University Curriculum Committee Meeting

Meeting #12, January 29, 2024

Members (those present in bold; * indicates a voting member):

Dave Paul, Chair*

Dean Panttaja

Francesca Sammarruca

Erin James*

Stacy Isenbarger*

Stacey Doumit*

Magdy Noguera*

Kyle Howerton*

Steve Shook*

Erkan Buzbas*

Emad Kassem*

Jerry Long*

Hanwen Dong*

Lindsey Brown

Emma Johnston*

Nate Trachimowicz

Gwen Gorzelsky

Guests present: Rebecca Frost, Ata Zadehgol, Feng Li, Indrajit Charit, Terence Soule, Ken Udas, Kirsten Pomerantz, Benjamin Barton, Vibhav Durgesh, and Russell Qualls

- I. Chair Dave Paul called the meeting to order at 3:32.
- II. January 22, 2024 meeting minutes were approved with a name correction (replace "Jerry" with "Jeff" on page 6 in new version).
- III. Announcements and Communications
 - a. Steve Shook requested additional information on the recent items regarding the Vandal Gateway Program (VGP) and the current emergency policy that no longer requires ACT/SAT to be submitted for admission to the UI. These items were discussed at Faculty Senate, but UCC did not receive detailed information on the topics. Stevie explained that discussions about maintaining the VGP and emergency policy should start at UCC and then report up to Faculty Senate as seconded motions, just like the curricular changes do. Francesca Sammarruca explained that they were presentations rather than items that were voted on, but she agreed that flow of information could be followed in the future.

Francesca asked if he would like to have a presentation on the information as well, and Steve agreed. It was agreed that if there was time at the end of the meeting, an agenda and the timing for the presentations would be discussed more.

IV. New Business

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add Advanced Microelectronics Fabrication Graduate Academic

Certificate

Speaker: Dave Paul

Discussion: No discussion needed.

Outcome: Approved unanimously

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add Semiconductor Design Undergraduate Certificate

Speaker: Feng Li

Discussion: Dave Paul asked for confirmation that this certificate could be completed in Moscow or online, and Feng Li confirmed. Francesca Sammarruca asked if this certificate could be earned on its own

without additional degrees, and Dave Paul said that was generally the case.

Outcome: Approved unanimously

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add High-Speed Circuits and systems Graduate Academic Certificate

Speaker: Ata Zadehgol

Discussion: Lindsey Brown explained that one of the courses (ECE 538) was dormant and read the note that said the course would require an additional proposal to remove it from dormancy. She also added that the line "at least one must be graduate level" could be removed from the "select two from the following" list because all the listed electives were graduate level. Dave and Lindsey discussed different options for approving the certificate, including removing the course, approving it pending the removal of the course's dormancy status, or rolling it back until the re-activation could be approved along with the certificate. Erin James noted that it was included in a large list of electives, so she would prefer to approve it rather than force the certificate to be delayed.

Stacy Isenbarger asked for further information on dormancy, and Sydney Beal explained that dormant courses aren't listed in the catalog, but they can be offered a certain number of times before they need to be reactivated. Lindsey said that it would be possible to use Ece 538 as a substitution for an elective, but it could not be listed as an elective in the catalog because the course is dormant. Erin moved to approve the certificate without ECE 538, and Dave agreed, adding that the course could be added to the program later if desired.

Jerry Long asked if having the stipulation of "at least one must be graduate level" for the electives list may be needed in the future, such as if undergraduate courses are added to the list later. Lindsey explained that she believed that phrase was included to align with regulation O-10-B-1, which explains that at least half of the courses must be graduate level courses. The department does generally maintain closer to 75% of coursework being graduate level, which may be the reason for the confusion. Since the certificate is already 50% graduate level coursework with the required courses, this line was not needed. Jerry asked if it was detrimental to have the parenthetical listed, and Lindsey said that it doesn't necessarily, but it could be confusing.

Magdy Noguera asked for Ata Zadehgol's opinion on removing the text. He said that it had been added to satisfy requirements as per their understanding, but it could be removed if it was not necessary. Dave asked if ECE 538 could be removed from the elective list, and Ata agreed. He asked if the course could be added once it had been removed from dormancy, and Dave said that it could.

Outcome: Approved unanimously with edits

UCC Agenda Item Number:

Item(s) Under Consideration: Add Artificial Intelligence and Machine Learning (AI/ML) Undergraduate and Graduate Certificate

Speaker: Terence Soule

Discussion: Dave checked that the undergraduate certificate was available online and in person in Coeur d'Alene, Idaho Falls, and Moscow. Terence Soule explained that the graduate certificate would be available online, but they would prefer not to offer the undergraduate certificate online. He explained that the coursework is largely joint-listed, and the graduate courses are generally offered online while the undergraduate courses are in person. Jerry Long asked if the department would like to change it to not being available online, and Terence said there had been a discussion on it, and they decided they wanted to keep it as being available online in the case of returning students seeking additional certification.

Steve asked why MATH 170 was listed as one of the prerequisites rather than MATH 160. Terence said that was because Linear Algebra was also listed as a requirement, and that course required MATH 170. Steve noted that Linear Algebra didn't require MATH 170 specifically, so it may benefit the certificate to edit that requirement. He agreed to edit that description to being MATH 170 or MATH 160.

Lindsey said that there hasn't been a list of prerequisites for the certificate coursework added to the catalog in this way before, so this would be a change for this certificate. She checked that the list included existing prerequisites for the coursework (as opposed to adding new course prerequisites), and Dave said that was correct. Jerry noted there were some prerequisites that were missing from the list, and Stacey Doumit agreed.

Stacy Isenbarger added that this would create another place where changes would have to be made if there were course prerequisite changes to the certificate coursework, and Terence said the department understood. She also said that it would help with advising, but she was concerned about the additional edits it would create in the future.

Erin pointed out that graduate degrees do not enforce prerequisites, so the list of required prerequisites is not applicable for the graduate certificate. She asked if phrasing it as "recommended preparation" would be better.

Stacy said that the point of certificates was that certificates have coursework that requires background information obtained either through prerequisites or life experience. Because of that, it puts more responsibility on the student to ensure they have the required background through talking with an advisor, connecting with faculty members, etc. This model, she said, should be maintained for this certificate to make it easier for future faculty members so they don't have to return to UCC to edit the listed prerequisite section. She suggested that this information could instead be maintained on the department's website where more of the advertising occurs.

Terence said that he agreed with changing the description to be "recommended preparation" for the graduate certificate. Erin added that doing so made this section have an advising function rather than a gatekeeping function.

Stacey Doumit said that she agreed with what had been said, particularly because students could already click on the course links to find the prerequisite information.

Jerry clarified that the listed prerequisites are the specific courses a student is required to take, and Terence agreed. Terence further said that the list was created to convey that students would best succeed in this program with the listed coursework. Jerry shared his agreement with what was already stated about the list of prerequisites being unnecessary since the information is already listed in the catalog, but he also noted that there should be a simple structure for students to access the information needed to the program.

There was a brief discussion on requiring prerequisite lists for other certificates, and Lindsey noted that doing so would require the certificates to come back through UCC because it would be a content change rather than a narrative change.

Terence said that it could be rephrased as the topics that graduate students should have knowledge of before pursuing the certificate and leave the responsibility with advisors on analyzing whether or not all of the topics have been studied to a sufficient degree. He also explained that this was included to inform students of all the required courses so that students would not be surprised by additional prerequisites after completing part of the certificate.

Stacy asked if the listed prerequisites should all be completed before pursuing the certificate's coursework. If not, students may misunderstand the prerequisite section, which could lengthen their time at the university unnecessarily.

Lindsey suggested rephrasing the section to "important advising information can be found at (department website)" as a compromise. Terence and the committee agreed with the suggestion.

Outcome: Approved unanimously with edits

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add Nuclear Materials Engineering Graduate Academic Certificate

Speaker: Dave Paul

Discussion: Erin James asked about the need for the line referring to no credit being received for F grades. Lindsey said that it was not required, and she'd like to work with the department to remove some of the unnecessary process language. As a counterpoint, Jerry said that the certificate stated that it was aimed toward nontraditional students, so additional help may be beneficial.

Lindsey agreed, but some of the language, particularly under the program requirements, could still be removed. She suggested that the certificate be sent back and revisited after the proposal author and the Registrar's Office have edited the curriculum text.

Outcome: Rolled back for edits

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add Biomedical Engineering Undergraduate Certificate

Speaker: Dave Paul

Discussion: Dave pointed out that one of the courses from the electives list required a prerequisite that was also listed on the list, and since only one course was required from the list, it may not be needed. However, the note was made as an informative point only.

Outcome: Approved unanimously

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add Cybersecurity PhD

Speaker: Terence Soule

Discussion: Steve Shook pointed out that there appeared to be a net loss of \$580,000 included on the

budget spreadsheet, which would likely be a red flag at the State Board.

Terence said that this is due to a lack of space available to include research funding and because it is hard to claim a specific number of PhD students to support the hiring of new faculty members. He stated that when the Cybersecurity bachelor's degree was created four years ago, they were projected to have 40 students and now have 120 students. The program proposal also includes the additional faculty needed to cover the growth of the undergraduate program.

Lindsey asked if the effective date of 2024-2025 was correct since PhD programs generally took two years before being added to the catalog due to the additional reviews required. Terence said that two individuals had reviewed it, and their reports should be received back by the following week. However, if the effective date needs to be pushed back another year, it can be.

Steve recommended reaching out to someone at the State Board to explain the situation beforehand so that the number is less alarming.

Erin suggested that the first couple sentences of the program description may not be necessary, so she suggested removing them. After a short discussion, it was decided to remove the first three sentences from the program description.

Lindsey suggested changing the phrase "Electives as agreed with major professor" to "electives as approved by major professor" because of the approval path that study plans undergo, and Terence agreed.

Outcome: Approved unanimously with edits

V. Old Business

UCC Agenda Item Number: UCC-24-009

Item(s) Under Consideration: Edit BE 441 and ME 529

Speaker: Russell Qualls, Vibhav Durgesh

Discussion: BE 441 was previously sent back because of a question regarding the prerequisites, and further clarification was added to the rationale as a result. Russell Qualls explained the wrong version of BE 441 came before the committee when it was first reviewed.

Steve asked if aero propulsion was addressed in the course previously and if this should be a new course rather than a course edit. Vibhav Durgesh explained that aero propulsion had not previously been included in the course content, but the course focused largely on combustion, and that would remain the primary focus. This change just helped this course fit more in line with the creation of the aerospace certificate. Lindsey added that it was generally recommended that new courses be proposed rather than

current courses edited when more than 50% of the content had been changed, and Vibhav said that it had not.

Outcome: Approved unanimously

VI. New Business (Continued)

UCC Agenda Item Number: UCC-24-051

Item(s) Under Consideration: Add BE 341, CE 408, and CYB 600

Speaker: Emad Kassem, Terence Soule

Discussion: Lindsey Brown explained that having a junior/senior standing required as a prerequisite could be enforced by the system but having a junior/senior standing specifically in civil engineering could not be enforced. She also asked for the differences between CE 408 (Advanced Engineering Computer-Aided Design and Drafting) and ME 421 (Advanced Computer-Aided Design).

Emad Kassem explained that ME 421 would focus more on mechanical engineering, while the new CE 408 would focus on civil engineering. He also agreed that it should be fine to remove the "CE" from the "CE junior/senior standing" prerequisite.

Lindsey explained that if there is nothing that strays from the typical format, CYB 600 does not need formal approval since it is a standard course number. Terence confirmed that it was all standard.

Outcome: Approved unanimously with edits

UCC Agenda Item Number: UCC-24-052

Item(s) Under Consideration: Add Teacher-to-New Endorsement Undergraduate Certificate

Speaker: Kirsten Pomerantz

Discussion: Lindsey Brown was confused by the title of the certificate and asked for clarification on the line "Following transcript analysis, the remaining credits to total at least 12 are identified." She suggested revising it to "Advisor approved electives", and Kirsten agreed. Lindsey also requested that a disclaimer be added that the state awards the certificate rather than the university.

Jerry agreed with Lindsey on the confusion of the title and asked for further explanation. Kirsten explained that it is aimed at current teachers who would like to add an additional endorsement. The committee suggested various options that Kirsten made a note of.

Lindsey pointed out that a degree can only be earned once, so if someone wanted to come back and earn multiple additional endorsements through this certificate, they would not be able to do so because it would be read as a single certificate in the system, even if they were focusing on different subject areas. She suggested breaking up the certificate into different subject areas to bypass this issue, and the committee agreed.

Outcome: Rolled back for edits

UCC Agenda Item Number: UCC-24-053

Item(s) Under Consideration: Add Professional Communication Undergraduate Certificate

Speaker: Benjamin Barton

Discussion: Stacy Isenbarger said she was concerned about the generality of the language used in the course description and that it wouldn't be applicable for specific professions, thus not being an effective certification on a resume. Francesca agreed, sharing examples where the professional communication skills needed may differ, such the communication skills needed for lawyers vs scientists.

Jerry argued that the course list is intended to be general, and the coursework appears to follow that goal in preparing students for a variety of professions.

Erin noted that this certificate was very similar to an existing English minor (professional writing), with both the program description and learning outcomes appearing to share much of the same language. She said that she did not doubt that the programs functioned differently, but the broad articulation mentioned by Stacy may cause issues in the future.

Stacy asked the representative, Benjamin Barton, if they would be willing to adjust the curriculum to make the certificate less discipline specific. He replied that he as the chair of the department would be willing to, but he was almost certain that the communication department would not. He clarified that the concern was it may make it difficult for other departments to create new programs in the future because it was general, and many of the committee members agreed.

Jerry asked for clarification on if Erin and Stacy agreed with the core concept of the certificate, and they both agreed, stating that it was the execution that they were concerned about, particularly with the program description and learning outcomes.

From the discussion that ensued, Dave summarized that the proposal would be sent back to have the program description, learning outcomes, and title be revised to be more discipline specific. He also suggested that the proposal author reach out to Erin and Stacy to ensure their questions were answered before the certificate is reviewed again.

Outcome: Rolled back for edits

VII. Chair Dave Paul closed the meeting at 5:04.

Sydney Beal UCC Secretary