



**Course Information**

A: Division: **INSTRUCTIONAL**

Date: **MARCH 1996**

B: Department: **SOCIAL SCIENCES**

New Course:

Program:

Revision of Course Information form: **X**

C: **PSYCHOLOGY 360**

D: **COGNITIVE PSYCHOLOGY**

E: **3**

Subject & Course No.

Descriptive Title

Semester Credit

F: **Calendar Description: This course provides an introduction to the psychology of cognition and is concerned with the methods and theories relevant to thinking and related processes. Concept formation, problem solving, reasoning, decision making, and the relation of language to thought will be covered. The influence of individual differences, social factors, artificial intelligence, and biology will be included as well as the practical applications of research in cognition.**

Summary of Revisions: (Enter date & section)  
Eg: Section C,E,F

**A,N,O,Q,R**

G: Type of instruction: Hrs per week / per semester

Lecture:	4	Hrs.
Laboratory:		Hrs.
Seminar:		Hrs.
Clinical Experience:		Hrs.
Field Experience:		Hrs.
Practicum:		Hrs.
Shop:		Hrs.
Studio:		Hrs.
Student Directed Learning:		Hrs.
Other (Specify):		Hrs.
<b>Total:</b>	<b>4</b>	<b>Hrs.</b>

H: **Course Prerequisites:**  
**PSYC 200**

I: **Course Corequisites:**

J: **Course for which this Course is a Prerequisite:**

K: **Maximum Class Size:**  
**35**

L: College Credit Transfer	<input checked="" type="checkbox"/>
College Credit Non-Transfer	<input type="checkbox"/>
Non-Credit	<input type="checkbox"/>

M: Transfer Credit:	Requested:	<input type="checkbox"/>
	Granted:	<input checked="" type="checkbox"/>

Specify Course Equivalents or Unassigned Credit as appropriate:

SFU **PSYC 360=PSY 320**  
 UBC **PSYC 360=UNASSIGNED (1.5)**  
 UNBC  
 UVIC **PSYC 360=PSY 313(1.5)**  
 Other:

*[Signature]*  
 Course Designer(s)  
*[Signature]*  
 Director/Chairperson

*[Signature]*  
 Registrar

**Subject and Course Number**

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**N. Textbooks and Materials to be Purchased by Students (Use Bibliographic Form):**

**One or more of:**

**Anderson, John, R., 1995) Cognitive Psychology and its Implications (4th ed.)**

**Salt Lake City, Utah, Freeman Publishers**

**Solso, Robert, L. (1995) Cognitive Psychology (4th ed.)**

**New York, Allyn & Bacon Publishers**

**Haberlandt, Karl (1994) Cognitive Psychology, New York, Allyn & Bacon Publishers**

**Text will be updated periodically.**

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**Complete Form with Entries Under the Following Headings: O. Course Objectives; P. Course Content;  
Q. Method of Instruction; R. Course Evaluation**

**O. Course Objectives**

**At the conclusion of the course the student will be able to:**

- 1. List the major historical figures in the history of cognitive psychology and describe their contribution.**
- 2. Define cognition and describe the various types of cognition included in the definition.**
- 3. Describe the major contemporary theoretical approaches in cognitive psychology.**
- 4. Describe concept formation and attainment and the role of perceptual and memory processes.**
- 5. Explain the similarities and differences between individual and group problem solving.**
- 6. Describe the similarities and differences between human reasoning and artificial intelligence reasoning.**
- 7. Describe the dynamics of decision making processes and boundaries of "rational decision making".**
- 8. Describe the role of language and imagery in cognition.**
- 9. Describe the role of individual differences in cognitive style and cognitive ability.**
- 10. Run simple simulations of cognitive processes on a microcomputer using packaged software.**
- 11. Locate and use internet resources in Cognitive Psychology.**

**P. Course Content**

- 1. Historical Context  
The rationalistic tradition  
Scientific decision making  
The behaviourist tradition  
The cognitive revolution**
- 2. Biological Processes  
Neural networks  
Rhythms and cycles**

**PSYCHOLOGY 360 - COGNITIVE PSYCHOLOGY**

**P. Course Content - cont'd**

3. **Perceptual Processes**  
Sensory memories  
Pattern recognition in humans and machines  
Attention
4. **Memory Processes**  
Models of memory  
Short term memory  
Arousal and memory  
Practical implications
5. **Imagery**  
Characteristics of images  
Imagery and memory  
Cognitive maps  
Graphical computer interfaces
6. **Language**  
Understanding language  
Computers and language representation  
Producing language  
Remembering language  
Reading  
Language translation
7. **Concepts and Categories**  
Methods of researching  
Factors affecting concept formation  
Testing hypotheses  
Natural categories  
Statistical methods of categorization
8. **Problem Solving**  
Problem representation  
Strategies and heuristic  
Ill-defined problems  
Creativity  
Computational explorations of creative processors
9. **Reasoning**  
Linear series problems  
Propositional reasoning  
Syllogisms  
Analogies  
First order predicate logic

**PSYCHOLOGY 360 - COGNITIVE PSYCHOLOGY****P. Course Content - cont'd**

10. **Decision Making**  
 Representativeness  
 Availability  
 Social judgement and bias  
 Mathematical modelling judges policy
11. **Individual Differences**  
 In memory processes  
 In language usage  
 In concept formation and problem solving  
 In cognitive styles  
 Thinking as measurable ability
12. **Artificial Intelligence**  
 Expert systems  
 Decision support systems
13. **Social Cognition**  
 Group problem solving  
 Consensual social reality  
 Game playing and simulation

**Q. Method of Instruction**

This course will employ a number of instructional methods to accomplish its objective and will include some of the following:

- lectures
- audio-visual materials
- small group discussion
- research projects
- computer based cognitive simulation exercises
- mediated electronic forums/discussion groups
- internet based individual and small group assignments

**R. Course Evaluation**

Evaluation will be carried out in accordance with the Douglas College policy and will include both formative and summative components. Evaluation will be based on some of the following: quizzes, multiple choice type exams, essay type exams, term paper or research project, computer based assignments, internet based assignments, quality of participation in class discussions, etc. An example of one evaluation scheme:

10 quizzes	25%
5 homework assignments	10%
Small group assignments	10%
Class discussion quality	10%
Term project paper	20%
Midterm exam	10%
Final exam	<u>15%</u>
	100%