CCN University meeting minutes
November 18, 2016

Present: David Keathly, chair (UNT), Chris Kadlec (Georgia Southern), Jimmie Joseph (Ferris State), Ann Beheler, Mark Dempsey, Debbie Miller (CTC)

* Status of the UNT Online BA in IT program

David - Online BAIT status: in the process of finalizing budgets so UNT can do curriculum development. The goal is July 31 – by then we'll have 10 courses online ready to go. Some may be offered in the spring, but certainly by the fall. Some may be beneficial to other schools. Trying to nail down the cost model. President's office trying to decide how much of what the students will be paying will come back to David's department. The goal is to use that money to fund things like the NetLab installation. The administration is very interested in the online element so hopefully that will mean more support.

* Curriculum development

David - One of the things we might want to talk about is what do other members have that might work online? Maybe courses that could be used in a "supporting area" track. Not all of these courses have to be at UNT. Mark, could you display that document? This will lead into some of the things that Ann wanted to talk about.

<See bottom of minutes for "Information Technology" sheet>

David – This is our current degree plan. Quite a bit of this can be done at the community college. A student could possibly do up to 78 hours at the community college or through dual enrollment at high school. This could work with 2+2+2. Potentially 78 hours outside of UNT, leaving 43 hours to complete at UNT and get a degree (UNT requires 42). We'd just have to figure out which ones to encourage students to take at high school and which ones we want them to take at community college. All of this could definitely fit in a 2+2+2 model. We'd have to strategically plan what's going to be where and take into account prerequisites. If they take everything but computer science and calculus before their last +2, they're going to have a problem because those are pre-requisites.

David – The other thing I wanted to talk about while this was up… obviously, we're trying to get people into the bachelor's programs. We'll have the ability very soon to offer an articulation path through our partners in the CCN. But I think the goal should be to offer more than one. We want students to have a choice. Choices that are somewhat differentiated. The UNT program spans the breadth of lots of different careers. We try to cover all these different areas. You might categorize the UNT program as an "IT generalist" degree. But some people want to go deeper. I'm thinking one of the things we can do with this university network is to put together similar BAIT models that take more community college credits but have one that's a little more specialized. In the past, Georgia Southern was interested in a master's degree on cloud stuff. That could be a bachelor's degree that fit this same kind of model. Students do work at high school and community college and then finish up online with a deeper dive into a specific IT area. What do you guys think?

Mark – So the idea is that Ferris State wants to focus their BAIT model on a specific topic?

David – Right. That gives the student choices. If I want to be a generalist and do a lot of jobs, there's a program at UNT. If I want to specialize in SDN and cloud, then there's a program at Ferris State. Three or four different bachelor's degrees they're choosing from. The commonality is that they'll take a bunch of community college courses in a supporting area.

Ann – That makes sense. We could market a bunch of different programs across the country.

David – Could have a depth of more than just 21 hours in supporting areas. The "supporting area" gives us a nice place to put the community college courses. There can be problems matching core classes between community college and university. We can use the same model for these different topic areas – using mentors at the community

college to help them with capstones and offer help about the program. Someone they can go talk to face to face. Keep it initially within the CCN group so we know we'll get certain student cohorts from the schools. We know CCN students will have that support.

Chris – Are you thinking an articulation agreement or a collaboration agreement? What are you thinking?

David – I'm working now on a UNT template articulation agreement. When we get started with 30 or 60 CCN schools, we can put out a fairly generic template. But what I'm talking about is a program different and more focused from the UNT generalist degree. Those could still be offered to all different schools but would give students a choice of what to focus on. Deep dive versus generalist. Different topics using the same model.

Chris – Makes a lot of sense. Let's start here: I would be very interested.

David – So what would we need to do to ask GSU to either morph an existing degree into something like this or… well, that's probably easier than creating one from scratch.

Chris – The lowest hanging fruit would be getting a student to enroll in a course at someone else's school and then seeing if it can transfer in. We're going to have to worry about in-state or out-of-state tuition. So we need to go talk to our registrar's office and see what they're willing to do.

David – Do you have a group who handles your online stuff?

Chris – We're associated with an online program. It's a consortium within the state of Georgia. We're the ones who are managing it. I'll start taking a look at that one.

Ann – How much of your degree is online?

Chris – There are two different programs. Never the tween shall meet. The one I've been talking to you guys about is primarily our on-campus program. We get one-sies and two-sies there. We've been involved in the online program that we've been managing so it's associated with my department. That's completely online. The one we've always talked about being ABET accredited has been our on-campus program. We're looking to branch out in a couple of different ways. We still need to talk, David.

* Training

David – This is what I'm thinking. Between now and July. I'd like to do a two-pronged approach. I'd like to get more universities involved. After the first of the year, let's do a webinar. Try to invite more universities. Maybe get the CCN members to nominate local universities that might have interest. Then we can do an informational webinar. Then for those who are really interested, we do a webinar or workshop where we sit down for 2-3 days and hash out the steps. Here's what UNT did. Talk about how that can be transformed into your environment. I have extra travel money. I can even come talk to your administrators. There's a group at UNT that manages Blackboard and all of our online mechanisms. It's not an academic department but it manages all of the online stuff. So I could go talk to them and say "This is what we want to do." Then they could intervene with the administrators and help with those discussions. If there's a group like that who already manages online stuff, they can be a good intermediary. Is that something you'd be interested in?

Chris – Yes, I'm interested. There will be some administrative red tape to deal with. But once those are resolved, I'm ready.

David – The workshop is where we'd do the work and come up with a game plan. The webinar is more for recruiting new people.

Ann – Do you want to recruit the CCN to work with?

David – Yes. And that's one of the other seminars we'll have to have. Training mentors. The people at these campuses helping these students work through the program, taking the right classes. Almost like an advisor. It'd be a faculty member in the IT area. We'd pay them a little something.

Ann – It'd be a like TA, right?

David – Yes. They'll help students navigate the program and then when we get to the capstone, help the cohort of people work together on a team. I think we could start with a third of the CCN.

Ann – I think you'll want to start smaller than that to work out the kinks. Maybe start with five.

David – Maybe. Mark, can you flip back to the agenda? Ann, did this address what you wanted to talk about?

Ann – Sure. I would suggest that as you pilot this, you keep it restrictive and make it work. Also don't give many options. Sometimes there are too many choices and so students make none.

David – And it'll take time. Even from where Chris is, it'll take two years to ramp up and get a program started. Maybe he's farther along than what I'm hearing. It took UNT two years just to get the degree ready for approval. So we're talking another 2-3 years before we can add another program to the choices. We should have worked out most of the kinks by then. I'm just thinking one or two options in the really hot areas.

 Ann – I agree with you. I just tend to think far ahead and if you start with too many options it might preclude being successful.

David – Going back to the agenda, I wanted to know if anyone had any ideas for training. A recruitment webinar, then a nuts-and-bolts workshop on how to make it happen. I listed other topics here. How do we design a degree plan for this kind of thing? How do we set up articulation agreements? Most of these will probably be webinars for people who are interested but haven't made a commitment yet. The other one (2-3 day workshop) needs to be face to face – sit down, do dinner, and discuss how to make it happen. Anyone have any other topics to add to that list (see below)?

      i.   *Recruitment*
     ii.   *Program development*
    iii.   *Training for mentors*
    iv.   *Developing lab resources*
     v.   *Designing degree plans*
    vi.   *Articulation*

Mark – This is for community colleges and universities, right? The recruitment one's informational for both?

David – Right. But the articulation one could apply to other situations. They're not intended just for building online programs.

* Recruiting other universities

David – Is there a way to use the CCN to give students more course choices without another university having to develop a whole degree? Some of our universities may have upper division courses that we could articulate to give students more choices. A student could pick a single course from UNT or Ferris State.

Mark – So articulate a single class?

David – Yes. We may not be able to provide enough classes through just community colleges. Use the CCN resources. UNT doesn't have an SDN or IoT course right now. So who has one that we can make available to students in the BAIT? But that other school would run the course and get the revenue. We'd just articulate it. So the question is who

has something a little more unique that would still fit into the "supporting area" category? Students could select other courses and add them to their degree plan. Schools don't have to build an entire degree plan – just offer a couple of courses.

Ann – Will UNT go for this?

David – We don't yet have buy-in for this sort of thing. As long as they take the minimum required hours for a UNT degree, I don't think there will be an issue with articulation. We already articulate with the community colleges. Now what could happen is someone asks "Why aren't we offering this if it's so hot?" That's a resource issue. We're dying for faculty right now.

Ann – What would this do to ABET and SACS?

David – As for ABET, the required courses they have to take satisfy all of ABET's requirements. "Supporting area" is extra hours. And SACS only looks at state course requirements. What we do for ABET is about three times what SACS wants.

Ann – All right.

David – It's a long-term goal. We'd have to run all of this through some curriculum committees to make sure and to get approval. We should just start thinking about it. I'm assuming it's going to be really successful. So we should discuss what we want to do with this group and the resources we have? What can we do in the next few months?

Mark – I think we do your informational webinar in the spring. Get them interested.

David – Okay good. Maybe two in the spring. I'm thinking the in-person workshop happens right before school starts in late July or after school ends in May. Not everyone has to come to Texas. Depending on who wants to be involved, we can do it elsewhere. Wanted to know if there are any topics I missed – recruitment, articulation, training mentors, ways to help schools develop similar programs.

Ann – I think you have to get yours going better. Success begets success.

Chris – I'm all in.

Ann – Maybe UNT and GSU can work out your internal issues at the same time.

David – We can probably help each other. I've fought some battles already.

Ann – Are you ABET accredited, Chris?

Chris – The online one isn't, the on campus one is.

<Jimmie joins the call>

Mark – David, you want to recap for Jimmie?

David – 60-second elevator speech. When we started this group, we wanted to find ways for the university CCN members to help each other. The big goal is to create a pathway to bachelor's degrees for students coming out of the other CCN schools. At UNT we have a program like that already called BAIT. I'm trying to get the upper division parts online so students at the community colleges can finish a bachelor's degree while they're still at the community college. They don't have to move to Texas to do it. We're going to limit it to CCN members for a while. So we're talking about what we as a group can do along those lines but also how we can help each other. Develop some similar programs so students regionally have more choices. UNT's degree is a generalist degree. Other schools have other areas of strength so maybe eventually students can take a bachelor's in a more focused IT area. We talked about

hosting some webinars to recruit more people. Maybe also a webinar on articulation. Plus also a specific nuts-and-bolts workshop to tackle problems for schools trying to develop an online BAIT model like UNT's that accepts more transfer hours from community colleges.

Ann – Jimmie, can you tell us more about your program?

Jimmie – In our department we have two programs. One is CIS, a programming developer course. The other is CIT, which is similar to what's being offered by others in the CCN. CIT is a four-year program through the college of business. Students take the business core as well as the CIT courses. We don't do Cisco track. That's handled by college of engineering and technology. We do CompTIA, A+, Net+, Security+, Linux+, the Microsoft suite. We also have a cloud computing course. We work closely with community colleges in the region to develop a coherent transfer strategy. We call it a 3+1 program. Three years at the community college, one at Ferris State. And in the third year at community college, they will take some dual Ferris State classes.

Ann – That's more and more popular. And what David's talking about is taking all but 43 hours at the community college level.

David – Or it could be dual credits, AP courses…

Ann – How many hours of upper division?

David – 42. 78 lower division hours you can take elsewhere.

Ann – The next step, David, I guess is getting the curriculum farther along. Then scheduling some webinars.

David – That's how I see it. From now through the holidays we'll be getting set for the curriculum development. I sent Ann a list of when those would be done. Then we can schedule a couple of webinars for spring and a face-to-face in the summer.

Mark – Are the two webinars different?

David – One is a recruitment thing. Maybe invite some four-year schools nominated by the CCN. The other one would be about articulation. Not specifically tied to the BAIT model. That would benefit people not at a four-year school. I'm going through this now creating this generic articulation template. By the spring I should be as close as an expert as there is. Then in the summer we'd have who's really interested in making this happen at your school. That would be a very small group.

Mark – Sounds good.

Ann – I think this is needed. Jimmie, you may not know, but UNT has just been designated an R1 university and getting this sort of program going with an R1 is pretty important.

Chris – We're a research university. I think they've gotten rid of the R1. We'd be just below an R1.

Ann – Jimmie, if you're interested in participating then we could have a whole set of choices for the students.

Jimmie – That would be great. We're a little farther north than Texas. There are a lot of job opportunities in Michigan. We're interested in participating.

Ann – We're looking at a lot of this bring online. Which can be beneficial to your bottom line.

Jimmie – We haven't really gone into online very much. Given the few faculty that we have. We want to be sure students have the right resources to do the work.

Ann – You may want to look at that.

David – Also, maybe you have a course that we don't have. We don't have a cloud course. So maybe you have an online course that other students may want to take. Or maybe you have a course that UNT students want to take. We'd set up an articulation agreement. That'd give you a broader program for your students.

Jimmie – That's a great idea. Takes the weight off schools. Faculty is a concern.

David – Yes, we're trying to hire 5 or 6 people.

Ann – Anything else for today?

David – This is it.

Ann and Mark – Thank you for calling in.

INFORMATION TECHNOLOGY

Bachelor of Arts (B.A.) degree with a major in Information Technology

Department of Computer Science & Engineering
Discovery Park F-201; (940) 565-2767
Faculty Advisors: Dr. Ryan Garlick, Mr. David Keathly
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Academic Advisor: Nancy Van Hoy
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University Core

COMMUNICATION
- ☐ 3 Hours approved course
Grade of "C" or better is required.

AMERICAN HISTORY
- ☐ HIST 2610, U.S. History To 1865 (3 Hours)
- ☐ HIST 2620, U.S. History From 1865 (3 Hours)

GOVERNMENT/POLITICAL SCIENCE
- ☐ PSCI 1040, Government: Laws & Institutions (3 Hours)
- ☐ PSCI 1050, Government: Processes & Policies (3 Hours)

If you are transferring credit for either PSCI course, check with your advisor about the application of courses.

CREATIVE ARTS
- ☐ 3 Hours approved course

LANGUAGE, PHILOSOPHY, & CULTURE
- ☐ 3 Hours approved course

SOCIAL & BEHAVIORAL SCIENCE
- ☐ 3 Hours approved course

DISCOVERY
- ☐ 3 Hours approved course

Major Requirements
Grades of C or better.

TECHNICAL COMMUNICATIONS
- ☐ TECM 2700, Technical Writing (3 Hours)

MATHEMATICS
- ☐ MATH 1710, Calculus I (4 Hours)
- ☐ MATH 1680 or MATH 1780, Probability (3 Hours)

SCIENCES
- ☐ PHYS 1710, Mechanics (3 Hours) &
  PHYS 1730, Mechanics Lab (1 Hour)
- ☐ CHEM 1410, General Chemistry I (3 Hours) &
  CHEM 1430, General Chemistry I Lab (1 Hour)
  or
  CHEM 1415, Chemistry for Engineers (3 Hours) &
  CHEM 1435, Chemistry for Engineers Lab (1 Hour)
  or
  BIOL 1710, Biology I (3 Hours) &
  BIOL 1760, Biology Lab (2 Hours)

Major Requirements
Grades of C or better.

COMPUTER SCIENCE and ENGINEERING
- ☐ CSCE 1030, Computer Science I (4 Hours)
- ☐ CSCE 1040, Computer Science II (3 Hours)
- ☐ CSCE 2100, Computing Foundations I (3 Hours)
- ☐ CSCE 2110, Computing Foundations II (3 Hours)
- ☐ CSCE 3055, IT Project Management (3 hours)
- ☐ CSCE 3220, Human Computer Interfaces (3 Hours)
- ☐ CSCE 3420, Internet Programming (3 Hours)
- ☐ CSCE 3530, Introduction to Computer Networks (3 Hours)
- ☐ CSCE 3600, Principles of Systems Programming (3 Hours)
- ☐ CSCE 3615, Enterprise Systems Arch., Analysis & Design (3 Hours)
- ☐ CSCE 4010, Social Issues in Computing (3 Hours)
- ☐ CSCE 4350, Introduction to Database Systems Design (3 Hours)
- ☐ CSCE 4550, Introduction to Computer Security (3 Hours)
- ☐ CSCE 4905, Information Technology Capstone I (3 Hours)
- ☐ CSCE 4925, Information Technology Capstone II (3 Hours)

ADMIN CONCENTRATION AREA
- ☐ CSCE 3535, Network Administration (3 Hours)
- ☐ CSCE 3605, Systems Administration (3 Hours)
- ☐ CSCE 4355, Database Administration (3 Hours)

SUPPORTING AREA
- ☐ Course approved by an advisor (3 Hours)
- ☐ Course approved by an advisor (3 Hours)
- ☐ Course approved by an advisor (3 Hours)
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You must choose a supporting area (21 Hours) & complete approved courses. Check with your advisor concerning approved classes. Suggestions include, but are not limited to:

Security	Health Professions
Networking	Pre-Med/Pre-Vet/Pre-Dental
Information Systems	Pre-Law
Software/Web Development	Education/Teach North Texas
Game Development	Pre-MBA Business
Criminology/Forensics	General Business
Technical Communications	Management
Microsoft/Oracle/Cisco Cert.	Logistics
Graphic/Communications Design	
Geographic Information Systems (GIS)	

Completion of CSCE 2610, 3530, 4550, & 4560 for Supporting Area earns a Security Certificate from the Committee on National Security Systems.

A maximum of 6 hours may be taken for the Supporting Area from CSCE 4890, 4920, 4940, or 4950.

This is an unofficial simplified checklist effective Fall 2016. Degree requirements may change. You may need elective courses to help reach a minimum of 121 Total Hours & 42 Advanced Hours. Check with your advisor.