

TECH ADVISORY COMMITTEE MEETING MINUTES

10/29/2024 from 4 p.m. to 5:30 p.m.

Student Center Conference Rooms (120)

Zoom: <https://lowercolumbia.zoom.us/my/universitycenter>

I. ATTENDANCE

a. Present

- i. Michaela Jackson, LCC Director of New Programs
- ii. Tamra Gilchrist, LCC Dean of Instruction
- iii. Stef Gilberti, LCC Dean of Instruction
- iv. Stefan Rijnhart, LCC Faculty
- v. Jamon Holgrem, Chair, Infinite Red
- vi. David Rosi, LCC Faculty
- vii. Don Derkacht, LCC Faculty
- viii. Jennie Bergman, LCC Program Manager
- ix. Tracy Stanley, IT Customer Support, LCC
- x. Mike Price, Kelso School District
- xi. Matt Pharr, Eden Health
- xii. Corky Jackson, Westrock
- xiii. Ken Taylor, BlueScope, Data Analytics
- xiv. Jenny Smith, LCC

b. Absent

c. Zoom (Remote)

- i. Chad Mullen, ESD 112, Software Manager
- ii. Elkan Wollenberg, CIO for Red Canoe CU
- iii. Tim Kalimakinis, Cowlitz PUD, Director of Technology
- iv. Wendy Droke, Teacher of CS at Kelso School District
- v. Ted Sprague, President of Cowlitz EDC
- vi. Ron Wright, Advising, Wahkiakum SD
- vii. Sean Moore, SW WA HC/Early Learning
- viii. Erik Terrell, Fibre CU, IT Director
- ix. Sunandan, Meta, FB Engineer

II. Call to Order: 4:02 p.m.

III. APPROVAL OF SPRING MEETING MINUTES (Motion item)

a. Email Minutes for approval -

- i. Moved, Tracy Stanley
- ii. Second: Ken Taylor
- iii. Motion carried

IV. TECHNOLOGY ADVISORY COMMITTEE MEMBERSHIP by Jennie Bergman

a. [Advisory Committee Member Application Form](#)

b. Directors and deans will approve

c. [Ethics Training](#) will be coming soon.

- d. **A letter from LCC's President comes shortly thereafter. The term is 3 years or adjustable.**
- e. **Many were invited due to being part of our IT advisory. Only those who complete the application will continue to be invited to this advisory.**
- f. **Please send us the names of those who would have insights into the content of these programs.**
- g. **2 meetings per year (fall/spring) unless we need course approval between those times**

V. **BUSINESS/INDUSTRY/LABOR EMERGING TRENDS**

- a. **Certification alignments w/ D Rosi - Everyone in the state of WA can get free vouchers and training through the WA State Library**
 - i. CompTIA Certs are available through this program as well
 - ii. Microsoft is working through certification options. We are determining which platform. We are looking for a balance that prepares students for work.
 - iii. CompTIA Cloud plus 1. We haven't had as much AWS because we are doing coursework, but willing to incorporate it. We are looking from a business perspective.
 - iv. Hands-on labs are for both the physical environment and the cloud as it relates to the workplace. Any certs that you see? Please keep us posted!
 - v. Indeed trends are what we use for certificate areas, but if you see more, please keep us in mind.
- b. **Entry skill-sets for 2-year students**
 - i. Windows 11 for depth, and we attempt to ensure we are not duplicating information
 - ii. Linux is used to leverage soc levels and depth
 - iii. We are aligning with intent.
 - iv. The first year is basic with a little bit of programming, operating system, hardware, windows, and web design, and we believe it helps.
 - Sunandun: Linux and Windows scripting? Yes, it is coming with PowerShell, Python, Ansible
 - Elkan: The change will be the next agenda item.
 - v. Chat GPT 01 is a scale-up from before. Front desk jobs are almost gone. We need to know what employers are looking for and what the job looks like.
- c. **Emerging topics**
 - i. Jamon: AI - Workforce using ChatGPT and copilot and other coding assistants, and expanding language and extending it across platforms is possible for a junior programmer.
 - Desired skills include actively being able to determine where the inconsistencies exist.
 - ii. Cloud is evolving. Robotics is not happening in CS, but it is happening in manufacturing. An entry course has been discussed, but we haven't moved forward yet.

- i. Automation: an instrumentation degree is coming. Industrial robotics will be introduced, but it is geared toward the machining and production industry.
- ii. We are hoping to partner with schools to get clubs involved in automation as well.
- iii. From a club standpoint, the interest is solid.
- iv. From a prof/tech standpoint, we have to have jobs for grads
- v. Elkan: AI is for automation, and it is advancing at a crazy speed.
- vi. Jamon: 800 unread emails - an AI sorts and filters emails with a small amount of coding in 3 ish hours
- vii. Ethically, there have been some discussions about working so fast that what a company paid 8 hours for, takes 3 now. How to rectify that... And find new uses for it.
- viii. Corky: The company's policy on AI starts with business leaders. Our role is to capitalize on the benefits. There are some issues with closed systems that can be robbed by ChatGPT.
- ix. Tim: The power industry and infrastructure is restricted in power
- x. Corky: in the mills, restrictions are real too.

VI. INPUT FROM BUSINESS/INDUSTRY/LABOR

a. Michaela: Advisory gets to hear from each other. We are informed by this input as well. It guides the direction of our programs. If you are building a plant or hiring, it helps us share, and we can connect grads with you and even invite you to career fairs. We want students to graduate ready to enter your workforce

- i. Sunandun: AI starter topics: Prompt engineering, introductory data analytics, etc. these can be interesting topics for students.
- ii. Ken: Steelscape: Mill - We are heavily investing in technology. It is mandatory to get better, faster, smarter about the work that we are doing. We are doing a lot with machine learning. Machine failure can be predicted before it occurs. There is a massive amount of data being generated, and AI can use that data to make determinations of what you should be focusing on. It is highly automated. Local AI is ideal so MS doesn't have access to all your data.
- iii. Erik: 2 areas are data management and security.
- iv. Corky: fine line between security and efficiency. Security risks are higher right now than they ever have been. The trend is to lock everything down until you need it and then determine what needs to be opened up again.
- v. Sunandun: For us at Meta: We are investing heavily in GenAI which is not just building ML models. It takes a lot more, like securing the data, reliability, scalability, and privacy, which creates the whole ecosystem. I don't see AI taking over the traditional backend engineering roles, but it is a recalibration of what the backend engineers will build for.
- vi. Jamon: Online coursework for those who may not be local? Currently, we are 80% online and 20% face-to-face. The double-edged sword of workplace

LCC is an AA/EEO employer - lowercolumbia.edu/aa-eeo • LCC Clery Annual Security and Fire Safety Report available at lowercolumbia.edu/CleryASFR

ethics and working in teams - We want to ensure interdisciplinary skills. Plan on boots on the ground at first to demonstrate your work ethic.

- vii. Global processes need to be taught at a higher level as well. Remote is a chronic thing, and professionalism matters. Multinational companies are a reality so relationship-building is foundational.
- viii. ITIL compliance is rough, but we use pieces of it.
- ix. Corky: What would you have liked this person to know right out of college? IT support. That encourages prioritization, diagnostics, and interpersonal skills.
- x. Sunandun: Team viewer is used in support roles and enterprise vendors
- xi. Erik: We are a smaller shop so while we have specialized positions, we are required to be generalists. We also focus on hiring problem-solvers.

VII. ASSOCIATE'S DEGREE-INFORMATION TECHNOLOGY SYSTEMS(AAS-IT) CURRICULUM UPDATES (Motion item)

a. **Review of feedback from the Spring meeting**

- i. GitHub, Security, A+, Network+ Ui/UX(BSCS)
 - GITHUB: it is needed at the university level. Dev ops
 - Help desk topics: not every student has access. How do we get them experience?

b. **Review IT 236 end-of-program outcomes**

- i. Motion item: Security topics were added, and Number 7 (Develop an understanding of cybersecurity principles, practices, and technologies in various IT environments) was added.
 - Moved: Mike Price
 - 2nd: [Tracy Stanley](#)
 - Motion carried

c. **Replacement of IT 235 Big Data with IT 236 Network and Systems Automation**

- i. Motion Item: Addition of "Network and systems Automation" as a potential replacement for 235. There is a security plus at the end of the program too. This will be used to maximize learning.
- ii. Discussion
 - Erik: Where does BDI fall? [tech discussion followed]
 - David: Yes, creating accounts in Win/Linux locally and remotely using provisioning methods.
 - Sundandan: In Linux, the big focus for enterprise engineers at Meta is to enable the auto-provision of laptops with company-approved software. Teaching students this skill set will be of practical use.
 - Elkan: Process foundation like UI path, Pegasus, and others.
 - David Rosi: Maybe we can leverage AI in this course, too.
- iii. Motion Item: Addition of "Network and systems Automation" as a potential replacement for IT 235.
 - Moved: Elkan Wollenberg

- 2nd: Matt Pharr
- Carried

VIII. STUDENT SUCCESS, PERFORMANCE & EQUITY

- a. **Nearly all completers were either hired or moved into a Bachelor's program - Only one didn't get a job**
- b. **Most are hoping for a bachelor's degree.**
- c. **Enrollment is going up. We went from 6 during the pandemic to 12-14 now.**
- d. **We aren't losing as many.**

IX. BSCS UPDATE

a. Approval Process Update

- i. We are on the agenda with the SBCTC to be approved this Thursday.

b. Curriculum Review - Bachelor of Science in Computer Science

- i. Course descriptions and outcomes reviewed. We used a lot of information from programs in WA State that are already running. However, much was developed on our own due to desires for soft skills and critical thinking.
- ii. David: Please get us feedback if you see anything that needs to be adjusted. We have time to make those adjustments, but we will have a good plan.
- iii. MJ: Our degrees are fluid. We can add and remove courses if gaps can be identified. This is LCC's first 4-year program that we will launch.
- iv. David: We landed on Statistics and Calc 1 for programming and AI.
- v. Michaela: Some other college programs didn't require calculus, but they regretted it. We recognize that is a barrier for some students and we are already having conversations with tutoring
- vi. Corky: Internships?
 - Response: We help place students with the assistance of our advisory
- vii. David: Our students do very well in internships. Winter and spring are heavy internship quarters. We need internship options soon.
- viii. Sunandan: Internship semester?
 - Response: Summer would be great, but we would aim for industry apprenticeships during the capstone term, as well.
- ix. Jamon: Regarding Programming through a CS degree, that class wasn't fun. Do something fun early for the hook. Algorithms fall into place after that. Games and mobile apps are fun options.
- x. Sunandun: Some universities do allow students to have multiple internship chances, which makes them highly sought-after companies, as they get almost 1-2 years of actual work experience.
- xi. David: Some students volunteer on open-source projects and clubs for additional fun training.

c. **Discussed Modalities: Full-time and part-time with online and hybrid options**

d. **Faculty: We will be posting this position.**

LCC is an AA/EEO employer - lowercolumbia.edu/aa-eeo • LCC Clery Annual Security and Fire Safety Report available at lowercolumbia.edu/CleryASFR

- e. **Motion to approve the program as currently presented**
 - i. Motion to approve: Mike Price
 - ii. 2nd: Corky Jackson
 - iii. Carried
- IX. **UPCOMING PROGRAM OR COMMUNITY EVENTS**
 - a. **Fibre Federal has regular computer IT meetings every month or so.**
- X. **NEXT MEETING (Tuesday, May 6, from 4 - 5:30 p.m. in LCC's Student Center Conference Rooms)**
 - a. **Future announcements on the technology program will follow accreditation (Approximately 90 days more)**
 - b. **Adjourned: 5:35 p.m.**

Lower Columbia College provides equal opportunity in education and employment and does not discriminate on the basis of race, color, national origin, citizenship or immigration status, age, perceived or actual physical or mental disability, pregnancy, genetic information, sex, sexual orientation, gender identity, marital status, creed, religion, honorably discharged veteran or military status, or use of a trained guide dog or service animal as required by Title VI of the Civil Rights Act of 1964, Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 504 and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act and ADA Amendment Act, the Age Discrimination Act of 1975, the Violence Against Women Reauthorization Act and Washington State's Law Against Discrimination, Chapter 49.60 RCW and their implementing regulations. All inquiries regarding compliance with Title IX, access, equal opportunity and/or grievance procedures should be directed to Vice President of Foundation, HR & Legal Affairs, 1600 Maple Street, PO Box 3010, Longview, WA 98632, title9@lowercolumbia.edu, Phone number, (360) 442-2120, Phone number/TTY (800) 833-6388.