

Helena College CT Advisory Committee Agenda 9/22/2020

In Attendance:

Bryon Steinwand – HC CT Department
Emmett Coon – HC CT Department
Robyn Kiesling – HC Executive Director of General Education and Transfer
Sandra Bauman – HC Acting Dean/CEO
Kelly Cresswell – Executive Director, Reach Higher Montana
Mike Murray – Lead Network Analyst, MT Office of Public Instruction
Steve Zimmerman – Computer Programmer, State of MT Department of Justice
Kevin Sandoval – Information Technology, Helena Indian Alliance
George Parisot – Workforce Development Strategist, MT Department of Labor & Industry
Caitlin Carroll – Software Engineer Fish, MT Department of Fish, Wildlife and Parks
Shaun Scott – Associate Professor of Computer Science Carroll College
Melanie Heinitz – Minutes

Update on last year:

Seminar Class implemented, industry exposure difficult due to COVID, ideas on another agenda item below.
Portfolio incorporated Capstone will be implemented for new fall students (last term course).
Block Scheduling not implemented due to impact on part time students.
CT professional day (soft skills, mock interviews, resume review) canceled due to COVID.
Computer Science Associate of Science not implemented too many courses to implement for a small cohort of students. The risk was too high. AS options dropped.
CT Faculty reduced to two full time faculty. Just Emmett and Bryon remain. Some courses removed from curriculum: Joy and Beauty of Data, Standards Based Mobile Apps, IP Telephony, Cisco 4 (due to Cisco curriculum changes). Added CT Seminar and Network Fundamentals courses to first semester.

1. Bryon reviewed above listed updates.
2. Emmett reported Cisco rearranged from 4 courses to 3 courses.
3. Internship put on hold due to COVID.

So far this year:

New CT student enrollment down about 60% this fall. More students seem to be picking programming option this fall. Typically, we are more balanced between Programming and Network Administration.
Many courses online or hybrid due to COVID.
CT Seminar job skills and HC CT program coverage handout. The skills listed were found on about 40 job postings, most from Montana.

1. Last year record high new CT student enrollment.
2. More Programming students this fall semester.
3. Attached Excel Spreadsheet from student assignment.

Current Initiatives:

Identify industry exposure experiences for seminar class.
Looking for partners for internships and apprenticeships. Meetings with Dept. of Labor and Dept. of Transportation in the works.
Involved in the Montana Governor's Emergency Education Relief (GEER) grants:

- A. Remote education classrooms at Helena College and East Helena High. Curriculum assistance with IT/Programming course for East Helena High. Potential for East Helena students to begin taking Helena College CT and other courses next fall.**
1. Internships and Apprenticeships are a priority
2. GEER Grant will allow East Helena High to begin Dual Enrollment next fall. Grant amount \$145,000.

B. Partnered with Missoula College, Bitterroot College and Highlands College on curriculum expansion, faculty development and course sharing for Cyber Security, Cloud Computing and Computer Science pathway.

1. Missoula College wrote the grant, and asked if HC wanted to participate.
2. Course sharing would benefit all colleges.
3. Duplicated paperwork for all colleges. Big initiative for UM. Spring semester this will start benefitting students. Funds needed for faculty development. Pilot with UM. Sandra Bauman noted student would pay home campus tuition. There are still salary coverage challenges for faculty to work out.

Investigating the integration of Amazon AWS into curriculum where we can. Professional development money for faculty available through GEERs grant.

Look into adding certificate or degree option in cloud computing and cyber security.

Possibility of considerable reduction of red tape for students taking courses from other UM affiliated campuses. If this is implemented, it would be much easier for HC students to take courses on other campuses while in Helena and opens the possibility of course sharing with other campuses.

1. Integrate real life not only labs for students. They need to work on servers. Use the Cloud for real life work for students.
2. Faculty need to be certified. AWS platform with VM. Shaun Scott noted the support is great. Future employee will use this platform. Students need this experience and background.
3. Certificate to build on would be beneficial for students.
4. Cyber Security push for students. The name is helpful to potential employers.
 - a. George Parisot noted internships are critically important, and system analysis course would be beneficial.
 - b. Caitlin Carroll noted employer's desire trainability.
 - c. CT could provide surface level cyber security training currently.
 - d. Entry level for a State job would be a network administrator.
 - e. Certification Testing Center here at Helena College. This was a barrier, but now with COVID online testing has opened up. HC should request the ability to test locally for certifications for CT.
 - f. Tie Certification into apprenticeships to validate skills acquired. Students could build skills while employed.
 - g. Students need project management, as it is a valuable stand-alone certification.

Current Needs:

IT industry exposure for CT seminar students. COVID has made this very difficult. Any ideas?

1. Kevin Sandoval noted Project Management classes helped prepare him for COVID response. In three days, they moved to digital medical meetings.
2. Student need to be exposed to job shadowing or a tour within the industry their first term.
3. Internships are for students that are further along and have more to offer.
4. CT could host a Zoom session with businesses across the state to assist students in the CT program.
5. First year students could be given a virtual tour and virtual interview as this would mimic real job interview events. Kevin Sandoval would be interested in providing students with this opportunity.

Current Questions:

Why drop in Network Admin numbers?

Many certification organizations have gone to online testing. Should we consider the integration of some IT certifications into the curriculum? If so which ones?

Name change for program and Network Administration option to include security.

1. Why are student dropping: Network and systems testing centers opening, free certifications and students are concerned about hands on Networking during COVID. More remote centers are taking care of IT issues as contactless needs arrive during COVID.
2. The Excel spreadsheet Skills at HC provide a list of job skills that stand out on resumes.
3. Move part-time students to full-time students by providing paid internships.
4. CT Professional Day: Mock interviews, invite online students through email to a business professionals meeting. Interviews are online, so mock interviews would provide real life training.

Meeting concluded at 6:53 pm



Skills at HC.XLSX



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Programming.docx



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Network.docx