Course Instructor: Igor Juricevic

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PSYCHOLOGY C82 - Theoretical Psychology

An introduction to the problems and methods of theoretical analysis in psychology.

The emphasis of the course is on developing sophistication in the techniques of theoretical analysis. The aim is to enable the student to read and evaluate the current literature in theoretical psychology.

MORE SPECIFICALLY...

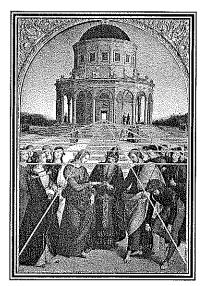
This course aims to cover both questions *about* theoretical psychology, as well as issues *within* it. The first half of most lectures will cover some of the tools, concepts, and methods of theoretical psychology as well as some basic philosophy of science. The second half will put these tools to work in considering theoretical issues in psychology, for example:

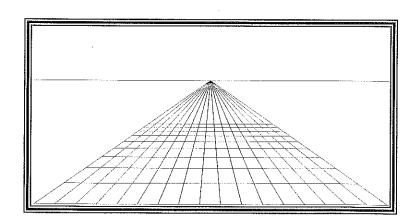
- 'paradigms' of classical, connectionist, and dynamical cognitive science
- foundational issues from neuropsychology and psychiatry.

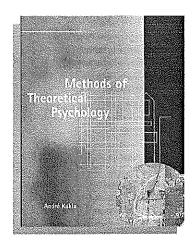
Readings will be taken from the course-text and publications from a variety of authors in cognitive science and its sub-disciplines. The course-text is available in the bookstore. The publications are all available on-line.

INSTRUCTOR

I am an experimental psychologist with special interests in perception and cognition. My Ph.D. research concerns spatial perception and perspective geometry.







Readings

The required course-text:
Kukla, A. (2001) **Methods of Theoretical Psychology**(Cambridge, MA: MIT Press)

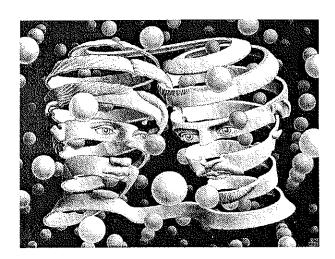
Other required readings (publications) are available online.

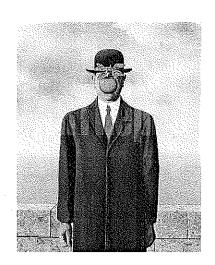
INSTRUCTIONAL PROCEDURE

Information is presented both in the classroom and through the readings. Lecture notes will be available on the UTSCweb PSYC82 course page before each class. During classroom meetings I will lecture first on the tools used in theoretical psychology. This will usually be based on the readings from the course-text. Not all aspects of the text will be covered. Rather, lectures will focus on particularly interesting areas, difficult material, or on topics of special utility. The second part of the lecture will cover issues in theoretical psychology. This will usually be based on the on-line publications. You are encouraged to ask questions and to interrupt the lecture for points of information, clarification, etc.

GRADES

There will be 1 midterm and 1 final exam, both consisting of "multiple-choice" and "essay" questions. The midterm is worth 35% of your final mark. The final exam (cumulative) is worth 65% of your final mark.





DATES, READING ASSIGNMENTS, & TOPICS

Week 1 (13 Sept.): Introduction and Overview No Readings

Week 2 (20 Sept.): Conceptual Tools

> Kukla, A (Course Text) - Chapter 2 "Basic Tools"

Week 3 (27 Sept.): 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 (4 Oct.): The role of philosophy

> Kukla, A (Course Text) – Chapter 3 "Theories and Data" > Horgan, T. and Tienson, J. (1990) "Soft Laws" *Midwest Studies in Philosophy* **15**:256-279

Week 5 (11 Oct.): Psychological Laws

> Kukla, A (Course Text) – Chapter 4 "Constructing and Evaluating Theories"

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

Week 6 (18 Oct.): Psychological Explanation

> Kukla, A (Course Text) – Chapter 5 "Deriving and Testing Empirical Hypotheses" pg. 81-88

> 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)

Week 7 (Week of Oct 23): MIDTERM - 35%

Covers all the reading and lectures from Week 1(13 Sept) to Week 6 (18 Oct).

DATES, READING ASSIGNMENTS, & TOPICS (continued...)

Week 8 (1 Nov.): Paradigms I: Classical cognitive science

- > Kukla, A (Course Text) Chapter 9 "Conceptual Issues"
- > Clark, A. (1989) Microcognition (Cambridge, MA: MIT Press)
 - Chapter 1: "Classical Cognitivism"

Week 9 (8 Nov.): Paradigms II: Connectionist cognitive science

> Kukla, A (Course Text) – Chapter 8 "Necessary Propositions" > 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)

Week 10 (15 Nov.): 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)

Week 11 (22 Nov.): Embodied/Embedded cognitive science

> Brooks, R. (1991) "Intelligence without Representation" Artificial Intelligence 47:139-159

Week 12 (29 Nov.): Disorders – Classification and the DSM-IV

Kukla, A (1995) "Amplification and Simplification as Modes of Theoretical Analysis in Psychology" New Ideas in Psychology 13:201-217
Bentall (1992) "A Proposal to Classify Happiness as a Psychiatric Disorder" Journal of Medical Ethics 18:94-98
Shea, S.E., Gordon, K., Hawkins, A., Kawchuk, J., and Smith, D. (2000) "Pathology in the Hundred Acre Wood: A Neurodevelopmental Perspective on A.A. Milne" Canadian Medical Association Journal 163(12):1557-1558

Dec 9-21: FINAL EXAM - 65% Cumulative. Emphasis (70%) on Weeks 8-12.