

# SOCS Curriculum Committee Motions

March 6, 2018

## 1. Reorganizing low enrolment courses.

The following low enrolment courses will be deleted or cross-listed with graduate courses.

Course	Past Enrolment Numbers
<b>CIS*3000 Social Implications of Computing (F)</b>	23, 28, 21, Cancelled, 15, 12, 20, 37
<b>CIS*4780 Computational Intelligence (F odd years)</b>	F9: 12, F11: 7, F13: 18, F15: 13, F17: 29
<b>CIS*4410 Trends in Distributed Systems (W)</b>	11, 9, 10, 16, 8, 13, 6, 7
<b>CIS*4430 Information Organization and Retrieval (W)</b>	13, 15, 17, 11, 18

Undergraduate courses that will be deleted due to low enrolment.

CIS\*3000 Social Implications of Computing  
CIS\*4410 Trends in Distributed Systems  
CIS\*4430 Information Organization and Retrieval

Existing undergraduate courses that will remain in the calendar and be cross-listed with existing graduate courses:

CIS\*4780 Computational Intelligence

Computational Intelligence will be taught only when the graduate course CIS\*6420 Soft Computing is offered.

Undergrad courses that will have corresponding graduate courses created and cross listed or will be cross-listed with existing graduate courses:

CIS\*4820 Game Programming  
CIS\*4510 Computer Security Foundations  
CIS\*4520 Introduction to Cryptography  
CIS\*4720 Image Processing and Vision

Proposed new course offerings:

- Mobile Computing (W) – 4000 level course
- Cloud Computing (W) – 4000 level course
- Data Science (F odd years) – 4000 level course
- Systems Programming (F) – 3000 level course

All changes are to be submitted in the 2017-18 calendar year. All course deletions and additions will be submitted in the same year.

**Motion:** Delete the following courses:

CIS\*3000 Social Implications of Computing  
CIS\*4410 Trends in Distributed Systems  
CIS\*4430 Information Organization and Retrieval

and create the proposed courses in Mobile Computing, Cloud Computing, Data Science, and System Programming.

## 2. New first year programming course for computing students.

The existing CIS\*1500 Introduction to Programming course has grown to be very large and now consists of a population of students who have vastly differing academic objectives. This has led to the course becoming difficult to manage. The proposed solution is to create a new course for students who will focus on computing as a major part of their undergraduate studies. The intention is to direct students who are not likely to require more than a single CIS course towards the existing CIS\*1500. Students who are going to take further CIS courses will be required to take the proposed CIS\*15zz course. This will include all B.Comp. majors, CIS minors, and possibly include B.Eng. students in the Engineering Systems and Computing (ESC) and Computer Engineering majors.

The lecture material for the existing CIS\*1500 course will not change. The primary change will be in the language of instruction. Python will be taught for the majority of the course. An introduction to C will be presented at the end of the course to provide sufficient background for this course to serve as a prerequisite to CIS\*2500 Intermediate Programming. The course will present Python for approximately nine weeks and will have an introduction to C for approximately three weeks. Python was identified as an appropriate language for students learning to program who don't need extensive experience with compilers, memory management, or typed variables. The course is intended to focus primarily on procedural programming and is not intended to study object oriented programming in any depth beyond using existing class libraries.

The updated calendar description for the course is below. Crossed out sections are deletions from the current calendar description. Underlined sections are additions.

### **CIS\*1500 Introduction to Programming F,W (3-1) [0.50]**

This course introduces problem-solving, programming and data organization techniques required for applications using a general purpose programming language. Topics include control structures, data representation and manipulation, program logic, development and testing. ~~The course is designed for students who require a good understanding of programming or are planning on taking additional specialist Computing and Information Science courses. This is the entry point to most CIS courses.~~

**Offering(s):** ~~Also offered through Distance Education format.~~

**Restrictions:** CIS\*15zz, not available to students registered in the B.Comp. degree or a CIS minor

**Department(s):** School of Computer Science

The new CIS\*15zz course for majors will cover the material that currently exists in CIS\*1500 with additional topics that are appropriate for students who plan to pursue a career involving computing. Lectures and assignments will reflect the expectation that students are studying topics in their major. Command line operating systems usage will be studied in the labs, and some more complex algorithms will be examined in order to differentiate this course from the existing CIS\*1500.

The calendar description for the new course follows:

**CIS\*15zz Programming F (3-2) [0.50]**

This course studies programming and basic data structures necessary for software development. The course explores control, data, input-output, program structure, and use of a compiler. The course is designed for students who require a strong understanding of programming or are planning on taking additional specialist Computing and Information Science courses. This is the entry point to most CIS courses.

**Restrictions:**

CIS\*1500

**Department(s):**

School of Computer Science

**Motion:** Introduce a new first year programming course for students who are likely to pursue further CIS courses.

**3. Introduce a first year service course in web design course.**

A course in web design is routinely requested by students, the Co-op office, and by other units on campus. A first year distance education course in web design that is open to all students is proposed.

**Motion:** Introduce a new first year Web Design and Development course.