## **Computer Science Faculty Meeting April 24, 2015**

Meeting called to order at 11:15 am by Department Chairman Xin Yuan

# **Faculty present:**

Bob Myers
Melina Vastola
Xin Yuan
Peixang Zhao
Sonia Haiduc
Michael Burmester
Randolph Langley
Sudhir Aggarwal
Margareta Ackerman
Caitlin Carnahan

Zhenhai Duan
David Gaitros
David Whalley
Xiuwen Liu
Ashok Srinivasan
Gary Tyson
Andy Wang
Jie Yang
Zhi Wang
Zhenghao Zhang

## **Faculty not present:**

Piyush Kumar Daniel Schwartz Michael Mascagni Robert van Engelen

## **Opening remarks**

• International program proposal in the Department of Computer Science

Program proposal was turned down by the Dean's office citing that the Department of Computer Science has too many international students. Proposal may be presented again in the future.

• Our faculty candidate is still waiting on the decision on tenure from the University.

### Reading of Agenda

- Exploration of a new degree program
- GCC issues
- UCC issues

#### **Business**

 Motion: By David Whalley: Should the department explore the idea of the potential new degree/major that simplifies the requirement and provides more flexibility in the program?

#### Discussions:

- 1. Our current UG degree programs have a big gap between BACS and CC.
- 2. BSCS and BACS are quite rigid with a very small number of electives. Both degrees require students to learn all courses in the traditional CS field (programming, organization, programming languages, software engineering, OS, Database, etc). The rigid course requirement in these two programs might not fit the evolving field of computing. Students may not need all of these courses.
- 3. CC requires students to learn materials outside the technology field.
- 4. Initiate another Computer Science program that is not as rigid, allowing more flexibility.
  - a. Provide better coverage in the computing field
  - b. Cover the core area in computing: programming (potential name: Computer Programming and Technology) at the same time providing flexibility to allow students to seek their interests in the computer technology field.
  - c. Not really a watered-down CS, but does allow more students who cannot get through BACS to stay in the program and the technology field.
  - d. Can potentially add lots of interdisciplinary majors or even CS majors (security) due to the flexibility.
- 5. Current Computer Science Degree may not be a good fit for everyone; the new major/degree may provide the needed coverage.
- 6. Allow students that may be changing majors to transition easily into the Computer Science program. Create a shorter pathway to transition from other programs to Computer Science.
- 7. Dr. Aggarwal mentioned that he believes there are too many students coming into the program that may not be capable of performing to the standards required to successfully complete the program.
- 8. It was mentioned the current curriculum in Computer Science does not have the flexibility to offer other courses to students in other disciplines.

Vote: 17 yes, 1 no

Resolved: The department will explore the idea of the potential new degree/major in the department and will form a committee to investigate this issue.

• Motion: By David Whalley, seconded by Gary Tyson: Modification of qualifying exams in graduate program. (1) expanding the exam to two in each area, and (2) the passing grade of **A** will be the barrier to be exempt from taking the qualifying exam.

### Discussions:

1. The qualifying exam in the graduate program seems to be a redundant retesting examination.

- 2. It was proposed that instead of having 5 exams, there should be 6 exams; 2 in each core area.
- 3. It was also mentioned that it may be beneficial for students to start research earlier.

Vote: 15 yes, 1 no

Resolved: Qualifying exam will be modified and the grade of  $\mathbf{A}$  will be made the barrier to be exempt from taking qualifying exam.

• Motion: By Sudhir Aggarwal, second by Sonia Haiduc: The undergraduate BS and BA degree requirements will only require SE1 and SE2 will be changed to an elective.

Vote: 19 yes

Resolved: The undergraduate BS and BA degree requirements will only require SE1; and SE2 will be changed to an elective. By this change the CS elective requirements will increase by 1 for both degrees.

Motion: By Sudhir Aggarwal, second by David Gaitros: (1) The department will require
Calculus I as co-requisite for the Discrete Math sequence for all of our degree programs
(pending discussion with the College of Criminology and Criminal Justice). (2) The
department will change the content of the Discrete Math sequence to be more similar the
"Mathematics for Computer Science" by Lehman, Leighton, Meyer, if appropriate after
discussion with the Mathematics department.

### Discussions:

- 1. It was mentioned that students that took Calculus I seemed to perform better than those that did not take that course.
- 2. Require calculus I to be a requirement prior to taking first discrete mathematics course.
- 3. It was mentioned that there should be a meeting with the faculty members in mathematics that teach the mathematics course for Computer Science to discuss the core of what is being taught in those courses and the changes Computer Science would like to see in that course.

Vote: 15 yes, 1 no

Resolved: (1) The department will require Calculus I as co-requisite for the Discrete Math sequence for all of our degree programs (pending discussion with CC). (2) The department will change the content of the Discrete Math sequence to be more similar the "Mathematics

for Computer Science" by Lehman, Leighton, Meyer, if appropriate after discussion with the Mathematics department.

The department will discuss this change with the faculty members in the mathematics department and come to a resolution on the issue.

### **Discussion**

- 1. Advising issues: Students should have the appropriate prerequisites before taking certain courses in the program.
- 2. Create a method of monitoring students that are taking courses in the program and the order in which they are taking certain courses.
- 3. Find a way to enforce prerequisites being taking at the appropriate times. Have Omni alert faculty and advisors of students taking courses when they should not be doing so.
- 4. The issue of COP 3014 being divided into two courses. One for majors and the other for non-majors. It was mentioned that the non-majors seem to be slowing down the course and hindering the students that are in the program from progressing.
- 5. It was mentioned that the issue with creating a course for majors and non-majors will be that there is no way to differentiate the two in the future. If a student that is in the program decides to take the course that is designed for non-majors, there will be no way of knowing and thus causing an issue when it is time for that student to graduate.

**Meeting adjourned at:** 12:45 p.m.