Crick's argument for the close connection between iconic memory and consciousness. Think of some supporting examples or counterexamples in your evaluation of his view. Give your own (sketchy) definition of 'consciousness' at the end, list all the necessary conditions for consciousness that you can think of.

Paper #2: For this essay you are to revise Paper #1 in a significant way. Hand in this paper along with Paper #1(with my comments), and I will compare them to see how different the two papers are. You should keep in mind that in this paper you are basically writing a new paper with the first paper as the foundation. You need to come up with deeper analysis, richer ideas and more scholarly research. Footnotes and references are expected for this paper.

Paper #3: Science and Ethics. Crick points out that the neurophysiology of human brain has advanced very little owing to the insufficiency of experimentation on animals and humans. He argues that animal experimentation is justified. Furthermore, he seems to imply that, for the advancement of scientific knowledge, humans should be allowed to volunteer to be subjects of experimentation. What are his arguments? Do you agree with him? Should we begin intrusive experimentation on human brains if we can get volunteering subjects? What are the ethical ramifications of human experimentation?

Paper #4: For this essay you are to revise Paper #3 in a significant way. Give your view (with supporting arguments) on the ethics of doing neural experimentation on live human beings. Consider the pros and cons of this issue thoroughly. Hand in this paper along with Paper #3 (with my comments), and I will compare them to see how different the two papers are. You should keep in mind that in this paper you are basically writing a new paper with Paper #3 as the foundation. You need to come up with deeper analysis, richer ideas and more scholarly research. Footnotes and references are expected for this paper.

Paper #5: Closing the Explanatory Gap. Tye points out that there needs to be some explanation of how our subjective phenomenal states can be generated by objective brain states. How can activities in a patch of gray matter generate our rich inner lives? How can something which scientists can study from an objective point of view produce something so intrinsically private and subjective as our feelings and emotions? What is your proposed explanation of this relationship? (Choose from the various strategies listed near the end of Chapter 2 and defend your choice.)

Paper #6: This is the final project of the semester. For this essay you are to revise Paper #5 in a significant way, and come up with your analysis and suggested solution to the Explanatory Gap problem. You need to read Chapter 6 carefully to further develop your view. Hand in this paper (2 copies) along with Paper #5 (with my comments) on **December 11th**. You should keep in mind that in this paper you are basically writing a new paper with Paper #5 as the foundation. You need to come up with deeper analysis, richer ideas and more scholarly research. Footnotes and references are expected for this paper.

§ Homework Topics:

With each homework assignment, you should read the chapter a couple of times at the minimum before sitting down to write the essay. Do not try to complete the assignment within an hour. If you simply skim through the readings, you will not be able to digest the content and answer my questions in your own words. The assignments challenge you to comprehend on your own, but I do not expect you to completely grasp the content of each chapter. Just do your best, and write down what you do understand.

Homework #1:

What is Crick's Astonishing Hypothesis? Why is the hypothesis "astonishing" according to him? Can you accept this hypothesis? Why or why not?

Homework #2:

What is a neural network? List three major types of neural networks that Crick discusses and briefly explain each of them. What are the advantages of having neural networks and what are the limitations?

Homework #3:

What is the Explanatory Gap between phenomenal states and brain states? Why is there such a gap? What is needed to fill the gap? Explain Tye's explanation of this problem carefully, including all the important terminology such as 'phenomenal', 'perspectival,' 'mechanism', 'realization,' etc. Use your own words to explain this problem. Do not simply copy down what he wrote.

Homework #4:

What does Tye mean by "the intentionality of feelings and experiences"? What exactly is the view he proposes? Use pain as an example to explicate Tye's view. Do you think his analysis of pain is accurate? Do you know how it is different from the philosophical orthodoxy on pain? Use your own words to explain his view to a layman, e.g. your roommate who is not in this class. Make sure that you explain his basic terminology such as 'representational' and 'intentional.'

Homework #5:

What does Tye mean by "phenomenal content"? What does he mean by the "PANIC" theory? Do not just give me his definition. What is his point with the story of the "swamp man" or the transported double? (Note: These are fanciful stories. But what is the point? Try to look beyond the apparent craziness and focus on the real issue here.)

Class Schedule

<u>Date</u>	<u>Content of discussion</u>	<u>Assignments for this class</u>
T 8/29	Introduction	None
R 8/31	Essay framing	Read [Guidebook], Section C
T 9/5	The General Nature of Consciousness	Read Crick, chaps. 1-2 [Homework #1 due]
R 9/7	The Psychology of Vision	Read Crick, chaps. 3-4
T 9/12	Attention and Memory	Read Crick, chaps. 5-6 [Paper #1, first draft (3 copies) due]
R 9/14	Peer editing and essay revision	Read [Guidebook], Section G Peer editing over the weekend
T 9/19	Workshop on Paper #1	Mandatory Attendance Bring peer editing comments
R 9/21	Human Brain and Neuron	Read Crick, chaps. 7-8
T 9/26	Types of Experiment	Read Crick, chap. 9 [Paper #1, final draft due] Hand in the final draft and three edited copies of the first draft in a three-ring binder.
R 9/28	Brain Damage	Read Crick, chap. 12
T 10/3	Neural Networks Paper #1 returned	Read Crick, chap. 13 [Homework #2 due]
R 10/5	Visual Awareness	Read Crick, chaps. 14-15
T 10/10	Fall Break	
R 10/12	Crick's Hypothesis	Read Crick, chaps. 16-18 [end of Crick] [Paper #2 due] Hand in Paper #1 (with my comments) along with Paper #2 in a three-ring binder.

T	10/17	The Ten Problems Paper #2 returned	Read Tye, Chap. 1
R	10/19	The Ten Problems due]	Tye, Chap. 1 [cont'd] [Paper #3, first draft (3 copies)
T	10/24	Workshop on Paper #3	Peer editing over the weekend Mandatory Attendance Bring peer editing comments
R	10/26	Why the Problems Run So Deep	Read Tye, Chap. 2 [Homework #3 due]
T	10/31	Why the Problems Run So Deep	Tye, Chap. 2 [cont'd] [Paper #3, final draft due] Hand in the final draft and three edited copies of the first draft in a three-ring binder.
R	11/2	Can Anyone Else Feel My Pains?	Read Tye, Chap. 3
T	11/7	Intentionality of Feelings and Experiences Paper #3 returned	Read Tye, Chap. 4 [Homework #4 due]
R	11/9	Intentionality of Feelings and Experiences	Tye, Chap. 4 [cont'd]
T	11/14	What What It's Like Is Really Like	Read Tye, Chap. 5 [Paper #4 due] Hand in Paper #3 (with my comments) along with Paper #4 in a three-ring binder.
R	11/16	What What It's Like Is Really Like	Tye, Chap. 5 [cont'd] [Homework #5 due]
T	11/21	The Tale of Mary and Mechanism Paper #4 returned due]	Read Tye, Chap. 6 [Paper #5, first draft (3 copies)
R	11/23	Thanksgiving Vacation	Peer editing over the weekend
T	11/28	Workshop on Paper #5	Mandatory Attendance Bring peer editing comments
R	11/30	Can You Really Imagine What You Think You Can	Read Tye, Chap. 7 [Paper #5, final draft due]

Hand in the final draft and three edited copies of the first draft in a three-ring binder.

T 12/5 Can You Really Imagine What You Think You Can Tye, Chap. 7 [cont'd]
Paper #5 returned

R 12/7 Review; Conclusion **[Hand in the whole set of homework in a three-ring binder.]**

[Note]:

Hand in Paper #6 (2 copies) along with Paper #5 (with my comments) before noon on December 11th (the Monday after our last class). Hand in a separate cover sheet for Paper #6 that contains the following information: Name, Student Identification Number, Term, and Instructor's Name.