

**EL CAMINO COLLEGE MATHEMATICAL SCIENCES
COMPUTER SCIENCE ADVISORY BOARD MEETING MINUTES**

November 2, 2018

Present: Leslie Aaronson (K-12 Initiatives at NCWIT), Dave Akins, Edwin Ambrosio, Mohsen Beheshti (CSUDH), Carl Broderick, Massoud Ghyam, Arturo Hernandez (MESA/STEM), Joe Hyman, Kevin Judge (John Deere), Marlow Lemons, Victor Matos, Alvaro Monge (CSULB), Thong Nguyen (Internet Brands), Solomon Russell, Greg Scott, Jacquelyn Sims, Satish Singhal, Dave Smallberg (UCLA), Jon Wada (Raytheon)

REVIEW OF MINUTES

The May 18, 2018 CS Advisory minutes were reviewed. M. Ghyam motioned to approve the minutes. Associate Dean M. Lemons seconded the motion. All were in favor to approve of the minutes.

CS DEGREE

Dean J. Sims discussed that the CS certificate is a work in progress. As new classes are developed, they will be embedded into the certificate.

A CS AS degree requires an ADT and compliance with CI-D. However, this would change our articulation.

The college is switching to a new curriculum software, so new curriculum is on hold until this switch is complete.

CAMPAIGN TO INCREASE FEMALE AND UNDERREPRESENTED STUDENTS IN COMPUTER SCIENCE

L. Aaronson discussed a program called Engage CS, which focuses on the three pillars of student engagement, building confidence and building a community. The more inclusive you can make things, the better.

S. Russell plans to increase on underrepresentation via his CS 7 class.

It is important that the classroom environment is inviting to female and underrepresented students.

NSF GRANT (MASSOUD GHYAM)

The NSF STEM Grant will assist a cohort of students every year and provide them with the help they need to graduate with a Bachelor's degree in CS.

The grant is \$5 million over five years with the first cohort starting in fall 2019. Students will complete CS and Math prep during the summer before the cohort officially begins.

This will be a partnership with ECC and CSUDH. We will replicate the successful partnership between CSUMB and Hartnell's NSF cohort.

We are in the process of recruiting two coordinators, one at CSUDH and one at ECC. One coordinator will be in charge of the day-to-day logistics, while the other will focus on the education aspect.

M. Beheshti and M. Ghyam are the PI's on the grant.

The idea is not only for students to finish in four years, but to also get them employed after graduations.

The cohort size will be between 25-30 students. One cohort will be ECC students transferring to CSUDH, the other cohort will start and finish at CSUDH.

Student recruitment is underway. The plan is to focus on female and underrepresented student recruitment.

ACM CHAPTER REPORT (SATISH SINGHAL)

ACM is campaigning to increase the number of female and underrepresented students.

ACM plans to have a "Women in CS Week" and bring in female speakers.

ACM had a presentation on iPhone Programming, which was well attended. S. Singhal is taking students to Code Camp at USC and is planning an Algorithm Day. This is all so students can have more industry exposure.

CURRICULUM UPDATES AND CIS CHALLENGE

ECC's Institutional Research department looked at data to see if students that take CIS courses cross over to CS courses. The data showed that CS students are more likely to cross over and take CIS classes.

We will continue to vet our curriculum through the CIS department. However, this data allows us to negotiate during the curriculum challenge process with more ease than it has been in the past.

HIRING PRIORITIZATION

We are adding more classes and have a need for more faculty. We were ranked #24 on the campus wide hiring prioritization list, so we will not hire a FT CS position to start during the fall 2019 semester.

HS OFFERINGS

One section of CS 1 is currently being offered at North Torrance High School. We expect an increasing number of requests to offer CS 7 at high schools going forward.

CTEA FUNDING AWARD AND RECOMMENDATIONS FOR FUTURE REQUESTS

We have been able to add more sections due to the use of our CTEA funded laptop cart.

K. Judge recommended applying to receive a kit for an Embedded Systems course as experience in this area is beneficial. S. Russell recommended applying for robotics, manipulatives and physical items to use in the class. This will help students see code working.