Division of Mathematical Sciences
Department of Computer Science
Computer Science Advisory Board

Facilitators: Marlow Lemons (Dean)
Gerson Valle (Associate Dean)

Date: November 6, 2020
Time: 11:30am-2:00pm

Location: Zoom

Agenda:

1.	Welcome and Introductions	All
2.	Computer Science in Review a. Classroom Enrollment b. Certificates and Transfer	M. Lemons
3.	NSF Warrior-Toro Computer Science Cohort updates	D. Beltran & M. Ghyam
4.	Preparing ECC Students for Internships	M. Ghyam
5.	Faculty Recruitment Update a. Adjunct Instructors b. Hiring Prioritization for Full-Time Instructor	M. Lemons & G. Valle & M. Ghyam
6.	Computer Science Week (Spring 2021 Semester)	D. Beltran
7.	Computer Science Curriculum Growth a. CSCI 17: MATLAB b. CSCI 8: Data Science	M. Lemons & E. Ambrosio & S. Russell
8.	Other Announcements	All

Computer Science Advisory Board Minutes
November 6, 2020

Present: : Leslie Aaronson, Edwin Ambrosio, Mohsen Beheshti, Daniela Beltran, Carl Broderick, Massoud Ghyam, Dragos Guta, Arturo Hernandez, Yih-Yu (Robert) Hwang, Kevin Judge, Marlow Lemons, Juan Leon, Victor Matos, Mitch Middler, Esmaail Nikjeh, , Solomon Russell, Satish Singhal, Dave Smallberg, Gerson Valle, Jon Wada, Julie Wood, Alek Zdziarski

WELCOME AND INTRODUCTIONS

Dean M. Lemons welcomed the Computer Science (CS) Advisory Board, and members introduced themselves.

COMPUTER SCIENCE IN REVIEW

- Classroom Enrollment
  - In 2015, only two students received a certificate in CS. During the 2019-2020 academic year, 22 students received certificates in CS.
  - Between fall 2016 and fall 2019, there has been an increase in student interest and enrollment in CS.
  - Most of the CS students are male. There is a college initiative to try to attract more females and persons of color to STEM majors.
  - Dean M. Lemons discussed several strategies to attempt to close the gap:
    - Hire female and persons of color faculty members.
    - Encourage the Warrior-Toro Program to focus on recruitment of female students and students of color.
    - Continue to reach out to high schools and recruit students of color and females.
  - A. Hernandez discussed that MESA is reaching out to minority students, low-income and first-generation students.

NSF WARRIOR-TORO COMPUTER SCIENCE COHORT UPDATES

D. Beltran provided updates on cohorts:

- Cohort 1 started in fall 2019. There are a total of 18 students, nine at ECC, and nine at CSUDH. The ECC students have already submitted their transfer application to CSUDH, and all of them will qualify for a CS certificate once they complete their studies at ECC.
- Cohort 2 started in fall 2020. This cohort has 38 students between ECC and CSUDH, seven of which are female. Juan Leon is working diligently with these students to keep them engaged and focused on passing their classes.
- D. Beltran is currently working on recruiting for cohort 3. She is working with outreach offices at both colleges and piggybacking on Admissions and recruitment events to promote the Warrior-Toro Program. D. Beltran is also working with other support programs at both campuses such as Upward Bound, South Bay Promise and First Year Experience.

PREPARING ECC STUDENTS FOR INTERNSHIPS

M. Ghyam discussed the Warrior-Toro road path to success. The goal for each cohort includes:

- Internship opportunities by teaming up with local companies
- Educational help (i.e. how to study, teaming them up with a mentor)
- Interview practice and resume writing classes. The Warrior-Toro Program practices with the students and teaches them what employers will expect
- Emotional help, if needed. Students meet on Fridays and D. Beltran provides them with guidance
- Scholarships - students are awarded $2,500 per semester
- Tutoring services
- Helping them graduate in four years
- Helping them find a job once they graduate

A goal is to have students obtain an internship during their first or second summer in order to gain experience.

It was discussed that the Python course should possibly be offered first before CS 1 as it may be more useful for industry. However, in order for students to transfer to a university, they need to take Java or C++. The quickest path to transfer would mean students should take CS 1 first.

S. Russell discussed CS 7: The Beauty of Computer Science Principles. This course teaches the Snap programming language, and is also an introduction into Python.

K. Judge discussed that his company uses both C++ and Python so there is a benefit to both languages.

J. Wada mentioned that is may be easier for someone to obtain an employable level of skill in Python. D. Guta also discussed that Python is used to build a lot of web applications, which is hot on the job market right now.

A. Zdziarski discussed that Python has become a general purpose language that is dominant in Data Science and AI, and has very strong web application tech capabilities as well. Students that can learn quickly on a tool like that become employable.

A. Hernandez recommended offering more Python sections.

FACULTY RECRUITMENT UPDATE

- Adjunct Instructors:
  Dean M. Lemons introduced adjunct CS faculty that were hired during summer 2020 including: Dragos Guta, Sean Vidal, Julie Wood, and Jin Chon.

- Hiring Prioritization for Full-Time Instructor
  Associate Dean G. Valle and M. Ghyam will represent the CS Department during the hiring prioritization process. The department will request a full-time CS faculty position.

There is strong evidence supporting the need for this position. However, this may be a challenge due to statewide budget cuts in the midst of the pandemic.

COMPUTER SCIENCE WEEK (SPRING 2021 SEMESTER)

D. Beltran discussed Computer Science Week. This will be a week where Computer Science is highlighted for current and prospective students. It will be virtual and held from March 22-26, 2021. There will be student panels, a Data Science talk, and information about the Warrior-Toro program. They are in the beginning stages of planning, so as speakers and dates are solidified, D. Beltran will communicate to everyone to help spread the word. Dean M. Lemons invited the advisory board to participate in panel discussions or give a talk on any projects they are working on that could be enlightening to students.

COMPUTER SCIENCE CURRICULUM GROWTH

- CSCI 17: MATLAB
  This course was first offered this semester and is being taught by adjunct instructor, Matin Lackpour. ECC's Strong Workforce funded student licenses for the MATLAB software. The department will offer one section in the spring, and will open more if enrollment increases.
- CSCI 8: Data Science
  This course will start during the spring 2021 semester. S. Russell discussed that this course is based off of the UC Berkeley course, Foundations of Data Science, which is one of their most popular courses. The CS Department is piloting this course for Berkeley and other community colleges. Moreover, we are one of the first community colleges to teach it. The course will be taught in a "team teaching" manner with three professors.

OTHER ANNOUNCEMENTS

- Lab Parity
  Courses that have labs connected to them are deemed as extensive labs because there is extensive interaction between the students and the instructor. The college has a campus committee that will review the labs, and those are deemed as extensive will receive higher loads and more funding.

- Internships
  K. Judge informed the CS Department that his company, John Deere, would like to provider internships to local students.