

CAPILANO UNIVERSITY COURSE OUTLINE			
<b>TERM:</b>	<b>Fall 2015</b>	<b>COURSE NO:</b>	<b>PSYC 330</b>
<b>INSTRUCTOR:</b>		<b>COURSE NAME:</b>	<b>THINKING &amp; REASONING</b>
<b>OFFICE:</b>	<b>LOCAL:</b>	<b>SECTION NO(S):</b>	<b>CREDITS: 3</b>
<b>E-MAIL:</b>			

**COURSE FORMAT:** Three hours of class time, plus an additional hour delivered through on-line or other activities, for 15 weeks, which includes two weeks for final exams.

**COURSE PREREQUISITES:**

45 credits at 100 or higher including PSYC 100, 101 and 230 as a pre- or co-requisite.

**COURSE DESCRIPTION:**

This course will address topics in the study of thinking and reasoning, a crucial topic in cognitive psychology, including theory and research on problem solving, thinking and decision-making; formal and “everyday” reasoning; intuition and creativity; cross-cultural and individual variations in thinking processes; and the cognitive heuristics which can bias or distort human rationality and effective decision making when dealing with social issues and problems. The theories will be applied to the problems of human cognitive limitations in solving urgent social and environmental crises.

**COURSE LEARNING OBJECTIVES:**

Successful students will be able to:

- Demonstrate (in exams, written assignments and original research) a breadth and depth of knowledge of current research and theory about how humans think, and the limitations to our ability to reason and solve problems in everyday cognition. These include an understanding of research and theories about the cognitive processes of thinking and executive functions - problem-solving, creativity, judgement and decision-making, deductive and inductive reasoning, intelligence, and cognitive heuristics.
- Demonstrate research skills, critical thinking, and analytical and synthesis skills in evaluating research within the field, and in conducting original quantitative research, and use appropriate technology to analyze data and present their findings. This is assessed by the Research Study assignment.
- Identify and apply the concepts in the course to the ethics problems of human cognitive limitations in solving urgent social and environmental crises in both local and global contexts.
- Communicate their research, analyses and applications in written formats.
- Complete both independent and cooperative assignments.
- Demonstrate an ability to apply the course concepts to analyze their own ability to reason effectively, and to understand the strengths and weaknesses in their everyday reasoning in their life and work.

**REQUIRED TEXTS:** Galotti, K. M. (2002). *Making decisions that matter: How people face important life choices*. Mahwah, NJ: Erlbaum.  
Halpern, D. F. (2003). *Thought and knowledge: An introduction to critical thinking* (4th ed). Mahwah, NJ: Erlbaum.

Several journal articles on specific topics in the course will be detailed in a handout on the moodle course website.

Go to the course web site for the course syllabus & assignments, class outlines, resources, handouts, 4<sup>th</sup> hour activities and exam study questions. Access from <http://moodle.capilanou.ca>

### COURSE CONTENT:

Week	Topics
1-2	Introduction; Neuroscience of reasoning
2-4	Problem solving (structured, unstructured, and everyday cognition)
4-5	Creativity & intuition
6-7	Decision making: Optimal decision-making theory, utility theory
<b>7</b>	<b>Midterm</b>
8	Cognitive heuristics & biases
9	Deductive & inductive reasoning, everyday reasoning
10-11	Intelligence & intelligence testing
12-13	Individual, aging, gender, and cultural differences in cognition
14-15	Exam Period

### EVALUATION PROFILE:

4 <sup>th</sup> Hour activities	20%
Research Study & Report	20%
Midterm Exam	30%
Final Exam	<u>30%</u>
Total	100%

### GRADING PROFILE:

A+ = 90 - 100%	B+ = 77 - 79%	C+ = 67 - 69%	D = 50 - 59%
A = 85 - 89	B = 73 - 76	C = 63 - 66	F = 0 - 49
A- = 80 - 84	B- = 70 - 72	C- = 60 - 62	

### COURSE REQUIREMENTS:

Exams: The midterm and final exams will contain multiple choice, short answer, and short essay questions.

### 4<sup>th</sup> Hour Equivalent Activities :

A handout detailing the 4<sup>th</sup> hour equivalent activities will be handed out in the first class. On-line activities will take an hour a week to complete.

### Research Study & Report:

This assignment is a research study on a topic in thinking and decision making. The research study will be conducted in groups of 4 or 5. The groups will design the research, collect and analyze the data, and present their research as a team, however each student will write and submit an individual research report in APA style. Further details will be handed out in class.

**OPERATIONAL DETAILS:**

*Capilano University has policies on Academic Appeals (including appeal of final grades), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.*

**Attendance:**

Students are responsible for all announcements made in class or on the course web site and for all material on the course outline. Although instructors may discuss only portions of a chapter in class, students are responsible for studying all of each chapter listed on the course outline.

Appropriate university level behaviour is expected (see the Capilano University Calendar), including professional and respectful classroom conduct. Turn off your cell phones and use your laptop only to take notes on class material.

**Missed Exams:**

Make-up exams are given only in exceptional circumstances and with prior notice to the instructor. A penalty of up to 20% will be levied on those make-up exams when granted. However, submissions for waiver of late penalties for exceptional circumstances may be presented, in writing, with the appropriate documentation, to the Psychology Department.

**Late Assignments:**

Due dates for papers and assignments will be announced and guidelines will be distributed in class.

All papers must be submitted directly to the instructor at the beginning of the class period or e-mailed by midnight that day. Late papers will be penalized according to the number of days delayed, up to 20% for one week. No papers will be accepted later than one week except under exceptional circumstances.

**Cheating and Plagiarism:**

The psychology department adheres to the definition of cheating and plagiarism found in the Study Policy Handbook which students are responsible for obtaining. Cheating and plagiarism will result in a grade of zero, either for the assignment or the entire course, and will be reported to the Dean.

**Incomplete Grades:**

Incomplete grades will be given only in exceptional circumstances, and require the approval of the Psychology Department rather than your instructor.

**Confidentiality:**

The psychology department adheres to professional standards of ethics and confidentiality. Personal information that you give to an instructor would not normally be shared with anyone outside the department without your authorization. However, there are a few exceptional circumstances in which an instructor may be required by law to disclose information about you, e.g. if there is an indication that a minor (under the age of 19) is being abused sexually or physically, or neglected; or, disclosure of information is made necessary for legal proceedings; and certain other circumstances about which you may inquire.

**English Usage:**

Academic writing skills are required in all assignments. American Psychology Association (APA) writing guidelines, including the use of non-sexist language, must be followed.

All assignments must be original and must be used for this course only. Keep a copy of all work and hand in the original which must be typed.

Electronic Devices: Laptops are permitted in the classroom for note-taking purposes only. No personal electronic devices (cell phones, pagers, calculators, electronic dictionaries, etc.) may be used during an examination. During an exam, turn off all cell phones and pagers and put them away.

Emergency Procedures: Please read the emergency procedures posted on the wall of the classroom.