

# Computer Studies Advisory Board Meeting Minutes

September 22, 2020 | 4:00 | Zoom

## LPC Mission Statement

Las Positas College is an inclusive, learningcentered, equity-focused environment that offers educational opportunities and support for completion of students' transfer, degree, and career-technical goals while promoting lifelong learning.

### LPC Planning Priorities

- Implement the integration of all ACCJC standards throughout campus structure and processes.
- Establish a knowledge base and an appreciation for equity; create a sense of urgency about moving toward equity; institutionalize equity in decision-making, assessment, and accountability; and build capacity to resolve inequities.
- Increase student success and completion through change in college practices and processes: coordinating needed academic support, removing barriers, and supporting focused professional development across the campus.
- Coordinate resources and provide professional development for effective online instruction and remote delivery of student support services and college processes to advance equitable student outcomes.

#### Computer Studies Advisory

#### Members:

| Peter Andrus            |                  |
|-------------------------|------------------|
| Victoria Austin         | Mark Tanis       |
| Miguel Baez             | Charles Troup    |
| Tim Berg                | Jake Walkenhorst |
| Tom Curl                | Jeff Weichert    |
| Moh Daoud               |                  |
| Debbie Fields           |                  |
| Gagan Gill              |                  |
| <b>Richard Grotegut</b> |                  |
| LaVaughn Hart           |                  |
| Don Hester              |                  |
| Nan Ho                  |                  |
| Bill Komenetsky         |                  |
| Harris Kravatz          |                  |
| Bryan Lawver            |                  |
| Mara Lockowandt         |                  |
| Pavan Manocha           |                  |
| Joseph Marsili          |                  |
| Sue Marlais             |                  |
| Carlos Moreno           |                  |
| Jean O'Neil-Opipar      | i                |
| Jamie Pirnie            |                  |

- 1. Call to Order Welcome and Introductions, 4:01 Present: Carlos Moreno, Bill Komanetsky, Tim Berg, Jeff Weichert, Moh Daoud, Jean O'Neil-Opipari, Vicky Austin, Charles Troup, Debbie Fields, Nan Ho, Mark Tanis, Tom Curl
- 2. Review and Approval of Agenda, Motion to approve, Vicky, second by Carlos w/ addition of bioinformatics, agenda approved
- 3. Review and Approval of Minutes April 28, 2020, Motion to approve Nan, second by Mark, approved minutes

# 4. Industry Updates

Meeting Minutes

- Training and Hiring Needs
- Tim -Push staff development
- Emerging Trends
- Tim- Continuing to hire, tend to hire more during recession, difficult onboarding, Conn. Teaching people to program heating/air-conditioning, opportunity in that space for CC (Domain experts and industry experts), hard to find computer experts with skill set in this space. Transportation as well.
- Bill need computer people who understand tech in domains
- Tim tour with auto faculty. Intersection of transportation and transport/auto
- Carlos internship/apprenticeship with IOT
- Debbie IOT not devices themselves, but data collection. Cisco has 4 classes that address that.
- Tim is going to send info from college in Conn.
- Debbie it has been a couple years, doesn't know how it has been updated, playing with programing autonomous cars
- Bill- might be a good start
- Tim shortage of people can speak with vehicle application
- Mark (get handout) Top 25 technologies for the next decade, IoT\*, cloud and edge computing\*, 5G, digital platforms, cybersecurity\* and resilience moved bookkeeping client to cloud (AWS workspace), areas having direct impact on small business IT management \* one more than one list
- Tim- certain areas of cybersecurity hot right now, correct configuration. 5G not just faster 4G, 5G has shorter range, high bandwidth, local implementations. Different graduate to handle that. 0 trust environment. Things connect where ever they are so need different cybersecurity. WiFi 6

• Nan – Mark having a hard time recruiting in this field, what is it in this department that students need to come work for you?

Mark – can hire pretty directly, offers paid internships, Smart hands, being able to hook up a system with 3 monitors, able to answer questions at a higher level. Some experience and 4-year degree can lead to 6 figure salary.

- Charles jobs@thermofisher.com, are hiring. Software hire 4 year+. COVID was good for ThermoFisher. Making about 2M a week on testing. Please pass students Charles's way. Bio-tech in medical devices and tests, regulated industry. Regulations still exist. Need people to write documentation. AI is an emerging trend
- Nan -open to Job Fair?
- Charles will talk to some people and get back to us.
- Mark one thought AWS, changed for us, used to use AWS, word press sites, AMS, Wordpress hosting and AWS, thing they can do is maintain firewall, plug ins
- Nan- support the pipeline of students into this field. How can we get graduates to you, not one offs?
- Charles AWS only at TF, IT for regulated environments is incredibly complex, need well trained people. Everyone wants to protect their data. Understand where to open ports. Hard and critical
- Jeff address firewalls throughout courses and VPNs. No one course it is throughout the curriculum.
- Charles devices heavily encrypted, penetration tested
- Moh VPN in few courses, penetration testing (3 unit)
- Nan how do we get our students in front of industry, make skills recognizable. How do we get marketplace for students?
- Mark company unique, support small businesses. Not looking for someone who wants to be a computer science major
- Charles TF, COVID no interns this year.
- Internship Opportunities
- 5. Faculty Report
- Enrollments
- Nan-Good for summer (up 20%), down for fall, trying to guess what students would do, the anticipated surge in enrollment did not happen. Dropped from Fall to Fall. Not surprising (down 7%).
- Not normal semester, enrollment good in CS and STEM
- Bill trend students not excited, students don't show up. Find new ways to enthuse them, Group work seems to help, forming groups randomly
- Pull together enrollment numbers for next meeting
- Curriculum Updates
- > Realignment of CNT certificates/Degrees and new Non-credit certificate
- Jeff scattered before, trying to create a more structured approach with guided pathways. Google IT cert moving to google site and will be free. Move into hire level networking cert, then roll into cyber program (cloud, penetration testing), Linux server, BASH, Cisco, forensics, Cloud Course development, Vicki encouraged a noncredit course (A+ cert, network course) increase enrollment. Degree program moved to cybersecurity (ask Jeff for excel sheet with degrees)
- Tim get unsolicited asks for cybersecurity. Can grads hit the ground running? Difficult space to prepare people for.
- Jeff need industry experience to have good grasp, may be outside LPX's degree. Ethic Hacking that is doable by students. Maybe need to look for appropriate exams for students. Have tried to map courses to some other organizations
- ➤ Tim wonder if Lab can work with program to develop situation for students to be made work ready.
- Charles not just computer courses?

- Jeff also GE, 60 units, looking to map for transfer. Is there any computer cert that would make student stand out?
- Mark Comptia security, CNT 52, 51, 55?
- ▶ Jeff non-credit and credit course same content and same space.
- Nan exact same course just not for credit. Set of 3 courses, free, Also non-credit CIS courses, career developers
- Debbie data analytics, programing language (python), statistics, 2 class in AWS cert is a class the student could take. 5 core courses and electives. Google coming out with 3 more certs. If it was free would include, but by themselves not a lot of content. Google project management. 16-unit certificate (Data Analytics), which is optimal. Created CIS 10 and CIS 11, been approved. Pulling together series of courses
- ▶ Need advisory recommend action to move forward. Aligned content with SJSU.
- Tim who seeks this out? What should we compare it to? People would already have the ability to present need
- Debbie geared towards business majors, not data science. Oracle academy for content

# New CS Certificates

- Artificial intelligence Carlos, thank Mark for sharing lists because they reinforced an industry trend, so college should move in that direction. One-year (6 classes) Have to start in fall, 3 courses a semester (get outlines from Carlos) Information on new courses and certificates, LPC can fill an AI vacuum in the CC system. Need to get LMI for this skill set. Most people who have AI knowledge would rather go into industry than into teaching. Could be mislabeling labeling for CERT. and degrees. Students do need understanding of statistics and probability.
- **Tim** move to approve, Mark second, motion carries to move forward with AL cert.
- Nan- cert has no GE included, AS has GE
- Nan moves for board support of Debbie's and Jeff's new certs, Carlos seconds, approved
- Management Information System
- Bill has not gone to curriculum committee yet. Many universities that have 4-year MISW program, but not too many CC. Idea from Kaiser Permenante
- Mark loves that project management is included
- $\circ$  Bill testing too
- Bill cross listed courses are listed as alternatives in the certification
- Motion to approve Nan 2<sup>nd</sup> Mark, cert approved.
- CS/CNT Certification
- Red Hat Admin Cert of A, gets students prepared to take red hat cert test
- $\circ$  **Tom** is there an industry need?
- **Bill** difference between generic Linux and Red Hat because it supported OS. Red Hat has more content than Linux plus
- **Charles** BASH programing?
- o Nan motion to approve, Carlos second, Tim abstains, motion approved
- > New CIS Certificate
- Data Analytics
- Update on Google IT Support Professional program tabled until next meeting
- Computer Studies Symposium
- Bill do you think we can create an effective symposium online? Yes
- Bioinformatics
- Nan- active last fall, new course Bio 2A offered in the Spring, total number of units 34 + GE = 60, also offering cert (no GE)
- Bill CSA 7 over the summer not the same as during the regular semester. CS 7 included in may degrees, may not want to offer during the summer

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- 6. Recommendations from the Advisory Board Bill – issues that we need to address Tim – Sandia very active bio program Charles wants to go back to school!
- 7. Other
- 8. Next Regular Meeting: Tuesday, March 23, 2021 at 4:00, send doodle poll to confirm
- 9. Adjournment, 5:56 by Bill