CIS Advisory Committee

10/26/16

Introductions

Present: David Klick, Vickie Klick, Mike Ebner, Dana Fellows, Ben Yochem, Jim Sager, Tim Campbell, Federico Bassetti, Paulette Bendixon, Bernie Pupino (later), Matt Feuerborn (even later)

After food and introductions, the meeting was called to order at 6:12PM.

Approve minutes from spring meeting

Jim moved to approve the minutes, Mike seconded. Approved unanimously.

Enrollment numbers

Dave pointed out that CIS 237 is required for some programs in the spring, but it is only offered in fall. Given the numbers (~10 per year), there isn't enough demand to offer it twice. Only a few courses (e.g., CIS 150, CIS 123) have enough students to offer them twice a year. CIS 140 has been borderline in the spring, but upcoming changes will make CIS 140 a core course and should ensure demand in both spring and fall.

The required number of students in a class depends in part on whether a full-time or adjunct instructor is teaching. Classes with adjuncts can be smaller.

Rationale for program changes

The department makeup has changed dramatically, with two instructors retiring and one new replacement. The change in staffing drives some cleanup of seldom or never-taught courses. State requirements have also changed regarding the credit hours required for degrees and certificates; a rationale is required if degrees exceed 60 credit hours, for example.

As part of streamlining the programs, the degree options have also been adjusted to make the first year consistent for each degree (programming and networking) and split them by emphasis in the second year. Once of the impacts of changing the network degree to have a single track the first year is to change the Cisco courses to 8 weeks and teach them all in the second year, with CIS 140 as a prerequisite. This is hoped to improve results for the Cisco classes, since the students will not be seeing networking terminology for the first time.

Students may want to take a proficiency test to test out of CIS 140. It will be necessary for the CIS department to create a test (or requirements for a body of work) to determine proficiency if that is requested.

Course deletions

These courses that are not being taught need to be removed from the catalog, whether they are deleted entirely (and go through the ICCB) or are simply made inactive. Matt said that courses have to be attached to a degree to remain active (though they could be electives that are never offered) and would have to stay in the catalog. He suggested that the materials (syllabus, course number) be kept and the course be deleted with ICCB. If a course needs to be reactivated, ICCB can approve something in a few months.

CIS 110/CIS 210/CIS 212: Need to reduce the number of programming language classes, interest has decreased since the .NET development, and the Visual Basic courses take enrollment away from C++/Java.

CIS 117: Replaced by CIS 118

CIS 121: Even Adobe has killed Flash

CIS 124: No demand for XML at this in-depth level

CIS 183: Novell is obsolete (and has been voted for deletion previously)

Federico mentioned that Visual Studio would be good to include somewhere, especially now that it has some open source extensions.

The deletions were approved unanimously.

Prerequisite changes

Making CIS 140 a prerequisite for CIS 145 (Cisco I) seems like common sense. Matt asked if this would be an issue for a returning student with experience. Per earlier discussion, Dana will need to create a way to demonstrate proficiency (Network+ certification, proficiency test, body of work, etc.). The committee agreed to the change with the requirement for a proficiency test.

CIS 270 used to require CIS 170 as a prerequisite, but Dana's perspective is that the system administration covered in CIS 270 is better prepared for with the introduction to networking course (CIS 140). This also aligns with Linux+ certification. All the system administration commands are covered in CIS 270. Vickie asked how the students are going to deal with the command line and learn the general Unix commands while learning the system administration. Federico said that the students struggle with the purpose of what they are learning in CIS 170, so they might do better with a purpose for knowing the material. Dave says that he's looked at making the courses match the Linux certifications better, but they are less rigorous than the current course. CIS 170 is very scripting intensive. Mike said there are a large number of technology exams (Cisco, CompTIA, Linux+, A+, etc.) that could be offered through Kishwaukee, but the school will have to pay Pearson to offer them, and Kish will be paid nothing unless at least 15 students take exams in a month (and then it's only $5/test). The Regional Office of Education (ROE) offers exams at Sauk Valley; that is probably the closest testing facility right now. Having the exams offered here would be a plus for potential students.

Mike asked if it would be possible to add CIS 140 as a second prerequisite instead of removing CIS 170. Paulette and Ben asked if they could be alternatives; that would not get students to a consistent starting place for CIS 270. Requiring CIS 170 would be a problem for the Cisco degree, as it's a second year course in the system administration degree. Federico suggested that the first part of CIS 170 might be broken out to accommodate those needs. Dana thinks enough of the basic Unix would be covered in CIS 270. The fall semester of the second year could be increased from 14 to 17 semester hours to accommodate CIS 170. Mike asked if CIS 170 could be substituted for the CIS 150/CIS 160 requirement. Dave said that he'd prefer to see CIS 170/270 updated to match the Linux certification (at a subsequent meeting) and keep one

rigorous programming course. Federico mentioned that the students without previous programming experience were having the most trouble with scripting.

Matt said that if we think it makes sense for the students to have this knowledge, he thinks that requiring CIS 170 in fall semester of year 2, dropping the 2 hours of electives is justifiable. ICCB is trying to avoid "credit creep," and the 62 hours should be OK with rationale provided. Dana observed that having all the students have both the prerequisites would be preferable for student preparation.

Dave pointed out that this will potentially affect students taking the networking certificate, but they COULD take both CIS 140 and CIS 170 in the first semester of the certificate program, so it can work.

The committee agreed unanimously to require both CIS 140 and CIS 170 as prerequisites for CIS 270.

CIS 238 is actually no longer required for any of the degrees or certificates if tonight's changes are approved, which would mean that it could be deleted. This course has only been offered every couple of years, even with it required for some programs. Dave read a comment from Eric Epps giving his feedback (positive) on the various changes (not specific to CIS 238). Federico said the course would need some updates to include modern techniques such as Agile/Scrum. The course could be helpful to have the students bring the various concepts together; Dave said that was the rationale for having the course. The final project (CIS 236) is a capstone, which also helps bring the concepts together. CIS 238 could be made an elective, which would keep it in the catalog; however, in reality, it would be unlikely to be taught. Mike suggested that CIS 238 could be an alternative to the final project or the internship; Dave said that might actually increase enrollment among those who can't find a job and don't want to do a project.

Matt asked if there is a way to combine some aspects of CIS 236 and CIS 296 (internship) into CIS 238. This could address both the open-endedness of the project and the students' expectation that the school will find them an internship job. Figuring out how to rework CIS 238 (and make it applicable to networking students as well as programming students) is work for a future meeting.

Federico suggested that all students doing the CIS 236 project could meet at particular times to go over some aspects of analysis and design. Dave said that the CIS 236 description is sufficiently general that aspects of CIS 238 could be added to it, but it might be better to adapt CIS 238 and leave CIS 236 as is.

We agreed to leave CIS 238 active as an elective, but not required for any degree or certificate.

We briefly discussed CIS 143, Wireless Communication. Dana said that Cisco is going to create a separate course for wireless at the end of the year; on the other hand, CompTIA/Network+ is adding a lot of wireless stuff. We agreed to keep it active as an elective and see what happens with Cisco. It may be possible to increase the course to a 3 hour class, which would fit the program better.

Degree changes

Mike raised a concern that the programming degree is too programming-heavy in the second year, with three programming classes per semester (NIU limits students to two programming classes).

Dave mentioned that both CIS 150/CIS 250 and CIS 160/CIS 260 are transferrable to any four-year school in Illinois as Computer Science 1 and 2. The choice of language (C++ or Java) depends on the four-year institution. CIS 123 is also transferable as a business course; most other courses are not. CIS 170 is also accepted at NIU as their Unix course (if students know to ask) but there are rumors that the course at NIU has changed (no official communication has happened, and Dave's contacts have retired). Federico suggested that it would be good for David and Dana to meet with some of the CS faculty at Northern. Mike is in school at NIU and could help facilitate some communication. Federico has connections to the OMIS program in the College of Business at NIU and will help make connections there. Bernie said that 4-year colleges have been encouraged to partner more with 2-year schools in the last couple of years. His advice is to reach out and go meet on their turf, rather than asking them to come here. Federico said that some engineering programs at Northern are teaming with Rock Valley.

Federico's contacts at four-year institutions say that their students need more programming experience. Learning more than one language at a time may be beneficial for learning, and is likely to be helpful in employability. Similarly, learning to use different IDEs could be helpful. Kishwaukee gets a lot of students from NIU, so it is important to consider their needs.

Tim asked why there wasn't more effort to get the Kishwaukee CIS programs and the NIU programs to be more coordinated. Basically, the goals of a two-year course technology degree and a four-year degree are different. Coordination requires reaching out and working with a specific institution. (NIU doesn't seem to have much in networking, though it may be more of an issue of finding the right contact; Dana has worked previously with Illinois State and Western Illinois.) The BSAM program at NIU is supposed to support students coming in with a 2-year degree, but it's hard to find someone who admits that BSAM exists.

After discussing the course deletions and prerequisite changes, we got back to the degree and certificate changes at 8:30PM. We agreed to all the changes, assuming Dave and Dana find no serious problems.

Certificate changes

As mentioned above, the degree and certificate changes were agreed to.

Input on possible new courses

Dana mentioned that some people would like a Wireshark course. We discussed that this might be a one-day continuing education, non-credit class. There are others interested in VmWare/virtualization. The seminar classes (CIS 106 and CIS 206) can be variable credit hours. Federico asked if it would be possible to modularize existing courses and get partial credit; in order to do that, it would have to be separate modules/courses (e.g., 5 weeks/5 weeks/5 weeks during a semester). Matt said there is interest in having continuing education courses offered from within the academic departments. (Financial aid only covers approved credit-bearing courses, but there are other sources for reimbursement for career training.) Other possible

topics are Aruba (wireless), Puppet (for system administration), Juniper Networks routers, Palo Alto (firewalls, etc.), Amazon Web Services, Azure, Google Administration.

PowerShell and Mobile App Development are others that the department was considering. In the short term, pruning the program is a good starting place.

The meeting adjourned by popular demand at 8:50.

Addendum

There was an additional course, CIS 252, that needed to be deleted. A vote was held by email. The mail was sent out on October 31, 2016 to all eleven voting members; nine responses were received, all in favor of deletion.