Committee on Curriculum
April 6, 2016
Meeting Minutes

Voting Members present: Bujanovic, Cohen, Dibble, Reuter, Shannon (for Wheeler), Verostek, Tao, Wagner, Stavenhagen

Guests and others present: C'Dealva-Lenik, Fortier, Newman, Ramarao, Sanford

Unable to attend: Batorsky, Donaghy, Rutkowski

1) Call to Order. The meeting was called to order at 12:46 pm

2) Approval of Minutes from March 9, 2016 meeting. Reuter reported that the curriculum actions taken at the last meeting were subsequently unanimously approved by Academic Governance. The minutes from the March 9 Committee on Curriculum meeting were approved unanimously.

3) Announcements

i) Proposals posted for CoC and faculty review:

EFB 696 Special Topics in Environmental and Forest Biology (new)

ii) Proposals submitted for CoC completeness review:

BS in Renewable Materials Science (major revision of Paper Science program)
EFB 438/638 Phytoremediation (new)
EFB 492 Senior Synthesis in Aquatic/Fisheries Science (revision)
EFB 306 Plants and Culture (new, Gen Ed)

iii) Recent Administrative Approvals

EFB 434/634 (additional changes)
EFB 434/634 (more additional changes)
Env. Studies Plan Sheet Revision

4) Updates from the Dean. There were no updates from the Dean, other than that outlined below.

5) Old Business:

i) Guidance document for differentiation between course levels. There has been no progress in the creation of this document.

ii) Catalog updates – deleting courses. C'Dealva-Lenik reported that he had heard from Russ Briggs that Environmental Science would shortly be sending a list of course drops for administrative approval.

iii) Proposals for action tabled from last meeting.

BS in Environmental Science - Renewable Energy Option Area. Due to an inadequate quorum at the end of the last meeting, this item had been tabled for vote. There being no additional comments, the proposal was approved unanimously.

BS in Biochemistry. Due to an inadequate quorum at the end of the last meeting, this item had been tabled for vote. There being no additional comments, the proposal was approved unanimously.

iv) Introduction and promotion of certificate programs. Shannon noted that this item was merely a heads-up on the desire of SUNY to see more completions. Any type of completion will be taken into account, which points to the growing importance of Certificates. A lot may be said about the designing of shorter term Certificates that may serve several audiences, i.e. matriculated students, the professional community, and others. Wagner asked if the Certificate programs would be exclusively at graduate level. When Shannon answered that they could also be at undergraduate level, Wagner asked if a minor could be turned into an undergraduate certificate. Shannon responded that it was his understanding

that they could, as neither SUNY nor SED has provided any clear criteria as to what comprises a Certificate. While learning outcomes have not historically been required for minors, they are increasingly being encouraged, and will definitely be required for Certificates, which must be registered with SUNY and SED. Wagner asked if Middle States would be looking at Certificates at both the undergraduate and the graduate level, to which Shannon replied that both would be taken into account. Wagner pointed out that, if shared resource courses are involved, a minor could end up becoming both an undergraduate and a graduate Certificate program. Shannon said that this was possible, but that there would need to be a clear distinction between the levels of Certificate. Wagner commented that this would be a low-cost solution to providing certificate programs. Shannon stated that he had been looking at opportunities for using 5xx-level courses so that undergraduates would be able to obtain an advanced certificate at the same time as they graduate with their undergraduate degree. Wagner noted that if a course is offered as a shared resource course then if the student took the graduate level option they could qualify for an advanced Certificate. Shannon agreed but pointed out that while this is a possible scenario for elective courses; required courses present a different issue. Cohen pointed out that it looked like a student could complete a Certificate within their four years of undergraduate coursework. Shannon explained that, for example, wildlife majors could obtain a professional qualification and an advanced certificate all while studying for their four-year undergraduate degree. SUNY is encouraging campuses to look at Certificates as a means of increasing completions. Currently, ESF has approximately ten Certificate Program graduates per year. Within 10 years SUNY would like to see 500 per year. No additional resources will be provided by SUNY to accomplish this, so many Certificate programs would result from a re-framing of sections of current programs. Currently, we only reward students for a full degree, whereas there are a lot of skills and knowledge that are worth being bundled into smaller packages. Wagner asked who would be the target market for these programs. Shannon responded that both our already-matriculated students and post-graduate professionals would be the main markets. Since the programs would not be low-level, we will not be looking at non-matriculated students without a prior degree. AAS students, particularly those from the Ranger School, would be welcome. Sanford asked how we were expected to get to 500 per year, and wondered if online courses/Certificates would be a factor. Reuter noted that there is no guidance as to the credit requirements for a Certificate, nor for the time period required to take these credits. Shannon pointed out that several professional organizations require continuing education coursework, and cited Forestry, Engineering and Landscape Architecture as examples. Bujanovic questioned the expectations for completions (from 10 to 500 in 10 years) and asked where the students would come from. Shannon explained that currently most Certificate students are ESF students, with a few visiting students in the Bioprocessing and Radiation Curing Certificate Programs. SUNY doesn't care where the students come from; the point is that the Government is throwing money at education and yet completions are declining. Tao pointed out that many Certificate programs are revenue producers, and asked if ESF students would have to pay additional tuition. Shannon replied that they would not. With regard to standards, visiting/external students would still have to apply to enter a Certificate program, so controls would be in place to maintain quality. Wagner asked if Certificate programs were a means to be able to attract students who currently would be interested in 2-year college programs. The response was yes, but only if they fulfilled the requirements to enter the program. Students with AAS degrees would also be potential Certificate students, especially those coming from the Ranger School. C'Dealva-Lenik noted that a rate of 500 Certificate completions per year would possibly involve one-third of the student body, and asked what kind of programs were being devised currently. Shannon explained that we have a high degree of expertise in GIS, and a 3-course Certificate in GIS, perhaps incorporating courses from different departments, would easily produce 100 Certificate completions per year. New revenue would be coming in from visiting student tuition and fees, and Shannon, Bob French and Valerie Luzadis would be sitting down to work out how this revenue would be fed back to the departments. Bujanovic asked if the number of credits for Certificates is defined, and whether a Certificate would require less credits than a minor. Shannon noted that, while SEC has not clearly defined any limits, it may begin to implement them in the future, and that he sees a Certificate to be mainly a 9-12 credit program. Stavenhagen noted that in order to be competitive, courses will increasingly need to be online. Shannon agreed, and noted that this is where an increase in revenue will come in.

Stavenhagen pointed out that professional taking Certificate programs may prefer evening classes, and Shannon stated that adjuncts may be used if current faculty are hesitant to teach an additional class. Wagner asked why an instructor would take on an additional class, to which Shannon responded that there was a potential for additional compensation. Wagner also wanted to know about the infrastructure available for online classes, and Shannon pointed out that Blackboard is a good tool to provide discussion boards and high quality interaction. Wagner noted that Blackboard is "clunky," but Shannon explained that, if the content is kept technically simple, Blackboard has a lot of capability. If a face-to-face (talking head) component is desired, Adobe Connect can additionally be used. Wagner thought he would like to see an example. Reuter noted that on May 9 Chuck Spuches will be present at the meeting to introduce the SUNY Open Academy concept, including the additional staffing and resources to be provided to help deliver course content.

6) New Business:

i) Proposals for action:

SRE 619 Energy Policy Assessment Methodologies. Dibble had some problems with the inclusion of items in the major concepts vs. learning outcomes, but noted that this was not enough to prevent the course from going forward, especially since its shared resource undergraduate course had already been approved. With no further discussion, the course was approved unanimously.

SRE 679 Life Cycle Assessment. Approved unanimously with no discussion.

BPE 650 Advanced Catalysis and Surface Reactions and BPE 658 Advanced Biocatalysis. Ramarao explained that both BPE 650 and BPE 658 build off prior knowledge of bioprocess kinetics and are meant for PhD students. Dibble had a problem with the prerequisites for both courses, and thought they should be more specific. It is unclear whether chemistry graduate students would be able to take the class. Ramarao stated that instructor approval would be needed, to which Dibble responded that this should be an official prerequisite, or else anyone would be able to sign up for either course. Wagner noted that, with regard to the Learning Outcomes for both courses, "understand" is not an outcome, as it is not measurable. He referred the proposer to Bloom's Taxonomy for higher knowledge action groups and suggested that the courses' learning outcomes be revised accordingly. C'Dealva-Lenik asked that there be more detail in the catalog descriptions of both courses, as students need more information than available in the descriptions provided by these proposals before deciding to take the course. It was decided that the learning outcomes and course catalog description and prerequisites for these two courses would need to be revised and the proposals resubmitted before approval by the Committee.

FOR 404 Ecotourism Abroad C'Dealva-Lenik noted that the proposed course is an advanced-level undergraduate course with no prerequisites. There followed some discussion regarding the need for prerequisites for a higher level undergraduate course. Sanford noted that many 400-level courses have no prerequisites, as there is an expectation that the student is a junior or senior. Dibble was not convinced, and noted that most 300- and 400-level courses in Chemistry have prerequisites. Shannon commented that while there are guidelines for the course numerical system, there are many courses that do not fit these guidelines, and there are many disciplines, unlike Chemistry, that do not require programs to be structured like building blocks. Bujanovic asked whether a freshman could take a 400-level course, to which Shannon replied that s/he is welcome to try, although expectations would be higher than those in courses a freshman is normally expected to take. Cohen noted that, even if there are prerequisites for a course, instructors cannot stop a student from taking it. Shannon did not think that there was a need for this degree of paternalism, and that ESF relies upon the student's ability to register for courses appropriate to his or her level. The course was approved as is, with one abstention, and with a friendly amendment to remove some extraneous wording from the catalog description.

EFB 326 Plant Evolution, Diversification and Conservation. There being no comments on this course proposal, it was approved unanimously.

RMS 200 Renewable Materials. Bujanovic stated that this course will act as a required course a major revision of the Paper Science program. It will be required for all three options of the new program revision. It presents a basic overview of three types of materials. The proposal as presented had been revised according to comments received during the faculty review period. C'Dealva-Lenik said that students are excited an dlookinng forward to the proposal for the revised program. Bujanovic noted that the course was a combination of lecture and lab. With no further discussion, the proposal was approved unanimously.

RMS 465 Renewable Materials and Surfaces. Bujanovic explained that this is a more advanced course that RMS 200, and that they are to be taken in sequence. C'Dealva-Lenik noted that there would be more than a year elapsing between the two courses. With no further discussion, the proposal was approved unanimously.

BPE 623 Chemistry of Lignocellulosic Biomass. This course has been taught as a Special Topics class for seven years. The proposer (Bujanovic) clarified the prerequisites, and noted that she had satisfactorily addressed written comments from Dibble. With no further discussion, the proposal was approved unanimously.

ii) Curriculum changes approved administratively. Tabled to next meeting due to time constraints.

iii) Other. No other business.

The meeting was adjourned at 1:53 pm.

Action Items:

Newman to make friendly amendments to FOR 404 before posting.