HMED3015/ HMEDG010/ HMEDG029

BRAINS, NERVES AND HUMAN NATURE IN THE MODERN ERA

Course Syllabus

2013-14 session | Dr Stephen Jacyna | s.jacyna@ucl.ac.uk

Basic course information

Course website:	[insert if applicable]
Moodle Web site:	https://moodle.ucl.ac.uk/course/view.php?id=14556
Assessment:	**Assessment for undergraduate and MSci students (HMED3015, HMEDM015)** will be by one essay of 3,500-4,000 words to be submitted on **Friday, 28 March** and by a three-hour examination held during the main examination period (end of April to early June). The essay and examination will be equally weighted. For **MASTERS (MA) students (HMEDG015/HMEDG029)**, no examination is required, but the essay - on a topic of your choice, to be confirmed by the lecturer - ought to be 4,000-5,000 words long (submission date is the same). **In addition**, an **extra assessment** is to be submitted on **Friday, 21st February**. All of you can choose to either: • write a book review of about 2,000 words (the book should be on a topic other than your essay) • analyse an image or object related to the module content (e.g. an object in a museum of your choice); the written report should also be about 2,000 words long The longer essay will account for 60% of the final mark; the shorter item of assessment will make up the remaining 40%.
Timetable:	[insert this link www.ucl.ac.uk/sts/hpsc Do noth enter any other info here]
Prerequisites:	No prerequisites.
Required texts:	No required texts
Course tutor(s):	Stephen Jacyna
Contact:	s.jacyna@ucl.ac.uk | t: 020 7679 6770
Web:	
Office location:	Room B50, Medical School Building, 74 Huntley Street
Office hours:	Tuesday 1500-1700 Thursday 10.00-1200

Assessments

Summary

	Description	Deadline	Word limit
	First Assessment for: Masters (MA) students (HMEDG015/HMEDG029)	11.59 pm, Friday 21 February	2000 words
	Assessment due from all students.	11.59 pm, Friday 28 March	3500-4000 words

Assignments
Essays must be submitted via Moodle.

Criteria for assessment
The departmental marking guidelines for individual items of assessment can be found in the STS Student Handbook.

Aims & objectives

The goals of the course are to provide students with an overview of major developments in the fields of psychology and neuroscience from the seventeenth to the twentieth century; to discern major issues that recur throughout this period; and to understand the relevance of this material to current discussions about the impact of neuroscience on modern society.

By the end of the course, students will have gained the skills necessary to research topics covered in the module and to use the information and understanding thus gleaned to produce substantiated written discussions of salient issues during the lectures.
[insert aims & objectives of the course here. N.B. 'Aims' = what are the goals of the course; 'Objectives' = assessable outcomes 'by the end of this course students will…']

Reading list

GENERAL TEXTS
Wayne Viney and D. Brett King, *A History of Psychology: Ideas and Contexts* (1993).
Stanley Finger, *Origins of Neuroscience: a history of explorations into brain function* (1994).

Lecture One: Introduction to the Course
Readings:
Required:
Wayne Viney and D. Brett King, *A History of Psychology: Ideas and Contexts* (1993), pp. 1-37.
M.G. Ash, "Psychology," in T.M. Porter and D. Ross (eds), *The Cambridge History of Science: The Modern Social Sciences* (2003), pp. 251-74.

Optional:
Carl Zimmer, *Soul Made Flesh: the discovery of the brain, and how it changed the world*, (2004), Ch. 1 'World Without Soul', pp. 25-41.
George Rousseau, *Nervous Acts: essays on literature, culture, and sensibility* (2004), Ch. 7 'Discourses of the Nerve', pp. 215-242.

Lecture Two: Cartesian Dualism and the Beginnings of the Mind-Body Problem
Readings:
Required:
Robert L. Martensen, *The Brain Takes Shape: an early history* (2004), Ch. 3 'The Human Mind and Gland "H": Cartesian Models of Mind, Brain and Nerves', pp. 47-74.
Stanley Finger, *Minds Behind the Brain* (2000), Ch. 6 'René Descartes: The Mind-Body Problem', pp. 69-83.
Optional:
Gary Hatfield, The Passions of the soul and Descartes's machine psychology
Studies in history and philosophy of science 38 (2007) 1–35.
Geir Kirkeben, 'Descartes' Embodied Psychology: Descartes' or Damasio's Error? *Journal of the History of the Neurosciences* 10: 2 (2001), pp. 173-191.
C.U.M. Smith, 'Descartes' Pineal Neuropsychology', *Brain and Cognition* 36 (1998), 57-72.

OPTIONAL PRIMARY READINGS:
Edwin Clarke and C.D. O'Malley, *The Human Brain and Spinal Cord. A Historical Study* (2n ed., 1996): 'René Descartes', pp. 469-472.
Cottingham, Stoothoff and Murdoch (eds) *The Philosophical Writings of Descartes*. 3 volumes (1984-1991). Esp. Vol. I: *The Treatise on Man*, pp.99-108 and *The Passions of the Soul*, pp. 327-348.

Lecture Three: Thomas Willis and the 'Cerebral Body'
Readings:
Required:
Robert L. Martensen, *The Brain Takes Shape* (2004), Ch. 4 'When the Brain Came Out of the Skull', pp. 75-94.
Stanley Finger, *Minds Behind the Brain* (2000), Ch. 7 'Thomas Willis: The Functional Organization of the Brain', pp. 87-99.
Optional:
Robert G. Frank, "Thomas Willis and his circle: brain and mind in seventeenth-century medicine," in George Rousseau, *The Languages of Psyche: mind and body in Enlightenment thought* (1990), pp. 107-46.
Carl Zimmer, *Soul Made Flesh*, (2004), Ch. 8 'A Curious Quilted Ball', pp. 169-187.
OPTIONAL PRIMARY READINGS:
Clarke and O'Malley, *The Human Brain and Spinal Cord. A Historical Study* (1996): 'Thomas Willis', pp. 388-390; 472-474; 582-584; 636-639.
Willis' *Anatomy of the Brain* (1664) and *The Soul of Brutes* (1672) can also be found online on EEBO (Early English Books Online).

Lecture Four: John Locke's Sensationalism
Readings:
Required:
Carl Zimmer, *Soul Made Flesh*, (2004), Ch. 11. 'The Neurologist Vanishes', pp. 237-259.
Robert L. Martensen, *The Brain Takes Shape* (2004), Ch. 8., subchapter 'Willis, Locke and Smuggled Mental Baggage', pp. 91-99.
Optional:
Patrick Romanell, *John Locke and medicine: a new key to Locke* (1984).
Roger Smith, *The History of the Human Sciences* (1997), Ch. 5 'John Locke and the Natural History of the Soul', pp. 157-83.
OPTIONAL PRIMARY READINGS:
John Locke, *An Essay Concerning Human Understanding* [1690]. With an Introduction, Critical Apparatus and Glossary by Peter H. Nidditch (1975)
/ Original Text online on ECCO (Eighteenth Century Collections Online).

Lecture Five: Eighteenth-Century Empiricism
Readings:
Required:
Graham Richards, *Mental Machinery: the origins and consequences of psychological ideas* (1992), Ch. 3 'Sensible Reasoning: Philosophical Moves towards Psychology', pp. 134-149, 155-172.
Roger Smith, *The History of the Human Sciences* (1997), Ch. 7 'Human Nature: Natural and Moral Philosophy', pp. 215-59.
P.B. Wood, "Hume, Reid and the science of mind," in M.A. Stewart and John P. Wright (eds), *Hume and Hume's Connexions* (1994), pp. 119-34.
OPTIONAL PRIMARY READING:
EEBO: David Hume, *An abstract of a book lately published: entitled, A treatise of human nature…*, 1740.

Lecture Six: Enlightenment Psychology
Readings:
Required:
C.U.M. Smith, 'Brain and Mind in the 'Long' Eighteenth Century', in Whitaker et al. (eds), *Brain, Mind and Medicine: essays in eighteenth-century neuroscience* (2007), 15-28.
Graham Richards, *Mental Machinery* (1992), Ch. 3 'Sensible Reasoning: Philosophical Moves towards Psychology', pp. 149-155.
Optional:
Glassman and Buckingham, 'David Hartley's Neural Vibrations and Psychological Associations' in Whitaker et al. (eds), *Brain, Mind and Medicine* (2007), pp. 177-190.
C.U.M. Smith, 'Julien Offray de la Mettrie (1709-1751), *Journal of the History of the Neurosciences* 11: 2 (2002), pp. 110-124.
OPTIONAL PRIMARY:
ECCO: La Mettrie, *Man a Machine*. Translated from the French of the Marquiss D'Argens, [1749]

Hartley, *Observations on man, his frame, his duty, and his expectations*. In two parts, [1749]

Lecture Seven: The Doctrine of the Nerves
Required:
Eugenio Frixione, 'Irritable Glue: The Haller-Whytt Controversy on the Mechanism of Muscle Contraction', in Whitaker et al. (eds), *Brain, Mind and Medicine* (2007), pp. 115-124.
George Rousseau, *Nervous Acts* (2004), Ch. 5 'Nerves, Spirits, and Fibres: Towards Defining the Origins of Sensibility', pp. 160-188.
Optional:
Peter J. Koehler, 'Neuroscience in the Work of Boerhaave and Haller', in Whitaker et al. (eds), *Brain, Mind and Medicine* (2007), pp. 225-229.
Hubert Steinke, Irritating Experiments: Haller's Concept and the European Controversy on Irritability and Sensibility, 1750-90 (Clio Medica Series 76, 2005).
OPTIONAL PRIMARY:
A Dissertation on the Sensible and Irritable Parts of Animals by Albrecht von Haller (London, 1755). Edited by Owsei Temkin. Baltimore: Johns Hopkins Press: Baltimore 1936.

Lecture Eight: Mesmerism and Romantic Psychology
Readings:
Required:
Matthew Bell, *The German Psychological Tradition in Literature and Thought, 1700-1840* (2005), Ch. 6 'Romanticism and animal magnetism' pp. 167-180.
Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (1998), pp. 32-59.
Optional:
Frank A. Pattie, *Mesmer and animal magnetism: a chapter in the history of medicine* (1994).
Alan Richardson, *British Romanticism and the Science of Mind* (2001), Ch. 1 'Introduction: neural Romanticism', pp. 1-38; Ch. 2 'Coleridge and the new unconscious', pp. 167-207.
OPTIONAL PRIMARY READINGS:
For those of you who would like to get a feel for archival sources, check out Dr. Robillard, (fl.1862-1879): notes on Mesmerism, Magnetism and Spiritualism [Wellcome Library archive material to be requested online from closed stores WMS 3 MS.7536] – which includes an account of an amputation under hypnosis (with 'magnetised water')!

Lecture Nine: Phrenology
Readings:

Required:
Roger Cooter, *The cultural meaning of popular science: phrenology and the organization of consent in nineteenth-century Britain* (1984), pp. 101-33.
Stanley Finger, *Minds Behind the Brain* (2000), Ch. 9 'Franz Joseph Gall: The Cerebral Organs of Mind', pp. 119-136.
Robert M. Young, *Mind, Brain and Adaptation in the Nineteenth Century: Cerebral localization and its biological context from Gall to Ferrier* (1990), pp. 9-53.
OPTIONAL PRIMARY READINGS:
Clarke and O'Malley, *The Human Brain and Spinal Cord* (1996), 'Gall and Spurzheim', pp. 392-

394.
Spurzheim, Johann Caspar (1776-1832) [archive material]: The text is headed 'Extracts from Spurzheim's Lectures' [request online from Wellcome Library - closed stores WMS 3 MS.4685.]

Lecture Ten: Evolutionary Psychology
Readings:
Required:
Howard E. Gruber, *Darwin on Man: a psychological study of scientific creativity* (1974), pp. 175-242.
L.S. Hearnshaw, *A Short History of British Psychology: 1840-1940* (1964), pp. 32-55.
Optional:
Graham Richards, *Mental Machinery* (1992), Introduction: 'Some Problems of Psychology' pp. 1-11.
Roger Smith, *History of the Human Sciences* (1997), Ch. 13 'Human Evolution', pp. 467-77.
OPTIONAL PRIMARY READING:
Browse through 2 CD-Roms on *Darwin* (1997) which include complete texts and illustrations from Charles Darwin's works. Contains a timeline of events in Darwin's life, a biographical dictionary, and a bibliography of 1,500 primary and secondary sources. Natural sounds for some of the species discussed and a 7-minute video, "Down House Appeal," narrated by Sir David Attenborough are also included
[Ask at Wellcome Library desk for closed stores computer media 24]

Lecture Eleven: The New Phrenology
Readings:
Required:
Young, *Mind, Brain and Adaptation*, pp. 224-48
Anne Harrington, *Medicine, Mind, and the Double Brain*, pp. 35-69
L.S. Jacyna, *Lost Words*, pp. 81-122

Lecture Twelve: Psycho-Surgery
Readings:
Required:
Elliot S. Valenstein, *Great and Desperate Cures*, 1986, pp. 80-100.
Jack Pressman, *Last Resort: Psychosurgery and the Limits of Medicine*, 1998, pp. 194-235.

Lecture Thirteen: Evolutionary Neurology
Readings:
Required:
Roger Smith, *Inhibition*, pp. 162-90
Young, *Mind, Brain and Adaptation*, pp. 150-96
Jacyna, *Lost Words*, pp. 123-45

Lecture Fourteen: Russian Psychology: Ivan Pavlov (1849-1936) and the Science of the Brain

Readings:

Required:

David Joravsky, *Russian Psychology: a Critical History*, pp. 3-26, and pp. 203-219

Daniel P Todes, *Pavlov's Physiological Factory: Experiment, Interpretation, Laboratory, Enterprise*, pp. 3-118.

Optional:

Roger Smith, *The Fontana History of the Human Sciences*, pp. 636-700

Lecture Fifteen: American Behaviorism

Readings:

Required:

Kerry Buckley, *Mechanical Man: John Broadus Watson and the Beginnings of Behaviorism*, pp. 73-98

Ben Harris, "'Give me a dozen healthy infants': John B Watson's popular advice on childrearing, women, and the family" in: *In the Shadow of the Past: Psychology Portrays the Sexes: a Social and Intellectual history*, pp. 126-154.

Lawrence D Smith and William R Woodward, *B F Skinner and Behaviorism in American Culture*, pp. 109-127 and pp. 128-150

Lecture Sixteen: Gestalt Psychology

Readings:

Required:

Mitchell Ashe, *Gestalt Psychology in German Culture, 1890-1967: Holism and the Quest for Objectivity*, pp. 17-84.

Henri Ellenberger, *The Discovery of the Unconscious: the History and Evolution of Dynamic Psychiatry* pp. 418-570 and pp. 657-748.

Lecture Seventeen: Defining Neurosis

Required:

Jill Matus, 'Emergent theories of Victorian mind shock: from war and railway accidents to nerves, electricity and emotion', in Anne Stiles (ed.), *Neurology and Literature, 1860-1920*, 2007, pp. 163-183.

Jessica Meyer, 'Shell shock as a self-inflicted wound', in Laura Salisbury and Andrew Shail (eds), *Neurology and Modernity*, 2010, pp. 231-244.

Lecture Eighteen: The Rise of the Unconscious

Readings:

Required:

Anthony Clare, "Freud's Cases: The Clinical Basis of Psychoanalysis," in Bynum and Porter (eds), *The Anatomy of Madness: Essays in the History of Psychiatry*, pp. 271-288

Smith, *Human Sciences*, pp. 701-745

Ellenberger, *Discovery of the Unconscious*, pp. 418-570 and pp. 657-748

Lecture Nineteen: The Neurological Patient
Readings
Required:
Stephen Jacyna and Stephen Casper (eds), *The Neurological Patient in History*, pp. 1-17.
M. Macmillan. *An Odd Kind of Fame: Stories of Phineas Gage*, pp. 279-305; 307-35.
OPTIONAL PRIMARY
A.R. Luria, *The Man with the Shattered World*, pp. 21-45.
Jill Bolte Taylor, *My Stroke of Insight: A Brain Scientist's Personal Journey*, pp. 168-187.

Lecture Twenty: Mind and Brain in Contemporary Culture
Readings:
Required:
Fernando Vidal, 'Brainhood, anthropological figure of modernity,' *History of the Human Sciences*, 2009, *22:* 5-36.
Stacey A. Tovino, 'Functional neuroimaging and the law: Trends and directions for future scholarship', *American Journal of Neuroethics*, 2007, *7:* 44-56.
Optional:
Joseph Dumit, *Picturing Personhood: Brain Scans and Biomedical Identity*, pp. 48-70.

Course expectations

It is expected that students will attend all lectures having first completed the required readings

Additional information

BIBLIOGRAPHY

Ash, Mitchell G., Gestalt Psychology in German Culture, 1890-1967 (Cambridge: Cambridge University Press, 1995)

Bell, Matthew, The German Tradition of Psychology in Literature and Thought, 1700-1840 (Cambridge: Cambridge University Press, 2005)

Brooks, John I., The Eclectic Legacy: Academic Philosophy and the Human Sciences in Nineteenth-Century France (Newark: University of Delaware Press, 1998)

Clarke, Edwin and Jacyna, L.S., Nineteenth-Century Origins of Neuroscientific Concepts (Berkeley: University of California Press, 1987)

Cooter, Roger, The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-Century Britain (Cambridge: Cambridge University Press, 1984)

Cunningham, Andrew and Nicholas Jardine, Romanticism and the Sciences (Cambridge: Cambridge University Press, 1990)

Danziger, Kurt, Marking the Mind: A History of Memory (Cambridge University Press, 2008)

Dumit, Joseph, Picturing Personhood : Brain Scans and Biomedical Identity (Princeton University Press, 2004)

Finger, Stanley, Origins of Neuroscience (Oxford: Oxford University Press, 1994)

Fox, Christopher, Psychology and Literature in the Eighteenth Century (New York: AMS Press, 1987)

Fox, Christopher, Locke and the Scriblerians: Identity and Consciousness in Early Eighteenth-Century Britain (Berkeley: University of California Press, 1988)

Fox, Christopher, Roy Porter, and Robert Wokler (eds), Inventing Human Science: Eighteenth-Century Domains (Berkeley: University of California Press, 1995)

Gay, Peter, The Enlightenment: An Interpretation (New York: Knopf, 1967-69)

Harrington, Anne, Medicine, Mind, and the Double Brain (Princeton: Princeton University Press, 1987)

Harrington (ed.), So Human a Brain: Knowledge and Values in the Neurosciences (Boston: Birkhauser, 1992)

Hughes, H. Stuart, Consciousness and Society (New York: Vintage Books, 1961)

Jacyna, L.S., Lost Words: Narratives of Language and the Brain, 1825-1926 (Princeton: Princeton University Press, 2000)

Jacyna, L.S. and Stephen Casper (eds), The Neurological Patient in History (Rochester: Rochester University Press, 2012).

Jones, Peter (ed.), The 'Science of Man' in the Scottish Enlightenment: Hume, Reid and their Contemporaries (Edinburgh: Edinburgh University Press, 1989)

Kushner, Howard L., A Cursing Brain? The Histories of Tourette's Syndrome (Harvard: Harvard University Press, 1999)

Luria, A.R., The Man with the Shattered World: The History of a Brain Wound (Cambridge, Mass.: Harvard University Press, 1987)

Macmillan, Malcolm, An Odd Kind of Fame: Stories of Phineas Gage (Cambridge, MA: MIT

Press, 2000)

Martensen, Robert, The Brain Takes Shape: An Early History (Oxford: Oxford University Press, 2004)

Meyers, Robert G. Understanding Empiricism: An Undergraduate Introduction to Empiricism and the Empiricist Tradition in Philosophy (McGill University Press, 2006)

Nye, Robert A., The Origins of Crowd Psychology: Gustave Le Bon and the Crisis of Mass Democracy in the Third Republic (London; Beverly Hills: Sage Publications, 1975)

Oldroyd, David and Ian Langham (eds), The Wider Domain of Evolutionary Thought (Dordrecht: D. Reidel, 1983)

Olson, Richard, The Emergence of the Social Sciences, 1642-1792 (New York: Twayne Publishers, 1993)

Olson, Richard, "The Human Sciences," in Roy Porter (ed.), Cambridge History of Science. Volume 4. Eighteenth-Century Science, pp. 436-62

Otis, Laura, Networking: Communicating with Bodies and Machines in the Nineteenth Century (Ann Arbor: Michigan)

Porter, Theodore M., The Rise of Statistical Thinking 1820-1900 (Princeton: Princeton University Press, 1986)

Reddy, William R, The Navigation of Feeling: A Framework for the History of the Emotions (Cambridge: Cambridge University Press, 2001)

Richards, Graham, Mental Machinery: The Origins and Consequences of Psychological Ideas from 1600 to 1850 (London: Athlone Press, 1992)

Richards, Robert J., Darwin and the Emergence of Evolutionary Theories of Mind and Behavior (Chicago: Chicago University Press, 1987)

Richardson, Alan, British Romanticism and the Science of the Mind (Cambridge: Cambridge University Press, 2001)

Rose, Nikolas, The Psychological Complex: Social Regulation and the Psychology of the Individual (London: Routledge, 1985)

Roth, Michael S., Rediscovering History: Culture, Politics, and the Psyche (Stanford: Stanford University Press, 1994)

Ross, Dorothy, Modernist Impulses in the Human Sciences 1870-1930 (Baltimore: Johns Hopkins Press, 1994)

Rousseau, George S., Nervous Acts: Essays on Literature, Culture and Sensibility (New York: Palgrave, 2004)

Seigel, Jerrold, The Idea of the Self (Cambridge University Press, 2005)

Smith, Woodruff D., Politics and the Sciences of Culture in Germany 1840-1920 (New York: Oxford University Press, 1991)

Smith, Roger, Inhibition: History and Meaning in the Sciences of Mind and Brain (London: Free Association Press, 1992)

Smith, Roger, The Human Sciences (New York: W.W. Norton, 1997)

Stewart, M.A. and John P. Wright, Hume and Hume's Connexions (Edinburgh: Edinburgh University Press, 1994)

Sulloway, Frank J., Freud Biologist of the Mind (Bungay: Fontana, 1980)

Taylor, Charles, Sources of the Self: Making of the Modern Identity (Cambridge: Cambridge University Press, 1992)

Taylor, Jill Bolte, My Stroke of Insight: A Brain Scientist's Personal Journey, (New York: Viking, 2009)

Vallins, David, Coleridge and the Psychology of Romanticism (New York, Macmillan, 2000)

Vickers, Neil, Coleridge and the Doctors, 1795-1806 (Oxford: Clarendon Press, 2004)

Viney, Wayne and D. Brett King, A History of Psychology (Boston: Allyn & Bacon, 1993)

Weidman, Nadine M., Constructing Scientific Psychology (Cambridge: Cambridge University Press, 1999)

Williams, Elizabeth A., The Physical and the Moral: Anthropology, Physiology, and Philosophical Medicine in France, 1750-1850 (Cambridge: Cambridge University Press, 1994)

Winters, Alison, Mesmerized: Powers of Mind in Victorian Britain (Chicago: Chicago University Press, 1998)

Zimmer, Carl, Soul Made Flesh (London: Heinemann, 2004)

Important policy information

Details of college and departmental policies relating to modules and assessments can be found in the STS Student Handbook www.ucl.ac.uk/sts/handbook

All students taking modules in the STS department are expected to read these policies.