

BSCS

Data of courses form

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Title of the course: Cognitive Psychology, 17-21 October 2015

Description: This course explores what is going on in your mind when you: pay attention, learn and remember, imagine, talk, reason, make decisions, and think. It is not a comprehensive treatment of the field of cognitive psychology, but rather an effort to introduce the most exciting and fruitful areas of current research.

Learning Objectives:

By the end of the course, students should be able to:

1. Name the main schools of thought within cognitive psychology, describe their historic roots as well as their implications for current-day research on human cognition.
2. For core cognitive behaviours, identify the main theoretical hypotheses, provide examples of research findings that support or refute these theories in the field, with a special focus on methods.
3. Explain the variety of internal and external influences on human cognition and describe the interaction between them.

Course Schedule:

1. Monday, 17 October 2016

9:00-10:30 – What is Cognitive Psychology?

10:45-12:00 – What are common methods?

12:30-13:30 – Perception, Attention, and Performance

Reading list:

- Chapter 1 from Anderson, J. R. (7th Edition). *Cognitive psychology and its implications*. WH Freeman/Times Books/Henry Holt & Co.
- Hand-out 'Methods in Cognitive Neuroscience.'
- Hand-out 'Functional Organisation of the Brain.'

Optional:

- Chapter 1 from: Michaels, C. F., & Carello, C. (1981). *Direct perception*. Englewood Cliffs, NJ: Prentice-Hall.
- Jarett, C. (2012, June 27). Why the left-brain right-brain myth will probably never die. *Psychology Today*. Retrieved from <http://www.psychologytoday.com/blog/brain-myths/201206/why-the-left-brain-right-brain-myth-will-probably-never-die>.
- Sporns, O., Chialvo, D. R., Kaiser, M., & Hilgetag, C. C. (2004). Organization, development and function of complex brain networks. *Trends in cognitive sciences*, 8(9), 418-425.

2. Tuesday, 18 October 2016

9:00-10:30 – Mental Imagery

10:45-12:00 – Representation of Knowledge

12:30-13:30 – Memory

Reading list:

- Shepard, R., & Metzler, J. (1971). Mental rotation of three dimensional objects. *Science*, 171(972), 701-703.

Optional:

- Baddeley, A. (1992). Working memory. *Science*, 255(5044), 556-559.
- Chapter 3 from: Chemero, A. (2011). *Radical embodied cognitive science*. MIT press.

3. Wednesday, 19 October 2016

9:00-10:30 – Problem Solving

10:45-12:00 – Expertise

12:30-13:30 – Reasoning

Reading list:

- Posner, M.I. (1988). What is it to be an expert? In M.T.H. Chi, R. Glaser & M.J. Farr (eds.), *The Nature of Expertise*. Hillsdale, N.J.: Lawrence Erlbaum Associates, xxix-xxxvi.

Optional:

- Chapter 8 from: Anderson, J. R. (7th Edition). *Cognitive psychology and its implications*. WH Freeman/Times Books/Henry Holt & Co.

4. Thursday, 20 October 2016

9:00-10:30 – Judgement and Decision Making

10:45-12:00 – Dynamics of Decision Making

12:30-13:30 – Special Topic: Serious Games

Reading list:

- Kahneman, D., & Tversky, A. (1983). Choices, values, and frames. *American psychologist*, 39(4), 341.
- Gilovich, T., Vallone, R., & Tversky, A. (1985). The hot hand in basketball: On the misperception of random sequences. *Cognitive psychology*, 17(3), 295-314.
- Chapter 14 from: Anderson, J. R. (7th Edition). *Cognitive psychology and its implications*. WH Freeman/Times Books/Henry Holt & Co.

Optional:

- Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *American Psychologist*, 69(1), 66.

Exam & Grade:

5. Friday, 21 October 2016

9:00-11:30 – Written exam.

The exam will consist of:

- 5 essay questions (100 points; 20 each).
- Essay questions are chosen from a list of 25 questions available at the start of the course.

The final grade will be calculated by points:

5	'Excellent'	85 – 100
4	'Good'	70 – 84
3	'Mediocre'	50 – 69
2	'Satisfactory'	30 – 49
1	'Unsatisfactory/fail'	0 – 29