



Psychology 101, section 1, Fall 2008
Introduction to Cognitive and Biological Psychology
Lecture time: Mon, Wed, Fri, 9:00-10:00
Lecture room: Woodward (Instructional Resources Centre-IRC), Room 2
Website:

Instructor: Maxim Abelev, Ph.D.
Office: Kenny (Psych Dept), Room 3535
Office hours: MWF 10:30-11:30 (email for appointment).
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(questions on lectures, readings, or exam content)

Teaching Assistant: Rachelle Smith
Office:
Office hours:
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(questions on enrollment, grades, or other administrative issues)

Course objectives.

Cognitive psychology studies the mental, representational and information-processing functions of the mind by systematically observing human and animal behavior and experimentally manipulating factors that influence it. ***Biological psychology*** explores the organization and functioning of the central nervous system (CNS) which implements the mental processes. The unifying theme of these disciplines is one of the greatest puzzles of science and philosophy, often called the Mind-Body Problem: how can physical, material phenomena give rise to mental phenomena like thoughts, feelings, ideas and subjective experiences? Topics to be covered include perception, attention and consciousness, learning and memory, knowledge representation, language, and analogical reasoning. The cognitive and neurobiological facets of each topic will be considered in parallel. Issues of research design, methodology and data analysis will also be reviewed.

Reading materials.

Required:

- Lindsay, D.S., Paulhus, D.L., & Nairne, J. (2003). *Psychology: the Adaptive Mind: 3rd Canadian edition* (Chapters 1-8) – available at the bookstore
- Required items from the Supplementary Readings list (available online).

Optional:

- Study guide for *Psychology: the Adaptive Mind* (a review and test-preparation resource) – available at the bookstore
- Optional items from the Supplementary Readings list (to learn more about the topics covered) – available online

Course requirements.

Exam 1: Friday, Oct 3 (week 5), regular class time & location, 40 points possible
(covers weeks 1 through 5)

Exam 2: December exam session, day/time/place to be announced, 60 points possible
(covers weeks 6 through 13)

Note:

- Both exams will use multiple-choice questions.
- Exams will test knowledge of all material from lectures and required readings (but *not* the optional readings)
- Remember to have your UBC student ID with you for all exams.
- No make-up exams (except for students who experience serious health problems, urgent medical treatment or family emergencies – please inform the instructor and/or TA as soon as possible!).

Class participation.

Lecture attendance is essential in this class. Exams cover all material presented in lectures, including topics not covered by the readings. Lecture slides will not be made available to students (brief lecture outlines will be provided to help you review).

Classroom conduct.

Please make an effort to arrive on time and to stay until lecture is over. No cell phone use or any sort of disruptive behavior in class, please!

Academic honesty.

You are strictly prohibited from using outside help or sharing information with other students while taking exams. You may not bring any notes, books or electronic devices with you to the exam. All suspected breaches of academic honesty will be referred to the Dean of your faculty. **Attempting to cheat seriously jeopardizes your academic career – please don't do it.** Please familiarize yourselves with the UBC policies concerning plagiarism and cheating.

Special accommodations.

Students with any disabilities or special needs relevant to this class should inform us by email as soon as possible. Please obtain a letter from the Disability Resource Centre that outlines your requirements. All personal information will be kept strictly confidential.

Time Table.

Week	Lecture dates	Topics	Reading	
			Required	Optional
1	<u>No class Sept 1</u> Wed, Sept 3 Fri, Sept 5	Introduction & foundations: philosophy of mind; scientific method	Ch. 1-2	Newall, 2005
2	Mon, Sept 8 Wed, Sept 10 Fri, Sept 12	Nervous system: neurons, synapses, & the brain.	Ch. 3	SFN Primer, 2005
3	Mon, Sept 15 Wed, Sept 17 Fri, Sept 19	Sensory systems; visual & auditory perception	Ch. 4	Palmer, 1999
4	Mon, Sept 22 Wed, Sept 24 Fri, Sept 26	Attention & consciousness.	Ch. 5	Roser & Gazzaniga, 2004; Baruss, 2003
5	Mon, Sept 29 Wed, Oct 1 <u>Exam I Oct 3</u>	Conditioning & learning	Ch. 6	Tolman, 1948
6	Mon, Oct 6 Wed, Oct 8 Fri, Oct 10	Memory: systems, processes, & neural mechanisms	Ch. 7	Shimamura, 2003
7	<u>No class Oct 13</u> Wed, Oct 15 Fri, Oct 17	Knowledge: categories, concepts, & theories.	Medin, 1989	Rosch, 1999
8	Mon, Oct 20 Wed, Oct 22 Fri, Oct 24	Language: production, comprehension, acquisition, & cortical organization	Ch. 8	Weiss & Newport, 2006
9	Mon, Oct 27 Wed, Oct 29 Fri, Oct 31	Language and thought	Boroditsky, 2003 Tomasello et al., 2005	Xu, 2002
10	Mon, Nov 3 Wed, Nov 5 Fri, Nov 7	Reasoning, problem-solving & decision-making,	Kahneman, 2003	Cosmides & Tooby, 1992
11	Mon, Nov 10 Wed, Nov 12 Fri, Nov, 14	Artificial intelligence, machine learning, & statistics	Appendix A Simon, 2000	Block, 1995
12	Mon, Nov 17 Wed, Nov 19 Fri, Nov 21	Creative & abstract thought: synaesthesia, analogy and metaphor	Ramachandran & Hubbard, 2003 Gentner & Colhoun, in press	Gallese & Lakoff, 2005
13	Mon, Nov 24 Wed, Nov 26 Fri, Nov 28	Topics to announced (student suggestions considered)	No new required reading.	TBA

Exam 2 time and location to be announced in early November.