From: Jennifer Parham-Mocello parhammj@engr.orst.edu

Subject: RE: winter break reading Date: January 3, 2018 at 7:13 AM

To: Bakos, Yong J yong.bakos@osucascades.edu

JP

Yong, Sorry for the delayed response!

Before you move forward, I think it would be best for me to find out from Mike B. and Carlos why they think your plan would not pass the faculty senate. I think this would help me serve you better. I think the biggest concern is that your current plan is somewhat degrading to our current CS degree. We have the systems vs. applied plans to help address some issues you mention in the proposal between this traditional CS approach versus a software engineering approach.

Therefore, I really think you need to distinguish this degree as really different from the applied degree. , I really think traditional SE doesn't really need to take a class in assembly language, since that group is one of the furthest from that level. However, I see the value in taking some of these low level classes because you might be tasked one day with the development of software that needs to be as fast as possible, and an understanding in assembly might help you do this better, which is the same argument I could take for needing any of the traditional CS courses.

Here is what I think your real focus should be on:

>> real-world, team- and project-based experience that addresses many shortcomings of traditional CS

However, I think this is something that should be integrated into the traditional CS program to give the students an innovative, transformative educational experience. In addition, I think it is the design-first idea that makes software engineering so different than a code-first program, which is what I have tried making the focus of our intro classes with the recitations. It is this focus on user requirements, feature requirements, software design and testing, etc. before any coding that is so radically different than the way traditional CS courses are taught, but I also think this is something that should be integrated into the CS curriculum not disjoint from it. Making this an applied option as of now and trying to change the curriculum for some of our current CS courses might be the easiest approach, and it would give Cascades a way to research a new approach with the traditional approach at the main campus for a year or two to try to really separate the different curriculum approaches with the effects of each.

Just a thought. :)

Jennifer

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Jennifer Parham-Mocello, PhD Senior Instructor, CS Curriculum Committee Chair School of Electrical Engineering and Computer Science Oregon State University 2101 Kelley Engineering Center Corvallis, OR 97331 Phone (541) 737-8895

From: Bakos, Yong J [mailto:yong.bakos@osucascades.edu]

Sent: Thursday, December 21, 2017 10:11 AM

To: Jennifer Parham-Mocello parhammj@engr.orst.edu>

Subject: winter break reading

Jennifer,

I hope you get the job. So much to talk about.

If you want some pleasure reading over break and can spare 20 minutes, perhaps take a look at the current draft of the Cat I BS Software Engineering, attached. The big impact here is that I feel it can be a petri dish for CS education related to diversity. In short, the first-year experience is a high-impact, real-world, team- and project-based experience that addresses many shortcomings of traditional CS curricula that affect diversity and retention.

It may be hard to elicit from the proposal the potential impacts, but see if you can discern the opportunity from the "big picture" experience of the curriculum design. (And I don't mean to trivialize / underestimate the numerous factors that affect diversity, retention and attrition.)

If you do make the time to read it, I would be flattered and encourage your most critical feedback.

Happy holidays, yong