

DEPARTMENT OF PHILOSOPHY
School of Philosophy, Theology & Religion
UNIVERSITY OF BIRMINGHAM

Philosophy of Psychology
Banner code: PHIL 08 19828

20 Credits

MODULE GUIDE
2008/2009

This module outline **must** be read in conjunction with the relevant sections of *The Philosopher's Stone* and the *Philosophy Study Guide*, available from the Philosophy Office (room 107).

MOMD and Erasmus students should pick up a student pack (including the *Stone* and the *Philosophy Study Guide*) from the Philosophy Office. Erasmus students, please note that your attendance and assessment requirements are exactly the same as for all other students on this module. Please see the *Philosopher's Stone* for more information.

1. GENERAL INFORMATION

Module convenor: Dr. Samuel Schindler
Office number: room 109, Arts building
Email: s.schindler@bham.ac.uk
Office hours: Tuesdays 11-12, Fridays 11-12, or by appointment

Semester: Two
Credit rating: 20
Level: H (year 3)

2. ABOUT THE MODULE

MODULE SUMMARY

Psychology is a diverse discipline. It includes clinical psychology, social psychology, comparative psychology, evolutionary psychology, forensic psychology, psychoanalysis and others. The emphasis in this course, however, lies with the philosophy of *cognitive* psychology, i.e. psychology of perception, thinking, problem solving, intelligence etc.

The course is divided into roughly three parts. In the first part, we are going to discuss central issues in the field of Cognitive Science, which seeks understanding about cognitive behaviour by trying to model it computationally. We shall make ourselves familiar with the classical

Computational Theory of Mind, Connectionism, and the more recent idea of Embodiment. In the second part, we shall see that one can be realist, instrumentalist, or eliminativist about propositional states. In this context we shall also discuss the two theories of *other minds* that have been defended in the philosophical and psychological literature. In the third part of this course, we will turn our attention to neuro-psychological and -biological science. Here, we shall take a closer look at the nature of contemporary neurobiological evidence and its pitfalls, the theses of modularity and localisation that underlie all contemporary neurobiological research, and we shall ask what constitutes neurobiological explanations. At the end of this module, we shall consider the question of whether any moral limits should be put on psychological research.

3. MODULE ORGANISATION

Classes: 12:00 – 14:00, Wednesday, Arts Lecture Room 2 *except Wednesday 25th February and Wednesday 25th March when these lectures will be in Aston Webb G33.* There will be a reading week in Week 6. There will be no classes during Reading Week.

Classes will normally consist of a mixture of a traditional lecturing format and interactive periods, e.g. small-group discussions and question-and-answer sessions. **Classes are compulsory. You are expected to prepare for classes, as directed by the module convenor.**

Work and attendance

The work and attendance requirements for this course are that you:

- **Attend all classes.** If you are absent from a seminar through illness or for any other reason, you should inform the module convenor as soon as possible – if possible, *before* the class.
- **Prepare adequately for classes** as directed by your tutor or the module convenor.
- **Complete written work on time:** Failure to complete assessed work by the due date constitutes a violation of the work and attendance requirements.

Persistent violations of work and attendance requirements will be reported to the Senior Tutor. If you have difficulties (e.g. personal, financial or family problems) that result in persistent failure to meet the work and attendance requirements, you should talk to your academic tutor or the Welfare Tutor.

Students are required by University regulations to display ‘due diligence’. Failure to do so may result in your being barred from assessment, which can lead ultimately to exclusion from your degree programme.

Study budget

The University’s Code of Practice specifies that a 20-credit module is expected to require about 200 hours work by students.

For this module, you are recommended to break this down roughly as follows:

Classes	20 hours
Preparation for classes	10 x 7 hours = 70 hours
Essay 1	20
Essay 2	20

Essential research / reading	40
Additional research / reading	30
TOTAL:	200 hours

Prompt arrival at classes

Students should note that all classes in the University start **on the hour** and should end at 50 minutes past the hour. Late arrival at classes may result in your being marked absent; if you arrive late it is your responsibility to ensure that your presence has been noted.

4. ASSESSMENT

The assessment for this module is as follows:

ASSESSMENT CRITERIA

For the Philosophy Department's assessment criteria and guidance on how to meet them, see the *Philosophy Study Guide*.

ASSESSED ESSAYS

Two essays of 1500 words each should be chosen from the list provided below.

Presentation

Essays must be typed in at least 12 point in a readable font, with wide margins and page numbers, and should **not** be single spaced. They should include proper bibliography and references; **marks will be deducted for inadequate referencing/bibliography**. See the *Study Guide* for guidelines and the *Philosopher's Stone* for information about penalties.

Failure to provide adequate referencing can amount to plagiarism. Plagiarism is a form of cheating and can lead to exclusion from your degree programme. Please see the *Study Guide* for guidance on avoiding plagiarism and the *Philosopher's Stone* for information about how cases of plagiarism are dealt with.

Word limit

Your essay **MUST NOT** exceed the word limit stated above. **You must state the exact number of words used (excluding bibliography) at the end of the main text of your essay, and again on the essay submission form.** If you fail to do this, your essay may be returned to you so that you can add this information, and this may significantly delay the marking process.

See the *Philosopher's Stone* for more information about the word limits and penalties for exceeding them.

Deadlines

The first essay must be handed in by **10th March 2009**.

The second essay must be handed in by **5th May 2009**.

See the *Philosopher's Stone* for information about the granting of extensions and penalties for unexcused late submission. Late submissions for which no extension has been granted will be penalised at a rate of 5 marks per day.

Handing in your essay

You must hand **two copies** of your essay by 12.30pm on the due date, to the Philosophy Office. An essay submission form must be included with your essay; you can fill this in when you submit your essay. See the *Philosopher's Stone* for more information about essay hand-ins.

Uploading your essay to turnitinUK

You must upload your essay to turnitinUK prior to handing in the hard copies. You will be asked to tick a box confirming this on the essay submission form, and your essay will not be accepted unless you have ticked the box (or attach the form excusing you from this, signed by the Department's plagiarism officer). The essay you submit in hard copy **MUST** be exactly the same as the one you upload to turnitinUK. However if discrepancies do occur, it will be the hard copy that is assessed. See the *Philosopher's Stone* for more information.

Return of assessed essays

A report on your first assessed essay should be available by **7th April 2009** provided the essay is submitted on time. A report on your second assessed essay should be available by **2nd June 2009** provided the essay is submitted on time. You will receive an email (to your bham.ac.uk account) as soon as your essay is available to pick up from the Philosophy Office; please **do not try to pick up your essay before you have received the email**.

Please note that all essay marks are provisional until confirmed by the Board of Examiners in June. Note also that you are NOT entitled to question the academic judgement of the person marking your essay. If you are unhappy with your mark, you should make an appointment with the member of staff who marked the essay to discuss your performance. If you are still not satisfied, you can raise the issue with the Head of Department, who may then arrange for a second member of staff to look at the essay. The HoD will not do this unless you have already discussed your essay with the person who marked it.

Students are welcome to discuss their essay with the module convenor or their academic tutor during office hours.

ESSAY TITLES

First essay

1. Review and assess Searle's famous Chinese room argument!
2. In modelling the mind, should one adopt a cognitivist, connectionist, or dynamic approach? Explain why!
3. Should one be realist, instrumentalist, or eliminativist about propositional attitudes?

4. Which view should one adopt for what reasons in the context of belief ascription: simulationism or the theory-theory?

Second essay:

1. What are the pitfalls of neuroimaging? Are those pitfalls reason enough for not using these methods?
2. The assumptions of modularity and localisation of cognitive functions, which are both fundamental to neuroscience, have come under attack in recent years. Review and assess some of those arguments!
3. Many philosophers of science believe that neurobiological explanations are mechanical in nature. Those philosophers often also contend that mechanistic explanations are non-reductionist. Review and assess the relevant arguments!
4. Should psychological research be morally constrained?

Do not hand in your second essay using a title from those listed for the first essay. **Do not** hand in your first essay using a title from those listed for the second essay.

5. OUTLINE OF THE MODULE

Week 1 (beginning 12 Jan):	Introduction, Overview, and a short history of Cognitive Psychology (Behaviourism and the Cognitive Turn)
Week 2 (beginning 19 Jan):	The Computational Mind I: Cognitive Architectures: Functionalism and the Computational Theory of Mind
Week 3 (beginning 26 Jan):	The Computational Mind II: Alternative Cognitive Architectures: Neural Networks, dynamic systems and embodiment
Week 4 (beginning 2 Feb):	Folk Psychology I: Eliminativism and Instrumentalism about propositional attitudes
Week 5 (beginning 9 Feb):	Folk Psychology II: Theories of Belief ascription
WEEK 6 (beginning 16 Feb):	READING WEEK (no classes)
Week 7 (beginning 23 Feb):	Neuroscience I: Neurobiological evidence (incl. lesions, single-cell recording and neuro-imaging techniques) and its problems
Week 8 (beginning 2 March):	Neuroscience II: Modularity & Localisation of Cognitive Functions
Week 9 (beginning 9 March):	Neuroscience III: Mechanistic Explanations in Neurobiology
Week 10 (beginning 16 March):	Moral limits on psychological research? The IQ debate.
Week 11 (beginning 23 March):	RECAP

6. READING LIST

Compulsory purchase: There is no compulsory purchase for this course.

Recommended purchases:

Unfortunately, there aren't any textbooks one could recommend without any qualifications. The background readings for each lecture are indicated below.

The internet provides two very good bibliographies for the topics of this course. You're encouraged to draw on these bibliographies when compiling your essays:

<http://artsci.wustl.edu/~neuro/PhilNeuroBiblio.html> -- Philosophy of Neuroscience Resources

<http://consc.net/mindpapers/7> -- Mind Papers

Course pack: A course pack is available for this module for £1. This includes readings for the seminars. If you have not yet bought a course pack, please buy one from the Philosophy Office.

Required seminar readings (incl. further readings and background readings):

Topic 1 (WEEK 2, beginning 19 Jan): **Behaviourism**

Required readings

B.F. Skinner, from Science and Human Behavior, in Block (1980), *Readings in philosophy of psychology*, Vol.1, London: Methuen, pp. 37-47.

N. Chomsky, "A Review of B.F. Skinner's Verbal Behavior," in Block (1980), pp. 48-63.

Background readings:

Smith, Edward E. (2001). "Cognitive psychology: History", *International Encyclopedia of the Social and Behavioral Sciences*. New York: Elsevier, pp. 2140-2147.

Flanagan, O, (1991), *The science of the mind*, Cambridge: MIT Press, Ch. 4 (behaviourism)

I. Pavlov, from *Conditioned Reflexes*, Lecture I

J. Watson, "Psychology as the Behaviorist Views It," *Psychological Review*, 20, 158-177.

Topic 2 (WEEK 3, beginning 26 Jan): **The Computational Mind I**

Required:

Turing, A., "Computing Machinery and Intelligence", *Mind*, New Series, Vol. 59, No. 236 (Oct., 1950), pp. 433-460.

Searle, J. (1981), 'Minds, Brains and Programs', in Rosenthal, D. (ed.), (1991), *The Nature of Mind*, Oxford: Oxford University Press, OR in Haugeland 1997.

Further readings:

Block, N. (1995), 'The mind as the software of the brain', in E. Smith and D. N. Osherson (eds.), (1995), *An Invitation of to Cognitive Science, vol. 3: Thinking*: Cambridge, MA: MIT Press, pp. 377-425.

Lycan, W. & J. Prinz, *Mind and Cognition*, Part III

Background readings:

Stanford Encyclopaedia article on Computational Theory of Mind

(<http://plato.stanford.edu/entries/computational-mind/>)

Stanford Encyclopaedia article on The Chinese Room Argument

(<http://plato.stanford.edu/entries/chinese-room/>)

Fodor, J. (1987), *Psychosemantics*, Cambridge, Mass.: MIT Press, esp. Introduction and Appendix.

Fodor, J. (1975), *The Language of Thought*. New York: Thomas Crowell.

Bem, S. and Looren de Jong (2006), *Theoretical Issues in Psychology*, Ch. 7.

Topic 3 (WEEK 4, beginning 2 Feb): **The Computational Mind II**

Required:

Fodor, J. and Pylyshyn, Z. (1988), 'Connectionism & Cognitive Architecture', *Cognition*, pp. 3-13 ONLY.

Clark, A. (1997), *Being There*, chapter 3, pp. 53-69

Further readings:

Curchland, P. 'Cognitive Activity in Artificial Neural Networks', in: E. Smith and D. Osherson (eds.), (1995)

Lycan, W. & J. Prinz, *Mind and Cognition*, Part IV

Background readings:

Bem, S. and Looren de Jong (2006), *Theoretical Issues in Psychology*, Ch. 8.

Topic 4 (WEEK 5, beginning 9 Feb): **Folk Psychology I**

Required:

Dennett, D. (1987), 'True Believers' in his *The Intentional Stance*, Cambridge, Mass.: MIT Press.
OR in Lycan, W. & J. Prinz, W.: *Mind and Cognition*, p. 323-336

Churchland, P. (1981), "Eliminative Materialism and the Propositional Attitudes", *The Journal of Philosophy*, Vol. 78, No. 2 (Feb., 1981), pp. 67-90

Further readings:

Churchland, P. "Folk-Psychology and the Explanation of Human Behaviour" *Proceedings of the Aristotelian Society Supplementary Volume 62* (1988): 209-22

Dennett, D., *The Intentional Stance*, MIT Press.

Lycan, W. & J. Prinz, *Mind and Cognition*, Part IV, V and VI

Background readings:

Heil, J. (2004), *Philosophy of Mind*, Routledge, Chapter 11.

Botterill, G. & Carruthers, P. (1999), *The Philosophy of Psychology*, Cambridge University Press, Chapter 2

Burwood, S., P. Gilbert, and K. Lennon (1999), *Philosophy of Mind*, UCL Press, Chapter 5.

WEEK 6 (beginning 16 Feb):

READING WEEK (no classes)

Topic 5 (WEEK 7, beginning 23 Feb): **Folk Psychology II**

Required:

Robert M. Gordon, "Folk psychology as simulations" in: Lycan, W. & J. Prinz: *Mind and Cognition* p. 369-378, and

Stich, S. and S. Nichols, "Folk Psychology: Simulation or Tacit Theory?", in: Lycan, W. & J. Prinz: *Mind and Cognition*, p. 379-392.

Further readings:

Readings in Davies, M. and T. Stone (1995), *Folk Psychology*, Oxford: Blackwell Publishers

Readings in Carruthers and Smith, *Theories of theories of Mind*, Cambridge.

Background readings:

Davies, M. "The mental simulation debate", in C. Peacocke (ed.) *Objectivity, Simulation and the Unity of Consciousness*, downloadable at

<http://philrsss.anu.edu.au/~mdavies/papers/simdebate.pdf>

Davies, M. and T. Stone (1995), *Folk Psychology*, Oxford: Blackwell Publishers, Chapter 1.

Botterill, G. & Carruthers, P. (1999), *The Philosophy of Psychology*, Cambridge University Press, Ch. 4

Topic 6 (WEEK 8, beginning 2 March): **Neuroscience I**

Required:

Hardcastle, V. G. (2002), "What do brain data really show?", *Philosophy of Science*, 69, Supplement, pp. S72-S82

Further readings:

- Raichle, Marcus E. (1994). Images of the mind: Studies with modern imaging techniques. *Annual Review of Psychology*, 45: 333-356.
- Bechtel, W. & R. Stufflebeam (2001), "Epistemic Issues in Procuring Evidence about the Brain", In W. Bechtel, P. Mandik, J. Mundale, and R. S. Stufflebeam (eds.), *Philosophy and the Neurosciences: A Reader*. Oxford: Basil Blackwell.
- Bogen, James (2002). Epistemological Custard Pies from Functional Brain Imaging. *Philosophy of Science* 69: S59–S71.
- See also readings for next lecture -

Background readings:

- Posner and Raichle, *Image and Mind*,
- Uttal, William R. (2001). The new phrenology: The limits of localizing cognitive processes in the brain. Cambridge, MA, US: The MIT Press.

Topic 7 (WEEK 9, beginning 9 March): **Neuroscience II**

Required:

- Mundale, J. (2002), "Concepts of Localization: Balkanization in the Brain", *Brain & Mind*, 3, No 3, pp. 313-330

Further readings:

Modularity

- Fodor, Jerry A. (1983). *Modularity of Mind: An Essay on Faculty Psychology*. Cambridge, Mass.: MIT Press, Chapter 1.
- Fodor, J. (1985), "Precis of the Modularity of Mind", *Behavioural and Brain Sciences*, 8, pp. 1-42
- Robert J. Stainton (ed.), (2006), *Contemporary Debates in Cognitive Science*, Wiley-Blackwell: P. Carruthers "The Case for Massively Modular Models of Mind"; J. Prinz "Is the Mind Really Modular?"; R. Samuels "Is the Human Mind Massively Modular?"

Localisation / Uttal-debate

- Uttal, William R. (2001). The new phrenology: The limits of localizing cognitive processes in the brain. Cambridge, MA, US: The MIT Press.
- Uttal (2002), "Précis of The New Phrenology: The Limits of Localizing Cognitive Processes in the Brain", *Brain & Mind*, 3, No 2, pp. 221-228.
- Bechtel, W. (2002), *Decomposing the Mind: A Long-Term Pursuit*, *Brain and Mind*, 3, 229-242
- Llyod, D. (2002), "Studying the Mind from Inside Out", *Brain and Mind* 3: 243–259.
- Uttal, W. (2002). Response to Bechtel and Lloyd. *Brain & Mind*, 3 (2): 261-273.
- Uttal, W. (2002). Functional Brain Mapping - What Is It Good For? Plenty, but Not Everything! (Reply to Malcolm J. Avison). *Brain & Mind*, 3 (3): 375-379.
- Hubbard, E.M. (2003) A discussion and review of Uttal (2001), *The New Phrenology*. *Cognitive Science Online*, 1, pp. 22-33. downloadable at cogsci-online.ucsd.edu/1/1-3.pdf

Background readings:

- Uttal, William R. (2001). The new phrenology: The limits of localizing cognitive processes in the brain. Cambridge, MA, US: The MIT Press.

Topic 8 (WEEK 10, beginning 16 March): **Neuroscience III**

Required:

- Craver, C. (2006), "When Mechanistic Models Explain," *Synthese*. 153: 355-376.

Further readings:

- P.K. Machamer, L. Darden and C. F. Craver (2000) "Thinking about Mechanisms," *Philosophy of Science* 67:1-25.
- C. F. Craver and B. Bechtel (2006) "Top-down causation without top-down causes" *Biology and Philosophy*; available online at <http://artsci.wustl.edu/~pnp/people/craver/papers/Craver%20papers.html>

Background readings:

- Craver, C. (2008), *Explaining the Brain*, Oxford University Press,

Topic 9 (WEEK 11, beginning 23 March): **Moral Limits on Psychological Research?**

Required:

S. J. Gould's review of *The Bell Curve*: "Curveball", *The New Yorker*, November 28, 1994, online at <http://www.dartmouth.edu/~chance/course/topics/curveball.html>

Further readings:

Fraser, S. (1995), *The Bell Curve Wars: Race, Intelligence, and the Future of America*, Basic books.

Background readings:

Kitcher, P. (2003), *Science, Truth, Democracy*, Chapter 7: "The Myth of Purity", pp. 85-92.

Bortolotti, L. (2008), *An Introduction to the Philosophy of Science*, Polity Press, chapter 6.