

FOR INFORMATION

SIMON FRASER UNIVERSITY

MEMORANDUM

**To:** Senate  
**From:** J.W.G. Ivany  
Chair, SCAP  
**Subject:** Cognitive Science Program -  
Curriculum Changes  
**Date:** November 17, 1988

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Acting under delegated authority SCUS approved curriculum changes as set forth in S.88-58 to the Cognitive Science Program.

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**MAJOR IN COGNITIVE SCIENCE  
LOWER DIVISION REQUIREMENTS  
Basic Courses (25-26 hours)**

**MAJOR IN COGNITIVE SCIENCE  
LOWER DIVISION REQUIREMENTS  
Basic Courses (19-23 hours)**

*Linguistics:*

LING 100-3  
LING 130-3

Communication and Language  
Practical Phonetics

*Linguistics:*

For students who choose Linguistics as one of the three disciplines at the intermediate level:

LING 100-3  
LING 130-3

Communication and Language  
Practical Phonetics

For students who do not choose Linguistics at the intermediate level:

LING 100-3

Communication and Language

*Philosophy:*

PHIL 100-3  
OR  
PHIL 110-3

Knowledge and Reality

*Philosophy:*

PHIL 100-3  
OR  
PHIL 110-3

Knowledge and Reality

PHIL 150-3  
OR  
PHIL 151-3

Introduction to Philosophical Concepts  
and Reasoning  
History of Philosophy I  
History of Philosophy II

Introduction to Philosophical Concepts  
and Reasoning

**Intermediate Courses (22-25 hours)**

**Intermediate Courses (20-25 hours)**

*Philosophy:*

PHIL 210-3  
PHIL 244-3

Elementary Formal Logic I  
Introduction to the Philosophy of Natural  
and Social Science

*Philosophy:*

PHIL 210-4

Elementary Formal Logic I

**Rationale**

The goal of these changes is to increase accessibility to the program by reducing the very heavy lower division load on majors and honors students. Changes were made by assessing the direct relevance of course content to the program in general, deleting those of lesser relevance.

**Note:** only those portions of the requirements proposed for change are listed here.

Cognitive Science Calendar Changes

**UPPER DIVISION REQUIREMENTS (30-31 hours)***Psychology:*

Any three of:

PSYC 302-3      Learning  
 PSYC 320-3      Cognitive Processes  
 PSYC 366-3      Language Development  
 PSYC 367-3      Experimental Psycholinguistics

**UPPER DIVISION REQUIREMENTS (30-31 hours)***Psychology:*

Any THREE (3) of:

PSYC 303-3      Perception  
 PSYC 320-3      Cognitive Processes  
 PSYC 325-3      Memory  
 PSYC 366-3      Language Development  
 PSYC 367-3      Experimental Psycholinguistics

*Computing Science:*

CMPT 384-3      Symbolic Computing  
 CMPT 410-3      Artificial Intelligence Survey  
 CMPT 413-3      Computational Linguistics

*Computing Science:*

CMPT 383-3      Comparative Programming Languages  
 OR  
 CMPT 384-3      Symbolic Computing

**Plus any TWO (2) of:**

CMPT 410-3      Artificial Intelligence Survey  
 CMPT 411-3      Knowledge Representation  
 CMPT 412-3      Computational Vision  
 CMPT 413-3      Computational Linguistics

**Rationale**

The addition of additional options for majors in Computing Science and Psychology will add flexibility to the upper-division requirements, thereby making course selection and planning more realistic in these heavily-enrolled subjects. The courses added are either relatively new in their home departments, or ones which are relevant to the goals of the program, but were omitted in the original design of the curriculum.

*Note: only those portions of the requirements proposed for change are listed here.*

Cognitive Science Calendar Changes

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**HONORS PROGRAM IN COGNITIVE SCIENCE**

**HONORS PROGRAM IN COGNITIVE SCIENCE**

**OPTION A:**

**OPTION A:**

A student must fulfill the requirements for a major in Cognitive Science and choose

A student must fulfill the requirements for a major in Cognitive Science, and choose the courses listed below for one of the disciplines, and choose

COGS 490-5 Honors Project I and  
COGS 491-5 Honors Project II.

COGS 490-5 Honors Project I and  
COGS 491-5 Honors Project II.

**Rationale**

This is an editorial clarification of the requirements, not a substantive revision. Honors students specialize in one of the constituent disciplines.

**Computing Science:**

**Computing Science:**

MACM 300-3 Formal Languages and Automata with Applications  
CMPT 383-3 Comparative Programming Languages  
MACM 402-3 Automata and Formal Languages  
CMPT 419-3 Topics in Artificial Intelligence

MACM 300-3 Formal Languages and Automata with Applications  
MACM 402-3 Automata and Formal Languages

Plus any TWO (2) of the following courses which have not been taken previously:

CMPT 383-3 Comparative Programming Languages  
CMPT 384-3 Symbolic Computing  
CMPT 411-3 Knowledge Representation  
CMPT 412-3 Computational Vision  
CMPT 413-3 Computational Linguistics  
CMPT 419-3 Topics in Artificial Intelligence

**Linguistics:**

**Linguistics:**

LING 401-3 Advanced Phonetics  
LING 403-3 Advanced Phonology  
LING 405-3 Advanced Syntax  
LING 406-3 Advanced Semantics

LING 403-3 Advanced Phonology  
LING 405-3 Advanced Syntax  
LING 406-3 Advanced Semantics  
LING 440-3 History and Philosophy of Linguistics

Continued...

**Note: only those portions of the requirements proposed for change are listed here.**

**Cognitive Science Calendar Changes**

**From:**

Psychology:

PSYC 303-3  
PSYC 351-3  
PSYC 425-5

Perception  
Child Psychology  
Language and Thinking

**To:**

Psychology:

Any THREE (3) of the following courses which have not been taken previously:

PSYC 302-3  
PSYC 303-3  
PSYC 351-3  
PSYC 360-3  
PSYC 381-3  
PSYC 425-5

Learning  
Perception  
Child Psychology  
Social Psychology  
Introduction to Physiological Psychology  
Language and Thinking

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### **Rationale**

The same addition of options to requirements is proposed for the Honors program as for the Major program, with even further options added in Psychology. (see the rationale on p. 2 of this submission). In addition, LING 440 is substituted for LING 401; the former is more directly relevant to the program in content.

*Note: only those portions of the requirements proposed for change are listed here.*

Cognitive Science Calendar Changes