

PSYC82 | Theoretical Psychology | Fall 2004

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• Course Description:

This course aims to cover both questions *about* theoretical psychology, as well as issues *within* it. The first half of the course will cover some of the tools, concepts and methods of theoretical psychology -- topics will include the relation between psychology and philosophy, the nature of psychological laws and explanations, and some basic philosophy of science. We will then study some actual theoretical psychology by considering the successive 'paradigms' of classical, connectionist and dynamical cognitive science, as well as foundational issues from neuropsychology and psychiatry. Readings will be drawn from a package of a variety of authors in cognitive science and its sub-disciplines. Emphasis will be placed on understanding both the arguments these authors advance, and how their theoretical concerns are related to experimental work.

• Evaluation:

1) Midterm take-home test	25%	Due in class on 27 th October
2) Reading response (1 page)	10%	Due any time in class
3) Final Essay (5-7 pages)	35%	Due in class on 1 st December
4) Exam (3 Hrs)	30%	Date and time TBA

• Recommended Reading:

Kukla, A. (2001) *Methods of Theoretical Psychology* (Cambridge, MA: MIT Press)

Available in the library on 1-hour in-house reserve at the library. Call number: BF38 .K84 2001 SCAR

Also available on-line at

<http://cognet.mit.edu/library/books/view?isbn=0262112612>]

• Schedule and Required Readings:

All of these readings are collected in a blue binder, which I have deposited in the Bladen Library, on short-term loan. Ask for it at the circulation desk; its call number is UNCAT7051. You may then photocopy it freely. Many of these readings are also available on-line; links to them will be provided via the course webpage.

Week 1 (15 September): Introduction and Overview.

No Readings

Week 2 (22nd September): Conceptual Tools

Kukla, A. (1989) "Nonempirical Issues in Psychology" *American Psychologist* 44:785-794

Kukla, A. (1995) "Amplification and Simplification as Modes of Theoretical Analysis in Psychology" *New Ideas in Psychology* 13:201-217

Week 3 (29th September): State of the art in philosophy of mind

Clark, A. (2001) *Mindware* (Oxford: Oxford University Press)

- Appendix 1, entitled "Some Backdrop: Dualism, Behaviorism, Functionalism and Beyond"

Fodor, J. (1981) "The Mind-Body Problem" *Scientific American* 244:114-123

Week 4 (6th October): The role of philosophy

Van Gelder, T. (1998) "The roles of philosophy in cognitive science" *Philosophical Psychology* 11(2):117-136

Grush, R. (2002) "The Philosophy of Cognitive Science" in P. Macamers and M. Silberstein (Eds.) *Blackwell Guide to the Philosophy of Science* (Oxford: Blackwell)

Week 5 (13th October): Psychological Laws

Horgan, T. and Tienson, J. (1990) "Soft Laws" *Midwest Studies in Philosophy* 15:256-279

Lycan, W. G. (1981) "Psychological laws." *Philosophical Topics* 12:9-38.

Week 6 (20th October): Psychological Explanation

Cummins, R. (2000) "'How Does It Work?' versus 'What Are The Laws?': Two Conceptions of Psychological Explanation" in F.C. Keil and R.A. Wilson (Eds.) *Explanation and Cognition* (Cambridge, MA: MIT Press)

Clark, A. (1996) "Happy Couplings: Emergence and Explanatory Interlock" in M. Boden (Ed.) *The Philosophy of Artificial Life* (Oxford: OUP)

- Midterm take-home test questions will be distributed this week.

Week 7 (27th October): Paradigms I: Classical cognitive science

Newell, A., and Simon, H.A., (1981) "Computer Science as Empirical Enquiry: Symbols and Search" *Communications of the Association for Computing Machinery* 19:35-50
 Clark, A. (1989) *Microcognition* (Cambridge, MA: MIT Press)
 - Chapter 1: "Classical Cognitivism"

- Midterm take-home test papers are due in class this week.

Week 8 (3rd November): Paradigms II: Connectionist cognitive science

Churchland, P.S. (1990) "Cognitive activity in artificial neural networks" in D. Osherson and E.E. Smith (Eds.) *An Invitation to Cognitive Science, Volume 3: Thinking* (Cambridge, MA: MIT Press)
 Franklin, S., (1995) *Artificial Minds* (Cambridge, MA: MIT Press)
 - Chapter 7: "The Second AI Debate"

- Midterm take-home test results will be given back on or before this date.

Week 9 (10th November): Paradigms III: Dynamical Cognitive Science

Van Gelder "Revisiting the Dynamical hypothesis" (unpublished manuscript. Available at <http://www.arts.unimelb.edu.au/~tgelder/papers/Brazil.pdf>)
 Beer, R.D. (2000) "Dynamical approaches to cognitive science" *Trends in Cognitive Sciences* 4(3):91-99

- Final paper topics distributed this week

Week 10 (17th November): Embodied/Embedded cognitive science

Clark and Chalmers (1998) "The Extended Mind" *Analysis* 58(1):7-19
 Brooks, R. (1991) "Intelligence without Representation" *Artificial Intelligence* 47:139-159

Week 11 (24th November): Disorders I: Cognitive Neuropsychology

Ellis, A.W. and Young, A.W. (1988) *Human Cognitive Neuropsychology* (London: LEA)
 - Chapter 1: "What is Cognitive Neuropsychology"
 Shallice, T. (1988) *From Neuropsychology to Mental Structure* (Cambridge: Cambridge University Press)
 - Chapter 11: "Functional Specialisation"

Week 12 (1st December): Disorders II: Classification and the DSM-IV

Bentall (1992) "A Proposal to Classify Happiness as a Psychiatric Disorder" *Journal of Medical Ethics* 18:94-98
 Miller, G.A. (1962) *Psychology: The Science of Mental Life* (London: Penguin)

- Chapter 20: "Clinical vs. Statistical"

Harris, J., Birley, J. L., & Fulford, K. W. "A proposal to classify happiness as a psychiatric disorder." *British Journal of Psychiatry*, 162, 539-542.

- Final papers due in class this week.

• Other dates to note

September 9:	Classes begin in F courses
September 22:	Last date on which students may enrol in F courses
October 11:	Thanksgiving day: University closed.
November 3:	Last day students may withdraw from F courses without academic penalty.
December 1:	Last day of classes
December 3-8:	Study break
December 9-21:	Exam period

• Notes on assignments

[N.B.: More detailed notes on my expectations, together with some hints on how to do well, will be distributed at the time of the assignments.]

The "Reading Response" should be at most one page long. It should be a brief discussion of, or commentary on, some issue in the readings which struck you as significant or gripping. For example, you might claim that an author's argument is invalid/unsound; you might point out a non-obvious implication of an author's position; you might suggest a potential counterexample to a theory you encounter; you might relate one of the theories to something you have learned in another class. It should be submitted in class in the same week as the readings to which it responds (e.g. if you want to respond to Horgan and Tienson's "Soft Laws", you should hand it in on the 13th October). It will not be accepted if it is submitted in a week other than the week of the readings to which it responds.

The midterm take-home test will consist of a list of five questions, from which you may choose any two on which to write. You should write no more than three sides per question. Questions will be distributed in class on October 20th, answers are due in class on October 27th, and I shall endeavour to have the papers graded on or before the 3rd of November (i.e. the drop date). Late submissions will *only* be accepted by e-mail. Late submissions will be deducted one partial letter grade per day (including weekends) -- e.g. a one-day-late A+ is recorded as A, a three-day-late C+ becomes a D+ etc.

The term essay should be five to seven pages long, and will allow you to develop your own thoughts more fully. It will *not* be a research paper, hence the use of outside sources will not be necessary, and is in fact discouraged. I will circulate a list of five questions, from which you may choose one to write on. You may also write on a topic of your own choosing, but if you do, it must be cleared with me no later than 24th November. The essay is due in class on 1st December. Again, the penalty for late submissions will be one partial letter grade per day (A- to B+, or C+ to C) including weekends.

The final exam will be on a date beyond my control between December 9th and 21st. It will be three hours long and will consist of one section of short answer questions, and two essay questions.

- A note on plagiarism

(Taken from the department of Philosophy's *Undergraduate Bulletin* at <http://philosophy.utoronto.ca/current/ubul4-5.pdf>)

"The following practices are all instances of academic dishonesty:

- 1 Copying or paraphrasing extensive passages from other sources without acknowledgement.
- 2 Submitting a term paper written in whole or in part by someone else.
- 3 Submitting a term paper for credit in more than one course, without the permission of the instructor.
- 4 Copying the answers of another student in any test, examination or take home assignments.

In any of these cases appropriate penalties, will be applied."

In short, anything that prevents the essay from demonstrating your original attempt to grapple with an issue is a Bad Thing, and will not be tolerated. If you're unsure about something, talk to me about it in advance.

For some useful advice on managing sources, and how to avoid both plagiarism and its consequences, take a look at:

<http://www.chass.utoronto.ca/~nscharer/plagmain.html>

For the university's stance, see the *Code of Behaviour on Academic Matters*, at: <http://www.artsandscience.utoronto.ca/ofr/calendar/rules.htm#behaviour>

For the University's advice on how *not* to plagiarise, have a look at: <http://www.utoronto.ca/writing/plagsep.html>

- Other useful web links

Some of you will be unfamiliar with the more philosophical readings. If this is the case, I strongly recommend you take a look at Jim Pryor's excellent advice on "How to Read a Philosophy Paper".

<http://www.princeton.edu/~jimpryor/general/reading.html>

Not sure what a philosophical term means? Take a look at Chris Eliasmith's Dictionary of Philosophy of Mind:

<http://www.artsci.wustl.edu/~philos/MindDict/dictindex.html>

- Other books you may find interesting/useful:

Bem, S and Looren de Jong, H (1997) *Theoretical Issues in Psychology* (London: Sage)

- A good introduction to philosophy of science and philosophy of mind for psychologists. Aimed at someone with little or no philosophical background.

Baggini, J and Fosl, P.S. (2003) *The Philosopher's Toolkit* (Oxford: Blackwell)

- A guide to the ways and means of constructing and evaluating philosophical arguments, together with examples.

Flanagan, O. (1991) *The Science of the Mind* (2nd Ed.) (Cambridge, MA: MIT Press)

- A thorough and well written book covering all aspects of the intersection of philosophy and psychology.