

**Minutes**  
**Computer Information Systems (CIS)**  
**& Computer Science (CS)**  
**Advisory Committee Meeting**  
**May 6, 2016**  
**Mimi's Restaurant**  
**8 a.m. - 10 a.m.**

**Business/Industry Members:**

Dave Anderson  
QA Analyst  
Blizzard Entertainment  
909.666.7721  
[sorgscoffe@gmail.com](mailto:sorgscoffe@gmail.com)

Bryan K. Crisler, Jr.  
Senior Network Engineer  
Time Warner Cable  
714.308.7564  
[Bryan.crisler@tweeble.com](mailto:Bryan.crisler@tweeble.com)

Hunter Curren  
QA Analyst  
Blizzard Entertainment  
818.521.280  
[Hcurren82@gmail.com](mailto:Hcurren82@gmail.com)

James Grant  
Business Systems Analyst II  
San Bernardino County Probation  
909.387.6077  
[JGrant@Prob.SBCounty.gov](mailto:JGrant@Prob.SBCounty.gov)

Matt Hudrlik  
IT Systems Engineer  
C.W. Driver

Ivan Jacobo  
Network Administrator  
Ontario-Montclair School District  
950 W. D Street  
Ontario, CA 91762

Claire Jefferson-Glipa  
IT Education Account Manager  
Sigmanet, Inc.  
4290 E. Brikell St.  
Ontario, CA 91761

Brent Stetz  
Network Engineer  
UC Riverside

Christopher Laasch  
Lead Systems Security  
Cal Poly Pomona  
909.753.8524  
[claasch@cpp.edu](mailto:claasch@cpp.edu)  
[claasch@csupomona.edu](mailto:claasch@csupomona.edu)

William Neise  
Network Technician  
Amphastar Pharmaceuticals  
904.202.0481  
[Williamn@amphastar.com](mailto:Williamn@amphastar.com)

Scott Russell  
Transmedia Producer  
Sirena Studios  
818.635.1864  
[scott@sierenastudios.com](mailto:scott@sierenastudios.com)

Ian Sorensen  
Blizzard Entertainment,  
949.955.1380 x1430 or 805.2-1.7282  
[isorensen@blizzard.com](mailto:isorensen@blizzard.com) or  
[iansorensen@gmail.com](mailto:iansorensen@gmail.com)

William Southwick  
Network Analyst/Wireless Engineer  
University of California, Riverside  
951.827.2527 or 951.333.1419  
[wills@ucr.edu](mailto:wills@ucr.edu)

Maher Tawfik  
Computer Repair/Network Security  
Baldy View ROP  
1501 South Bon View Avenue  
Ontario, CA 91764

Ari Wijata  
Manager Outside Plant, Transport Planner  
AT&T  
626.202.0116  
[Arie.wijata@gmail.com](mailto:Arie.wijata@gmail.com)

Steve Vargas  
United Communications Engineer  
University of La Verne

### **Chaffey College Members:**

Wanda Baker, CIS Instructor  
Maria Beck, Counselor  
Joy Haerens, Dean, Business and Applied Technology  
Terri Helfand, CIS Coordinator  
James (Jim) Kerr, CISCO Instructor  
Tracy Kocher, CIS Instructor  
Steve Siedschlag, CIS Instructor

---

### **Welcome and Introductions**

Terri Helfand welcomed committee members and asked for self-introductions.

Terri mentioned to members that the program hosts this meeting once each year to have members share with us the trends they are seeing, review curriculum to see if what we offer is meeting their needs, or if there are changes that need to be made, employment outlook, and other input members may want to share.

She also referred them to the questionnaire handout and asked that they be completed and returned to her, either at the end of the meeting, or emailed to her once they have had a chance to complete it. She also asked members to add any additional comments they may have.

### **Instructional Hardware/Software changes for 2016-17**

Steve explained that in the past, programs received hardware on a replacement cycle of five years; however, the district had little to no money to fund it. Steve is a tri-chair of Chaffey's Technology Committee, and there is now a new technology plan in place that is based on a rolling cycle, with a full budget. Another change that was made was that the library and CIS, which were always competing for funds in the same cycle, are now in different cycles. CIS will be funded this summer.

We will teach Windows 10 and Office 2016 in the fall.

### **Programs**

Terri referred members to the printout of the current catalog pages for CIS/CS contained in their folders.

Terri explained to members that the creation and submission of a new course is a lengthy process -- from course prep, to the curriculum committee, to the regional consortia, to the State Chancellor's office could -- and can take a full year.

Our current program catalog includes a transfer degree, AS degree, and certificates. For the CIS A.S. Degree, students complete the core classes, and any other 17.5 units in an area they want to specialize in -- hardware, Web development, Game, Networking, Project Management, CISCO, etc. The certificate requires the same program courses as the degree, without the General Education classes. We do, however, encourage our students to complete the GE classes and the Degree.

Tracy said that there was a push State-wide to have students complete the first two years at a community college and be able to transfer to any of the Cal State Colleges as a junior. We work closely with CSU San Bernardino and Cal Poly.

Tracy mentioned that she has students accepted at UCI for the fall; some of her students were accepted at a summer camp for woman; NASA program. 50 students applied for 30 seats. The emphasis will be algorithm development.

Student demand for Programming 1 is high. We will offer Prog 1 and CS1 at the Chino campus in the fall.

Tracy talked about her students participating in competitions: We had a programming team at the Programming Fest at CSULA and took first place last year; we took 3<sup>rd</sup> place this year. In the ACM competition, we were 37<sup>th</sup> out of 100. We had four students compete in programming at the regional SkillsUSA competition in San Diego, and they placed 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup>. The first place (Gold Medal) winner will compete in SkillsUSA National competition this summer to be held in Louisville, Kentucky. We also have a Game Club with many enthusiastic members.

Tracy also mentioned that we have a GAME club. We only have a certificate at this time, but hope to build on it.

### **Discussion: Labor Market Outlook and Industry Trends and What Changes Would You Recommend We Consider**

STEM. Terri said that the culture is that STEM is only math, engineering and science – technology is ignored. Tracy agreed--She took part in a STEM meeting at Cal Poly Pomona where out of 300 attendees, she was the only technology person.

Terri said that our advanced Web development classes are experiencing declining enrollment. She asked if members are seeing a change on the server side employment requirements as we are trying to decide how to handle this issue. She commented that we are now teaching WordPress which is popular for students. Members express security issues with WordPress as it can have a problem when self-hosted by a small company. Our course emphasizes using commercial hosts for security reasons.

Tracy said she wants keep Java – it is used in the Unity Game software, which we just purchased. We could look into creating a programming certificate. The committee members agreed. We should develop a certificate for programming.

Discussion then turned to a basic coding class. Children in England as well as parts of the U.S. are learning coding in kindergarten. The members agreed that Chaffey should create a basic coding class as all students should know basic coding. This could be an elective in the CIS degree/certificate as well as a foundation for Web Development. One member stated that there is discussion in education about allowing a coding class to replace a math class as replace a foreign language class.

Members stated that Current students lack logic and critical thinking skills and believe that they are computer competent because they use electronic devices and social media. Students don't understand what happens in the background. Jim and Clair commented that 9 out of 10 breaches are user-end which they believe is a lack of basic knowledge of the foundations of computing and security which is why classes like our CIS 1 are so important.

Terri said we want to add programming logic concepts into the core classes. She is going modify and reactivate our former computer foundation certificate.

Logic and critical thinking was discussed. We are going to these this into other classes.

Cyber security was discussed. CSUSB and Cal Poly are big in cyber security. Steve commented that we have not had the room space or other resources; however, we are not looking at this.

### **DISCUSSION SUMMARY AND RECOMMENDATIONS**

- Include soft skills in courses other than A+
- Consider portfolio development
- Confirmation is given for the need of voice classes and a request for an increase of wireless courses.
- Develop Health IT classes.
- The program should be teaching courses utilizing VMware at all levels.
- Security should be taught and emphasized at all levels.
- Review the Networking classes and certificate. Create an advanced networking class that incorporates TCP/IP and additional advanced topics.
- Add additional Security classes toward creating a Cyber Security certificate.
- Add additional class that cover wireless, Cloud, and security concepts.
- Coding should be introduced in CIS 1.
- Develop a Basic Coding class. This would be relevant to Web development and A+ students as well as other certificates.
- Reactivate and revise the Computer Foundations certificate. Add the Coding class.
- **Develop a Programming certificate.**
- Continue with wireless and Voice over IP classes
- The Game program should add Unity software to the curriculum as it is used by so many developers.
- Change any Game Development classes to transfer level that compare with 4-year colleges.
- Review the Web development classes and certificates. As Ruby and PHP no longer have much demand, perhaps we should just concentrate on JavaScript, which is in high-demand.
- Because the need for CISCO certified personnel is in such high demand for employment for students who complete the Chaffey Curriculum that the completers are hired right away, the CISCO Academy curriculum should be maintained at all levels. This includes updating of all Cisco Academy required curriculum, routers, and other hardware and software as well as instructor training.
- A Python programming class should be added.
- Consider adding a Java programming class.
- Include responsible use of Social Media technology in the curriculum. Develop a Social Media course and a Social Media certificate. Include Social Media in the revised Computer Foundations Certificate.
- Add additional Project Management classes and a certificate. Prepare students for industry certification as well.

**Other**

Chaffey's CIS classroom hardware will be upgraded next year. We are looking forward to our classroom instructor stations to have their own server and to be able to use VM as part of our instruction. The committee members were very pleased that we would be able to use VM as this has been one of their main recommendations for the past two years.

**Adjournment**

Terri thanked everyone for attending.

The meeting adjourned at 10 a.m.