

## Spring CTC Meeting Notes

05/29/15

### Attendees:

- David Ross (UWT Institute Advisor)
- Beth Jeffrey (UWT Institute Advisor)
- Menaka Abraham (UWT CSS/CES)
- David Schuessler (UWT CSS)
- Matthew Alden (UWT CSS)
- Donald Chinn (UWT CSS)
- Andrew Fry (Institute of Technology)
- Richard Hoagland (SPSCC)
- Josh Archer (GRCC)
- Ken Hang (GRCC)
- Janet Ash (GRCC)
- Tina Ostrander (GRCC)
- Dondi Hanson(Olympic)

### Introduction/Updates

- Menaka: Reviewed new TCSS 450 (Mobile Apps) class.
  - Overall it was working out well, after much review with students. Is project based only and had to stick with Android. Focused on source control, Google API and small groups. There will be more flexibility during the summer class, including creation of apps in other platforms, such as IOS. Overall has been very popular by students.
- Donald: Announced that we need a 333 (Programming in C) instructor for this summer.
- Matt: Announced that he will be leaving UWT at the end of this quarter.
- David S.: Updates on TCSS 143 (OOP) classes. Preface—students are now being taught Python (general programming skills) in 142 and there was concern over the transition to 143 in Java.
  - So far students this year have picked up the material relatively quickly.
  - Seems to be a nice transition for students from 142 into 143 and students' abilities are nearly the same as they used to be, but they are transitioning more smoothly.
  - Students are also learning whether they truly belong in CS sooner than later, compared to previous years.

### SIGCSE (Donald and Tina)

- Tina:

- Attended many seminars on “life projects” and was most intrigued by students developing software for the community (pro bono for local businesses). Great ideas for service learning.
- Women in computing, specifically one about women having the type of personality where they “tinker.” This requires goal setting vs. just end results. Found that women don’t want to break things; they struggle as seeing themselves in CS and are adverse to risk. Overall, they see a PC as a tool to solve problems vs. men who see it as a machine.
- GitHub and using it for version control more effectively and using it pedagogically (checking out assignments and then returning them as completed).
- Microsoft’s “touch develop” used to program any device. It can switch to code view easily (great for those new to CS) when they are ready for more advanced programming.
- Donald:
  - One of the keynote speakers was Mark Allen Weiss, author of many books on data structures. In addition to his reflections on textbook writing and the data structures course, he speculated on ways to teach data structures using just a spreadsheet.
  - Problem based learning—students resist it and dislike groups. Most students want a combination of lectures (traditional learning) along with group work. One speaker said that it is important to set up expectations early and provide support throughout the project.
  - An NSF-sponsored project to develop materials for a project-based learning curriculum for a course on NP-completeness.
  - Ambitious research—the 37 million compilation. Done in Bluejay IDE for Java which can collect information about people’s programming processes. Is able to see where programmers make errors and what their overall process is.

#### Information about UWT Institute Graduates and Employment (Andrew)

- Huge growth since 15 years ago to where many large companies are now recognizing who we are and what we provide. Some are actively recruiting from the UWT campus.
- Finding that we have “specialties” which companies are looking for in graduates.
- Many UWT interns are hired directly from their internship sites.
- Most CS interns are paid, some IT are as well
- Wants to create a dedicated industry partnership program dedicated to paid internship for UWT students on a regular basis
- Reviewed a list of graduates, all by using LinkedIn, to determine their whereabouts. *All* are currently employed in the field, many of which are moving into senior level positions within a couple of years. Overall, they are easy to find and are doing what they were set out to do.

#### UWT Institute of Technology, Academic Advising—David and Beth

- Seeing prospective students on a regular basis and willing to meet with any students from local CC’s. Please refer them if they have any interest.

- Have an online appointment system for any interested students, both native and transfer. Can be found at: [www.booknow.so/techuwt](http://www.booknow.so/techuwt)
- Discussed the new application and entry requirements for CSS (*all* prerequisites must be complete prior to entrance to major) and an application will be due. CES will also require an application with *all* prerequisites complete and will only start in autumn quarter. IT is still the same, but new courses (Discrete Math for IT, Computer Ethics, Statistics and Tech Writing) are now required for the major.
- Wanting to stay in touch...possibly plan an “Institute & tech advisors” meeting from CC’s.

#### Coding with Kids—Marek Brejl (guest speaker)

- Marek has developed a business model and successful teaching program titled “Coding with Kids.” It has been implemented all over the Puget Sound, primarily in King county. The goal is to teach coding skills to kids early on and they focus on elementary to middle school students.
- Have found the kids learn coding quickly (much like a 2<sup>nd</sup> language) and more emphasis needs to be placed on learning these skills so that we have more advanced and qualified students who would be a good fit for STEM majors, careers and areas of interest.
- Focus on getting younger generations interested in programming, especially to meet a demand for these skills in the near future.
- All are after school classes, including evening and weekends. Some summer camps are also offered (1 week long).
- Paid for mainly by parents, much like a PTA after school program.
- They divide curriculum by a system of levels, via project completion, which are delivered vs. just focusing on time/progress in class.
- Primary goal is on coding skills, not languages—the basis being that good programmers know how to architect and debug, not just program or understanding syntax well.
- Projects are demonstrated using Scratch (online programming software tool).
- Later on, students learn how to build a website (direct HTML and CSS). Use of [www.codepen.io](http://www.codepen.io) for more tools design/build process.
- Stats/Info
  - 25% female, 75% male. Question becomes, “what’s the problem?” given this split is happening even at the elementary level. Retention is good, it’s how they enter the program—the thinking is that the stereotype/communication issue is due to parents.
  - Students are encouraged to work in groups, but not required. The goal is to have them ask a neighbor first, if they have a question.
  - Use of Chromebooks (supplied) as an all-inclusive fee. Runs about \$19.00 an hour for the class and supplies.
  - Primary instructors are UWT students and they are paid
  - Currently working with individual schools and PTSA’s, but plans to expand, including in the south sound.

12:00 Adjourn