2014-15 Proposal to Fill a Full-Time Faculty Position

1. Faculty position being proposed
   Full time Faculty position in the CNET department

2. Proposal Being Made by (List Name(s) and Title(s))
   Richard Grotegut, CNET Faculty,
   Danijela Bedic Babic, CNET Faculty

3. Summary description of the position
   The Computer Networks and Emerging Technologies (CNET) program provides key core and advance training for students who desire to learn key Information and Communication Technologies (ICT) skills. ICT is a superset or umbrella term encompassing all computer, software, networking, telecommunications, Internet, programming and information systems technologies.
   A full time faculty member would be able to teach emerging ICT technologies in several of the following CNET program offerings: Cybersecurity, and/or Cloud Computing, and/or Virtualization, and/or UNIX/Linux System Administration. Full time faculty member would also play a lead role in CNET department’s industry partnership programs including: VMware Academy, EMC2 Academic Alliance, Linux Professional Institute (LPI), and/or Citrix Academy. They could also support other partnership programs with Cisco, CompTIA, Microsoft, and Oracle.

4. Rationale for filling this position: include examples of how this position impacts students, program needs, and college goals
   This position is will help the College’s second goal “Support the economic vitality of the community through educational programs and services that respond to identified employment needs.”
   According to the latest Environment Scan of Information and Communication Technologies (ICT) in the Bay Area: “The economic and strategic benefits generated by ICT industries in Bay Area and national economies is far greater than the revenue they generate, salaries they pay, or tax revenue they produce. Support for ICT industries should be a major economic development strategic priority for government policymakers. Preparing a highly skilled workforce to support these industries is an important public education priority.”
   CNET department is experiencing high student demand for emerging ICT technologies classes in Virtualization, Cloud Computing, Cybersecurity, Business Analytics and Big Data. Three new course in these areas are scheduled for the Spring 2015 term. It has been extremely difficult to find Adjunct Faculty to teach those classes since professionals with these skills are in high demand by industry. A full time faculty member assigned to teach in these areas will help immensely.
   An additional full time faculty member will also help meet the college’s first goal “Through innovative programs and services, improve student learning and achievement.”
   A new CNET full time faculty member would be implementing innovative instructional
methods and practices, strategic use of “flipped classroom” courses, hybrid course delivery, remote lab, and computer assisted instruction. These innovations in the past (when the department had more full time faculty members) have allowed the CNET department to achieve a high WSCH/FTEF ratio.

5. Are there any externally imposed requirements such as a specialized program accreditation that would put this program in jeopardy if a full time position is not filled? If so, please explain.

Each of the CNET department industry partnership Academy programs (VMware, EMC2, LPI, Citrix, Cisco, Oracle, Microsoft, and CompTIA) requires a faculty member to act as the liaison or representative administrator in each of the academies and that there be certified instructors in place to teach the curriculum offered by the representative Academy programs. These administrative positions need to be held by full time faculty.

6. Any other rationale to support the position proposal:

Two CNET department full time faculty retired in 2011, and currently department has only two full time faculty members, which makes difficult for the department to maintain its present level of activity and success.

The remaining questions to be completed by Deans

7. A statement by the Dean of the division housing this position, which includes data, evidence, and analysis.

The CNET Department has been exceptionally successful in securing external funding - this year alone CNET department brought in $2 million in Career Technical Education funding shared with high schools and adult education programs across Silicon Valley. Ohlone College via its CNET Program serves as Western Academy Support and Training Center (WASTC) for Cisco Network Academies across the California, Arizona and Nevada. WASTC provides Train the trainer classes through Community Ed. Over the past year WASTC has provided training for over 280 individual instructors. As a result of the CNET departments involvement in WASTC through mini-grants, support and training fees, and equipment rental, additional funding has been generated to support the program and the College general fund. CNET full-time faculty are directly responsible for directing this Community Education program.

DATA SUMMARY:

8. What is the department FTES?

71.96

9. What is the ratio of full-time to part-time faculty in the department?

43:57

10. What is the ratio of full-time faculty to department FTES?
11. What is the current WSCH/FTEF in the department?

Several factors have contributed to our declining WSCH/FTEF:

1. **Reduction of sections offered due to reduced State funding.**
2. **The economy is better.** We always have more students when employment is down,
3. **We no longer have the advantage of repeatability of our courses.** Current CNET course outlines are so broad with so few and very general learning outcomes that it is difficult for us to create new courses to map to the new industry certification requirements. In an effort to simplify assessment we have limited our flexibility in our course offerings
4. **The difficulty with hiring and keeping part time faculty.**

The ICT industry in the Bay Area is on an upswing. Computer Science typically is impacted by ICT innovation first with technology classes following the software development. At the same time, the college is now chasing enrollment. With new courses planned for Spring 2015 in Ethical Hacking, Computer Forensics, and Big Data Analytics the will be an upswing FTES.

12. What is the number of sections taught by full-time faculty and number taught by part-time faculty?

**FT 17, PT 14**

13. Does the position address an area of growth? If yes, include a three year trend line for FTES.

The Computer Networks and Emerging Technologies (CNET) program provides key core and advance training for students who desire to learn key Information and Communication Technologies (ICT) skills. ICT is a superset or umbrella term encompassing all computer, software, networking, telecommunications, Internet, programming and information systems technologies.
Demand for Information and Communications Technologies (ICT) skills is high. ICT jobs can be found in all employment areas. Study done by California EDD showed ICT as the largest and fastest growing industry cluster in the San Francisco Bay Region in 2013, with a much higher ICT industry concentration than average for the nation.
Mid-Pacific ICT /Center Of Excellence study found roughly half of California employers reporting difficulties finding appropriately skilled ICT workforce, even in a period of high unemployment.
U.S. Department of Labor data publicly stating the U.S. is currently 1.5 million workers short in IT and a shortfall of 32 million IT workers globally through 2020.

2012 Bluewolf and 2013 Robert Half salary guides, show strong increases in salaries for ICT related occupations. In fact, year to year compensation is up significantly for each ICT related occupation in the Robert Half guide, indicating that demand exceeds supply throughout the ICT sector.

According to the Bay Area Council Economic Institute, the local multiplier effect for high-tech is large. For each job created in the local high-tech sector, approximately 4.3 jobs are created in the local non-tradable sector in the long run.