Cognitive Science

Program Requirements

Cognitive Science with Concentration in Philosophical and Conceptual Issues

Bachelor of Cognitive Science Honours (20.0 credits)

A. Credits Included in the Major CGPA (15.5 credits)

Α.	Credits Included i	n the Major CGPA (15.5 credits)	
1.	1.0 credit from:		1.0
	FYSM 1607 [1.0]	Cognitive Science: Thinking and Knowing	
	FYSM 1400 [1.0]	Cognition: A Scientific Exploration of the Mind	
	CGSC 1001 [0.5]	Mysteries of the Mind	
	PHIL 1301 [0.5]	Mind, World, and Knowledge	
2.	1.0 credit in:		1.0
	CGSC 2001 [0.5]	Introduction to Cognitive Science	
	CGSC 2002 [0.5]	Theories and Methods in Cognitive Science	
3.	1.0 credit in:		1.0
	CGSC at the 3000-	level or higher	
4.	0.5 credit from:		0.5
	CGSC 1005 [0.5]	Computational Methods in Cognitive Science	
	COMP 1005 [0.5]	Introduction to Computer Science I	
5.	0.5 credit in:		0.5
	CGSC 4001 [0.5]	Artificial Intelligence for Cognitive Scientists	
6.	0.5 credit in:		0.5
	LING 1001 [0.5]	Introduction to Linguistics I	
7.	1.0 credit in:		1.0
	LING 2005 [0.5]	Linguistic Analysis I	
	LING 2007 [0.5]	Phonetics	
8.	0.5 credit from:		0.5
	PHIL 2501 [0.5]	Introduction to Philosophy of Mind	
	PHIL 3502 [0.5]	Mind and Action	
9.	0.5 credit from:		0.5
	PHIL 2001 [0.5]	Introduction to Logic	
	PHIL 2520 [0.5]	Introduction to Philosophical Logic	
10	0. 0.5 credit from:		0.5
	PHIL 2301 [0.5]	Introduction to the Philosophy of Science	
	PHIL 2504 [0.5]	Language and Communication	
	PHIL 3104 [0.5]	The Roots of Analytic Philosophy	
	PHIL 3301 [0.5]	Issues in the Philosophy of Science	
	PHIL 3306 [0.5]	Symbolic Logic	
	PHIL 3501 [0.5]	Philosophy of Cognitive Science	
	PHIL 3502 [0.5]	Mind and Action	
	PHIL 3504 [0.5]	Pragmatics	
	PHIL 3506 [0.5]	Semantics	
	PHIL 3530 [0.5]	Philosophy of Language	
	CGSC 3004 [0.5]	Philosophy and Cognitive Science	
11	. 2.0 credits in:		2.0
	PSYC 1001 [0.5]	Introduction to Psychology I	
	PSYC 1002 [0.5]	Introduction to Psychology II	
	PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	

	PSYC 2700 [0.5]	Introduction to Cognitive Psychology	
12	. 0.5 credit from:		0.5
	PSYC 2307 [0.5]	Human Neuropsychology I	
	NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease	
13	. 1.5 credits from:		1.5
	a. Thesis pathway		
	CGSC 3908 [0.5]	Honours Seminar in Cognitive Science	
	CGSC 4908 [1.0]	Honours Thesis	
	OR		
	b. Coursework pat	hway	
	i. 1.5 credit at the 30 LING, NEUR, PHIL,	000 level or higher in CGSC, COMP, or PSYC	
14	. 4.5 credits in the	concentration:	4.5
	a. 4.0 credits from:		
	PHIL 2301 [0.5]	Introduction to the Philosophy of Science	
	PHIL 2504 [0.5]	Language and Communication	
	PHIL 2540 [0.5]	Personal Identity and the Self	
	PHIL 3104 [0.5]	The Roots of Analytic Philosophy	
	PHIL 3140 [0.5]	Epistemology	
	PHIL 3301 [0.5]	Issues in the Philosophy of Science	
	PHIL 3306 [0.5]	Symbolic Logic	
	PHIL 3501 [0.5]	Philosophy of Cognitive Science	
	PHIL 3502 [0.5]	Mind and Action	
	PHIL 3504 [0.5]	Pragmatics	
	PHIL 3506 [0.5]	Semantics	
	PHIL 3530 [0.5]	Philosophy of Language	
	CGSC 3004 [0.5]	Philosophy and Cognitive Science	
	b. 0.5 credit from:		
	PHIL 4055 [0.5]	Lexical Semantics	
	PHIL 4210 [0.5]	Seminar in philosophy of Language or Linguistics	
	PHIL 4220 [0.5]	Seminar in philosophy of Mind or Cognition	
	PHIL 4230 [0.5]	Seminar in Metaphysics, Epistemology, or Philosophy of Science	
	PHIL 4503 [0.5]	Special Topic in Philosophy of Computing	
	PHIL 4505 [0.5]	Formal Semantics	
В.	Credits not include	ed in the Major (4.5 credits)	
15	5. 4.5 credits in free	e electives.	4.5
То	tal Credits		20.0
No	normally stu	dents may not offer more than one	2

Note: normally, students may not offer more than one credit of independent study (eg. CGSC 4801 Independent Study and CGSC 4802 Independent Study) in their total program, including independent study credits taken through other departments.

Cognitive Science with Concentration in Language and Linguistics Bachelor of Cognitive Science Honours (20.0 credits)

A. Credits Included in the Major CGPA (15.5 credits)

1. 1.0 credit from: 1.0

	FYSM 1607 [1.0]	Cognitive Science: Thinking and	
	FYSM 1400 [1.0]	Knowing Cognition: A Scientific Exploration	
	0000 4004 [0.5]	of the Mind	
	CGSC 1001 [0.5]	Mysteries of the Mind	
_	PHIL 1301 [0.5]	Mind, World, and Knowledge	1.0
۷.	1.0 credit in:	Introduction to Cognitive Science	1.0
	CGSC 2001 [0.5] CGSC 2002 [0.5]	Introduction to Cognitive Science Theories and Methods in Cognitive Science	
3.	1.0 credit in:		1.0
C	GSC at the 3000 leve	el or higher	
4.	0.5 credit from:		0.5
	CGSC 1005 [0.5]	Computational Methods in Cognitive Science	
	COMP 1005 [0.5]	Introduction to Computer Science I	
5.	0.5 credit in:		0.5
	CGSC 4001 [0.5]	Artificial Intelligence for Cognitive Scientists	
6.	0.5 credit in:		0.5
	LING 1001 [0.5]	Introduction to Linguistics I	
7.	1.0 credit in:		1.0
	LING 2005 [0.5]	Linguistic Analysis I	
	LING 2007 [0.5]	Phonetics	
8.	0.5 credit from:		0.5
	PHIL 2501 [0.5]	Introduction to Philosophy of Mind	
	PHIL 3502 [0.5]	Mind and Action	
9.	0.5 credit from:		0.5
	PHIL 2001 [0.5]	Introduction to Logic	
	PHIL 2520 [0.5]	Introduction to Philosophical Logic	
10). 0.5 credit from:		0.5
	CGSC 3004 [0.5]	Philosophy and Cognitive Science	
	PHIL 2301 [0.5]	Introduction to the Philosophy of Science	
	PHIL 2504 [0.5]	Language and Communication	
	PHIL 3104 [0.5]	The Roots of Analytic Philosophy	
	PHIL 3301 [0.5]	Issues in the Philosophy of Science	
	PHIL 3306 [0.5]	Symbolic Logic	
	PHIL 3501 [0.5]	Philosophy of Cognitive Science	
	PHIL 3502 [0.5]	Mind and Action	
	PHIL 3504 [0.5]	Pragmatics	
	PHIL 3506 [0.5]	Semantics Dhilacarby of Language	
4.4	PHIL 3530 [0.5]	Philosophy of Language	2.0
11	. 2.0 credits in:	Introduction to Davishala and	2.0
	PSYC 1001 [0.5]	Introduction to Psychology I	
	PSYC 1002 [0.5] PSYC 2001 [0.5]	Introduction to Psychology II Introduction to Research Methods	
	PSYC 2700 [0.5]	in Psychology Introduction to Cognitive Psychology	
12	2. 0.5 credit from:	.,	0.5
	NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease	
	PSYC 2307 [0.5]	Human Neuropsychology I	
13	3. 1.5 credits from:	1	1.5
	a. Thesis pathway		
	CGSC 3908 [0.5]	Honours Seminar in Cognitive	
	. ,	Science	

OR			
	oursework par	•	
	credits at the 30 G, NEUR, PHIL	000 level or higher in CGSC, COMP, , or PSYC	
14. 4.	5 credits in the	concentration:	4.5
a. 2	.5 credits in:		
LIN	G 3004 [0.5]	Syntax I	
LIN	G 3005 [0.5]	Morphology I	
LIN	G 3007 [0.5]	Phonology I	
LIN	G 3505 [0.5]	Semantics	
LIN	G 3601 [0.5]	Language Processing and the Brain I	
b. 1	.0 credit from:		
LIN	G 2604 [0.5]	Communication Disorders I	
LIN	G 3604 [0.5]	Communication Disorders II	
LIN	G 3504 [0.5]	Pragmatics	
LIN	G 3603 [0.5]	Child Language	
c. 1	.0 credit from:		
LIN	G 4004 [0.5]	Syntax II	
LIN	G 4005 [0.5]	Morphology II	
LIN	G 4007 [0.5]	Phonology II	
LIN	G 4505 [0.5]	Formal Semantics	
LIN	G 4601 [0.5]	Language Processing and the Brain II	
B. Cre	dits not includ	ed in the Major (4.5 credits)	
15. 4.	5 credits in free	e electives	4.5
Total C	credits		20.0

Note: Normally, students may not offer more than one credit of independent study (eg. CGSC 4801 Independent Study and CGSC 4802 Independent Study) in their total program, including independent study credits taken through other departments.

Cognitive Science with Concentration in the Biological Foundations of Cognition Bachelor of Cognitive Science Honours (20.0 credits)

Α.	Credits Included in	n the Major GPA (15.5 credits)	
1.	1.0 credit from:		1.0
	FYSM 1607 [1.0]	Cognitive Science: Thinking and Knowing	
	FYSM 1400 [1.0]	Cognition: A Scientific Exploration of the Mind	
	CGSC 1001 [0.5]	Mysteries of the Mind	
	PHIL 1301 [0.5]	Mind, World, and Knowledge	
2.	1.0 credit in:		1.0
	CGSC 2001 [0.5]	Introduction to Cognitive Science	
	CGSC 2002 [0.5]	Theories and Methods in Cognitive Science	
3.	1.0 credit in:		1.0
	CGSC at the 3000 I	evel or higher	
4.	0.5 credit from:		0.5
	CGSC 1005 [0.5]	Computational Methods in Cognitive Science	

COMP 1005 [0.5] Introduction to Computer Science I

0.5

5. 0.5 credit in:

CGSC 4001 [0.5]	Artificial Intelligence for Cognitive Scientists	
6. 0.5 credit in:		0.5
LING 1001 [0.5]	Introduction to Linguistics I	
7. 1.0 credit in:		1.0
LING 2005 [0.5]	Linguistic Analysis I	
LING 2007 [0.5]	Phonetics	
8. 0.5 credit from:		0.5
PHIL 2501 [0.5]	Introduction to Philosophy of Mind	
PHIL 3502 [0.5]	Mind and Action	0.5
9. 0.5 credit from:	lates de ation to Lonio	0.5
PHIL 2001 [0.5]	Introduction to Logic	
PHIL 2520 [0.5] 10. 0.5 credit from:	Introduction to Philosophical Logic	0.5
PHIL 2301 [0.5]	Introduction to the Philosophy of	0.5
	Science	
PHIL 2504 [0.5]	Language and Communication	
PHIL 3104 [0.5]	The Roots of Analytic Philosophy	
PHIL 3301 [0.5]	Issues in the Philosophy of Science	
PHIL 3306 [0.5]	Symbolic Logic	
PHIL 3501 [0.5]	Philosophy of Cognitive Science	
PHIL 3502 [0.5]	Mind and Action	
PHIL 3504 [0.5]	Pragmatics Semantics	
PHIL 3506 [0.5]		
PHIL 3530 [0.5] CGSC 3004 [0.5]	Philosophy of Language Philosophy and Cognitive Science	
11. 2.0 credits in:	Filliosophy and Cognitive Science	2.0
PSYC 1001 [0.5]	Introduction to Psychology I	2.0
PSYC 1002 [0.5]	Introduction to Psychology II	
PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	
PSYC 2700 [0.5]	Introduction to Cognitive Psychology	
12. 0.5 credit in:	-,	0.5
NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease	
13. 1.5 credits from:	•	1.5
a. Thesis pathway	•	
CGSC 3908 [0.5]	Honours Seminar in Cognitive Science	
CGSC 4908 [1.0]	Honours Thesis	
OR		
b. Coursework pa	thway	
i. 1.5 credit at the 3 LING, NEUR, PHIL	000 level or higher in CGSC, COMP, , or PSYC	
14. 4.5 credits in the	concentration:	4.5
a. 0.5 credit in:		
NEUR 1203 [0.5]	Neuroscience of Mental Health and Neurological Disease	
b. 2.5 credits in:		
NEUR 2002 [0.5]	Introduction to Statistics in Neuroscience	
NEUR 2201 [0.5]	Cellular and Molecular Neuroscience	
NEUR 2202 [0.5]	Neurodevelopment and Plasticity	
NEUR 3001 [0.5]	Neurodevelopment and Plasticity Data Analysis in Neuroscience I	
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NEUR 2801 [0.5]	Neuroscience and Creativity		
NEUR 3204 [0.5]	Neuropharmacology		
NEUR 3206 [0.5]	Sensory and Motor Neuroscience		
NEUR 3207 [0.5]	Integrative Neuroscience		
NEUR 3303 [0.5]	The Neuroscience of Consciousness		
PSYC 3307 [0.5]	Human Neuropsychology II		
PSYC 3709 [0.5]	Language Processing and the Brain		
d. 0.5 credit in NEU	IR at the 3000-level or above		
B. Credits Not Included in the Major CGPA (4.5 credits)			
15. 4.5 credits in free	e electives.	4.5	

Note: normally, students may not offer more than one credit of independent study (eg. CGSC 4801 Independent Study and CGSC 4802 Independent Study) in their total program, including independent study credits taken through other departments.

Total Credits

Cognitive Science with Concentration in Cognition and Psychology Bachelor of Cognitive Science Honours (20.0 credits)

credits) A. Credits Included in the Major CGPA (15.5 credits)

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1.	1.0 credit from:		1.0
	FYSM 1607 [1.0]	Cognitive Science: Thinking and Knowing	
	FYSM 1400 [1.0]	Cognition: A Scientific Exploration of the Mind	
	CGSC 1001 [0.5]	Mysteries of the Mind	
	PHIL 1301 [0.5]	Mind, World, and Knowledge	
2.	1.0 credit in:		1.0
	CGSC 2001 [0.5]	Introduction to Cognitive Science	
	CGSC 2002 [0.5]	Theories and Methods in Cognitive Science	
3.	1.0 credit in:		1.0
	CGSC at the 3000 l	evel or above	
4.	0.5 credit from:		0.5
	CGSC 1005 [0.5]	Computational Methods in Cognitive Science	
	COMP 1005 [0.5]	Introduction to Computer Science I	
5.	0.5 credit in:		0.5
	CGSC 4001 [0.5]	Artificial Intelligence for Cognitive Scientists	
6.	0.5 credit in:		0.5
	LING 1001 [0.5]	Introduction to Linguistics I	
7.	1.0 credit in:		1.0
	LING 2005 [0.5]	Linguistic Analysis I	
	LING 2007 [0.5]	Phonetics	
8.	0.5 credit from:		0.5
	PHIL 2501 [0.5]	Introduction to Philosophy of Mind	
	PHIL 3502 [0.5]	Mind and Action	
9.	0.5 credit from:		0.5
	PHIL 2001 [0.5]	Introduction to Logic	
	PHIL 2520 [0.5]	Introduction to Philosophical Logic	
10	. 0.5 credit from:		0.5
	PHIL 2301 [0.5]	Introduction to the Philosophy of Science	

20.0

PHIL 2504 [0.5] Language and Communication	
PHIL 3104 [0.5] The Roots of Analytic Philosophy	
PHIL 3301 [0.5] Issues in the Philosophy of Science	
PHIL 3306 [0.5] Symbolic Logic	
PHIL 3501 [0.5] Philosophy of Cognitive Science	
PHIL 3502 [0.5] Mind and Action	
PHIL 3504 [0.5] Pragmatics	
PHIL 3506 [0.5] Semantics	
PHIL 3530 [0.5] Philosophy of Language	
CGSC 3004 [0.5] Philosophy and Cognitive Science	
11. 2.0 credits in:	2.0
PSYC 1001 [0.5] Introduction to Psychology I	
PSYC 1002 [0.5] Introduction to Psychology II	
PSYC 2001 [0.5] Introduction to Research Methods in Psychology	
PSYC 2700 [0.5] Introduction to Cognitive Psychology	
12. 0.5 credit from:	0.5
PSYC 2307 [0.5] Human Neuropsychology I	
NEUR 1202 [0.5] Neuroscience of Mental Health and Psychiatric Disease	
13. 1.5 credits from:	1.5
a. Thesis pathway	
CGSC 3908 [0.5] Honours Seminar in Cognitive Science	
CGSC 4908 [1.0] Honours Thesis	
OR	
b. Coursework pathway	
 i. 1.5 credit at the 3000 level or above in CGSC, COMP, LING, NEUR, PHIL, or PSYC 	
14. 4.5 credits in the concentration:	4.5
a. 1.5 credits in:	
PSYC 2002 [0.5] Introduction to Statistics in Psychology	
PSYC 3000 [1.0] Design and Analysis in Psychological Research	
b. 0.5 credit in PSYC at the 2000-level or above	
c. 2.0 credits from:	
PSYC 3700 [1.0] Cognition (Honours Seminar)	
PSYC 3307 [0.5] Human Neuropsychology II	
PSYC 3506 [0.5] Cognitive Development	
PSYC 3508 [0.5] Child Language	
PSYC 3702 [0.5] Perception	
PSYC 3709 [0.5] Language Processing and the	
Brain	
NEUR 3303 [0.5] The Neuroscience of Consciousness	
NEUR 3303 [0.5] The Neuroscience of	
NEUR 3303 [0.5] The Neuroscience of Consciousness	
NEUR 3303 [0.5] The Neuroscience of Consciousness d. 0.5 credit in PSYC at the 4000-level or above	4.5

Note: Normally, students may not offer more than one credit of independent study (eg. CGSC 4801 Independent Study and CGSC 4802 Independent Study) in their total program, including independent study credits taken through other departments.

Cognitive Science with Concentration in Cognition and Computation Bachelor of Cognitive Science Honours (20.0 credits)

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13. 1.5 credits from	om:	1.5
a. Thesis path	way	
CGSC 3908 [0.	5] Honours Seminar in Cognitive Science	
CGSC 4908 [1.	0] Honours Thesis	
OR		
b. Coursework	c pathway:	
i. 1.5 credit at th LING, NEUR, P	ne 3000 level or higher in CGSC, COMP, PHIL, or PSYC	
14. 4.5 credits in	the concentration:	4.5
a. 0.5 credit in:		
COMP 1006 [0.	.5] Introduction to Computer Science II	
b. 0.5 credit in 0	COMP at the 1000 level or above	
c. 2.0 credits fro	om:	
COMP 2401 [0.	.5] Introduction to Systems Programming	
COMP 2402 [0.	5] Abstract Data Types and Algorithms	
COMP 2404 [0.	.5] Introduction to Software Engineering	
COMP 2406 [0.	.5] Fundamentals of Web Applications	
COMP 3008 [0.	.5] Human-Computer Interaction	
d. 1.0 credit in 0	COMP at the 2000 level or above	
e. 0.5 credit from	m:	
COMP 4102 [0.	.5] Computer Vision	
COMP 4106 [0.	.5] Artificial Intelligence	
COMP 4107 [0.	.5] Neural Networks	
COMP 4805 [0.	.5] Theory of Automata	
B. Credits not inc	cluded in the Major CGPA (4.5 credits)	
15. 4.5 credits in	free electives.	4.5
Total Credits		20.0

Note: Normally, students may not offer more than one credit of independent study (eg. CGSC 4801 Independent Study and CGSC 4802 Independent Study) in their total program, including independent study credits taken through other departments.

Cognitive Science Bachelor of Cognitive Science General (15.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit from:		1.0
CGSC 1001 [0.5]	Mysteries of the Mind	
FYSM 1400 [1.0]	Cognition: A Scientific Exploration of the Mind	
FYSM 1607 [1.0]	Cognitive Science: Thinking and Knowing	
PHIL 1301 [0.5]	Mind, World, and Knowledge	
2. 1.0 credit in:		1.0
CGSC 2001 [0.5]	Introduction to Cognitive Science	
CGSC 2002 [0.5]	Theories and Methods in Cognitive Science	
3. 1.0 credit in CGSC	at the 3000 level or above	1.0
4. 0.5 credit from:		0.5
CGSC 1005 [0.5]	Computational Methods in Cognitive Science	
COMP 1005 [0.5]	Introduction to Computer Science I	
5. 1.5 credits in:		1.5

	LING 1001 [0.5]	Introduction to Linguistics I	
	LING 2005 [0.5]	Linguistic Analysis I	
	LING 2007 [0.5]	Phonetics	
6.	0.5 credit from:		0.5
	PHIL 2501 [0.5]	Introduction to Philosophy of Mind	
	PHIL 3502 [0.5]	Mind and Action	
7.	0.5 credit from:		0.5
	PHIL 2001 [0.5]	Introduction to Logic	
	PHIL 2520 [0.5]	Introduction to Philosophical Logic	
8.	0.5 credit from:		0.5
	CGSC 3004 [0.5]	Philosophy and Cognitive Science	
	PHIL 2301 [0.5]	Introduction to the Philosophy of Science	
	PHIL 2504 [0.5]	Language and Communication	
	PHIL 3104 [0.5]	The Roots of Analytic Philosophy	
	PHIL 3301 [0.5]	Issues in the Philosophy of Science	
	PHIL 3306 [0.5]	Symbolic Logic	
	PHIL 3501 [0.5]	Philosophy of Cognitive Science	
	PHIL 3502 [0.5]	Mind and Action	
	PHIL 3504 [0.5]	Pragmatics	
	PHIL 3506 [0.5]	Semantics	
	PHIL 3530 [0.5]	Philosophy of Language	
9.	2.0 credits in:		2.0
	PSYC 1001 [0.5]	Introduction to Psychology I	
	PSYC 1002 [0.5]	Introduction to Psychology II	
	PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	
	PSYC 2700 [0.5]	Introduction to Cognitive Psychology	
10	10. 0.5 credit from:		
	NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease	
	PSYC 2307 [0.5]	Human Neuropsychology I	
B. Credits Not Included in the Major CGPA (6.0 credits)			
11	. 6.0 credits in free	e electives	6.0
To	tal Credits		15.0

Post-Baccalaureate Diploma in Cognitive Science (4.0 credits)

Admission to this program requires the permission of the Institute of Cognitive Science. Normally, students are required to have completed an undergraduate degree with a minimum B average or higher to be admitted. Applications will be reviewed on a case-by-case basis.

Requirements:				
1. 1.0 credit in:		1.0		
CGSC 3908 [0.5]	Honours Seminar in Cognitive Science			
CGSC 4001 [0.5]	Artificial Intelligence for Cognitive Scientists			
2. 1.5 credits in CGSC at the 3000 level				
3. 1.5 credits from:		1.5		
CGSC 4801 [0.5]	Independent Study			
CGSC 4802 [0.5]	Independent Study			
CGSC 4900 [0.5]	Special Topics in Cognitive Science			
CGSC 4908 [1.0]	Honours Thesis			

Total Credits

Empirical Issues in Cognitive Science

CGSC 3201 [0.5 credit]

4.0

Cognitive Science (CGSC) Courses

CGSC 1001 [0.5 credit]

Mysteries of the Mind

Challenges faced in understanding the mind, and some of the approaches cognitive science has brought to bear on them. Topics may include the nature of knowledge, how we learn, the extent to which human thinking is rational, biases in thinking, and evolutionary influences on cognition.

Lectures three hours per week.

CGSC 1005 [0.5 credit]

Computational Methods in Cognitive Science

Introduction to computational methods, with an emphasis on programming. Topics and assignments will focus on applications in cognitive science. No prior computing experience required.

Lecture three hours and tutorial one and a half hours a week.

CGSC 2001 [0.5 credit] Introduction to Cognitive Science

An integrated background of the discipline of Cognitive Science, with an historical overview (1940's onward) and examination of the extent to which the discipline has assimilated the collective knowledge of contributing disciplines (e.g., psychology, philosophy, linguistics, artificial intelligence and neuroscience).

Prerequisite(s): second-year standing or permission of the Institute.

Lectures three hours a week.

CGSC 2002 [0.5 credit]

Theories and Methods in Cognitive Science

Selected topics in cognitive science covered from the perspectives of psychology, computer science, linguistics, philosophy, and other related disciplines. Students may be required to complete independent research projects. Prerequisite(s): CGSC 2001, second year standing, and two of PSYC 1001, LING 1001, COMP 1005, PHIL 1301 or PHIL 2501, or permission of the Institute. Restricted to students enrolled in B.Cog.Sc. General or Honours. Seminars and tutorials six hours per week.

CGSC 3004 [0.5 credit]

Philosophy and Cognitive Science

An examination of the significance and role of philosophy in cognitive science. Topics may include: philosophical methods for studying the mind, prospects for naturalizing consciousness and intentionality, assessing competing models of the mind.

Prerequisite(s): third-year year standing and 0.5 credit in CGSC 2001 and PHIL 2501.

Seminar three hours per week.

CGSC 3301 [0.5 credit]

CGSC 2001 or PSYC 2700.

Seminar three hours per week.

Language and Cognitive Science

Issues related to language and cognitive science are examined through a detailed consideration of selected topics.

Issues in empirical Cognitive Science are examined

through a detailed consideration of selected topics. Prerequisite(s): third-year standing, and 0.5 credit in

Prerequisite(s): third-year standing, and CGSC 2001. Seminar three hours per week.

CGSC 3908 [0.5 credit]

Honours Seminar in Cognitive Science

Major theories and empirical approaches within Cognitive Science are examined through a detailed consideration of selected topics. Students are required to complete independent research projects to prepare for their fourthyear honours theses.

Precludes additional credit for CGSC 3001 (no longer offered) and CGSC 3002 (no longer offered). Prerequisite(s): third year standing, CGSC 2001 and CGSC 2002, and enrolment in B. Cog. Sc. Honours with a CGPA in the major requirements of 8.0. Seminars and tutorials six hours per week.

CGSC 3999 [0.0 credit] **Co-operative Work Term**

CGSC 4001 [0.5 credit]

Artificial Intelligence for Cognitive Scientists

An introduction to the contribution of artificial intelligence and computer modeling of cognitive processes to cognitive

Prerequisite(s): third-year standing and CGSC 2002 and (CGSC 1005 or COMP 1005). Restricted to students enrolled in B.Cog.Sc. Honours.

Seminars and labs six hours per week.

CGSC 4801 [0.5 credit] Independent Study

A reading or research course for selected students who wish to investigate a particular topic of interest. Normally students may not offer more than one credit of independent study in their total program (including independent study credits taken through other departments).

Prerequisite(s): third- or fourth-year standing and permission of the Institute.

CGSC 4802 [0.5 credit]

Independent Study

A reading or research course for selected students who wish to investigate a particular topic of interest. Normally students may not offer more than one credit of independent study in their total program (including independent study credits taken through other departments).

Prerequisite(s): third- or fourth-year standing and permission of the Institute.

CGSC 4900 [0.5 credit]

Special Topics in Cognitive Science

The topic of this course will vary from year to year. Students may register in more than one section of CGSC 4900 but may register in each section only once. Prerequisite(s): each section will have its own prerequisites and permission of the department if is required.

Seminar three hours per week.

CGSC 4908 [1.0 credit]

Honours Thesis

Interdisciplinary thesis. In developing a thesis, students must consult the Undergraduate Supervisor. Only the Undergraduate Supervisor can assign a supervisor or grant approval to register in this course. Faculty regulations governing Honours Research Essays and Honours Theses apply.

Precludes additional credit for CGSC 4909. Prerequisite(s): fourth year standing, CGSC 3908, and enrolment in B.Cog.Sc. Honours with a major CGPA of 8.0.

CGSC 4909 [1.0 credit]

Honours Project

Interdisciplinary project. Students engage in one or more group research projects.

Precludes additional credit for CSGC 4908.

Prerequisite(s): 4th year standing, enrolment in B. Cog. Sc. Honours.

Seminar

Summer session: some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at central.carleton.ca

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at central.carleton.ca