

## **Graduate Council Meeting Minutes**

Thursday, May 5 2022 Remotely with Google Meet 3:30pm -5:00pm

**Present:** Renee Scapparone, Becky Copper-Glenz, Brady Chen, Amy McGlothlin, Petri Flint, Deborah Stone, Lynn D'Agostino, Viera Lorencova, Michael Hoberman and Soumitra Basu.

**Absent:** Nancy Murray, Laura Baker, Barbara Cormier and Jennifer Murray

**Guests:** Jim Alicata, Nirajan Mani, Lyndsey Benharris, Margaret Hoey and Anne Howard

### **Review of the Minutes from the April 7, 2022 Meeting**

Motion to Approve: Amy McGlothlin

Second: Becky Copper-Glenz

Vote: Unanimous Approval

**Update from the Registrar's office** – Non-Substantive Program Change Request Review – Dues to the absence of the Registrar, this item was delayed/not discussed.

### **Proposals**

#### **GCE 21-22-30 New Program – Graduate Vocational Technical Teacher – Engineering Technology**

Motion to Review: Deborah Stone

Second: Amy McGlothlin

Discussion: Presented By James Alicata.

We have a vocational teacher licensure/certificate program where we provide all of the courses necessary for a teacher to get professional licensure. The program is currently only available at the undergraduate level. We have found that there are a number of students seeking this program who are looking for graduate level courses as they already have an undergraduate degree. All of the courses needed are already offered through the M.S. Occupational Education program. There was a question regarding whether or not the courses that were part of this program were reviewed and approved by the School of Education. It was discussed that the courses were previously approved for the M.S. Occupational Education program through the University governance process. Nirajan Mani confirmed that the proposal was discussed at the Engineering Technology department level and approved by the department. The need to involve Fitchburg's School of Education was discussed and Amy McGlothlin confirmed that at the University leaves subject specific programs and courses to the discipline specific departments to manage. Also, Amy mentioned that for licensure programs, the guidelines are set by DESE and if a program meets DESE requirements, that is the most important thing.

Motion to Approve: Deborah Stone

Second:

Vote: Unanimous Approval

**GCE 21-22-31 Program Change – Early Childhood - Education**

Motion to Review: Amy McGlothlin

Second: Becky Copper-Glenz

Discussion: Presented by Lyndsey Benharris.

The curriculum in the graduate Early Childhood and Elementary Education programs was aligned a few years ago as the programs are small and the School of Education wanted to combine required courses as needed to increase class sizes. At that time, it was important to include a course on assessment which was EDUC 8500. Since that time the topic of assessment has been built into some of the required courses and the course is not a course needed for licensure so the department wants to remove it as a requirement and make it an elective. This will also drop the number of credits needed for the program to 39 instead of 42.

Motion to Approve: Amy McGlothlin

Second: Deborah Stone

Vote: Unanimous Approval

**GCE 21-22-32 New Course – SPED 8035 – Special Education**

Motion to Review: Amy McGlothlin

Second: Deborah Stone

Discussion: Presented by Anne Howard.

We have a graduate certificate program in Autism which was developed in alignment with the state endorsement requirements for teachers of students with autism. Our certificate has to include a 150 hours of fieldwork to align with the state requirements. This 150 hour fieldwork requirement is very difficult for all students to get and some students do not want the endorsement but just want the content. There are 3 courses that could be offered without the fieldwork requirement; therefore those 3 courses will be alerted to eliminate the fieldwork but will be cross-listed with those courses that require the fieldwork so all students in these courses will receive the same content, but only those that need the fieldwork will have that requirement. SPED 8035 is one of those courses.

Motion to Approve: Amy McGlothlin

Second: Deborah Stone

Vote: Unanimous Approval

**GCE 21-22-33 New Course – SPED 8030 – Special Education**

Motion to Review: Lynn D'Agostino

Second: Amy McGlothlin

Discussion: Presented by Anne Howard.

We have a graduate certificate program in Autism which was developed in alignment with the state endorsement requirements for teachers of students with autism. Our certificate has to include a 150 hours of fieldwork to align with the state requirements. This 150 hour fieldwork requirement is very difficult for all students to get and some students do not want the endorsement but just want the content. There are 3 courses that could be offered without the fieldwork requirement; therefore those 3 courses will be alerted to eliminate the fieldwork but will be cross-listed with those courses that require the fieldwork so all students in these courses will receive the same content, but only those that need the fieldwork will have that requirement. SPED 8030 is one of those courses.

Motion to Approve: Lynn D'Agostino

Second: Amy McGlothlin

Vote: Unanimous Approval

### **GCE 21-22-34 New Course – SPED 8044 -Special Education**

Motion to Review: Lynn D'Agostino

Second: Amy McGlothlin

Discussion: Presented by Anne Howard.

A course in advanced topics in teaching mathematics to students with disabilities. We used to have a graduate professional license degree program for Special Education in Moderate and Sever Disabilities but we no longer have that program. Those students are now moving into the Special Education Guided Studies program and looking for advanced courses like this one. This course is designed for individuals who are looking to identify and understand more advanced strategies for teaching math to students with disabilities. This was a topics course last fall and based on that experience the course was updated for this official update/request. This course is meant to be offered once a year.

There was a question about the guidelines for the faculty member teaching this course. It was confirmed that the person who will be teaching the course should have a doctorate in education and background in teaching mathematics. It was confirmed that Graduate Council does not confirm assessment methods for courses as those are determined by the department.

A comment was made to include the graduate grading scale rubric. It was also confirmed that the Dean's signatures are on file for this proposal.

Motion to Approve: Deborah Stone

Second: Becky Copper-Glenz

Vote: Unanimous Approval

### **GCE 21-22-35 New Course – Temporary Structures- Engineering Technology**

Motion to Review: Deborah Stone

Second: Michael Hoberman

Discussion: Presented by Nirajan Mani.

This is a 3- credit elective course for the program. This course focuses on a study of structural design and analysis concepts of temporary structures used in the construction process. It includes formwork design, scaffolding, support excavation systems, equipment for hoisting materials, personnel, and erecting structures, and other material handling equipment and staging.

There was a question about the numbering of the courses and the rationale for the 8000 level courses. Nirijan explained that there are 7000 level courses that serve as foundational level courses and the 8000 level courses are meant to represent a higher level.

There was also a question about the expected enrollment in the course of 12 students for the first course. Nirijan explained that we feel there is a lot of demand locally and regionally and without much competition. Becky Copper-Glenz also confirmed that the number were discussed and reviewed.

The academic dean approved and confirmed.

Motion to Approve: Deborah Stone

Second: Amy McGlothlin

Vote: Unanimous Approval

### **GCE 21-22-36 New Course – Construction Law and Contracts - Engineering Technology**

Motion to Review: Becky Copper-Glenz

Second: Deborah Stone

Discussion: Presented by Nirajan Mani.

This course provides in-depth knowledge of the construction process and construction contract documents, exploring typical legal disputes which arise among developers, contractors, subcontractors, architects, and engineers. The course will examine the statutory and common law liabilities which attach once the construction process has been completed, with an emphasis on the rights and remedies of those who purchase defectively constructed or designed homes and buildings.

Motion to Approve: Amy McGlothlin

Second: Soumitra Basu

Vote: Unanimous Approval

### **GCE 21-22-37 New Course – Modular Construction - Engineering Technology**

Motion to Review: Becky Copper-Glenz

Second: Amy McGlothlin

Discussion: Presented by Nirajan Mani.

This course provides knowledge of modular construction including, advantages, disadvantages, impediments, industry status, business case process, execution plan, critical success factors, and standardization strategy of modularization.

Motion to Approve: Soumitra Basu  
Second: Lynn D'Agostino  
Vote: Unanimous Approval

**GCE 21-22-38 New Course – Risk Management- Engineering Technology**

Motion to Review: Deborah Stone  
Second: Becky Copper-Glenz

Discussion: Presented by Nirajan Mani.

This course is designed especially for graduate level students with focus on identifying and managing risks at the project level. The project could be a major architectural, engineering, construction (AEC) project, a civil-infrastructure project, or a new/innovative technological based project. This is a 9000 level course as it is an advanced course.

Modern engineering-driven projects are often complex and risky. With a special emphasis on built facilities and infrastructure projects, this course develops tools and methodologies appropriate for decision making under uncertainty.

There was a question about specifying what AEC means. Nirajan indicated he can update this.

There was a question about how we determine the statistics background of students. Nirajan indicated a specific background is not needed as there is already a statistics component built into the course to assist students in getting up to speed. There was a suggestion to provide a preview in the description about the expected statics knowledge needed.

Motion to Approve: Lynn D'Agostino  
Second: Soumitra Basu  
Vote: Unanimous Approval

**GCE-21-22-39 New Course – Construction Engineering Management**

Motion to Review: Becky Copper-Glenz  
Second: Deborah Stone

Discussion: Presented by Nirajan Mani.

The Construction Engineering Management course is designed and structured to equip students with the required technical competencies and the necessary skill sets in managing construction and engineering projects, project delivery methods, construction planning, estimating, scheduling, resource management, life-cycle analysis, and construction project control processes.

It was confirmed there are 2 pre-req courses needed.

There was a question regarding outcome number 5 and it was recommended that the language be updated or confirmed. There was a term “crash scheduling” that may be unfamiliar to some.

Motion to Approve: Brady Chen  
Second: Deborah Stone  
Vote: Unanimous Approval

**GCE 21-22-40 New Course –Construction Safety - Engineering Technology**

Motion to Review: Becky Copper-Glenz  
Second: Soumitra Basu

Discussion: Presented by Nirajan Mani.

The course includes the application of management principles, communication and human relations factors, safety/health rules, industry and federal standards, accident investigation, and technical issues especially within the job planning and construction phases.

There was a question related to rationale and outcomes #5, a request to remove the word “many” from the last sentence? This was a friendly amendment.

Motion to Approve: Amy McGlothlin  
Second: Lynn D’Agostino  
Vote: Unanimous Approval

**GCE 21-22-41 New Course – Special Project in Construction Management - Engineering Technology**

Motion to Review: Deborah Stone  
Second: Lynn D’Agostino

Discussion: Presented by Nirajan Mani.

The course requires individual effort that is overseen by the course instructor (special project advisor). The preparation and presentation of special project is the culminating experience in the M.S. in Construction Management Program. Students are expected to work with a high level of self-motivation. Successful students exercise initiative and exhibit strong communication skills in working with their advisors.

There was a question of whether or not this is a capstone course. It was confirmed that this course is a capstone for those students that choose not to complete a thesis.

Motion to Approve: Amy McGlothlin  
Second: Deborah Stone  
Vote: Unanimous Approval

### **GCE 21-22-42 New Course –Construction Management Thesis- Engineering Technology**

Motion to Review: Lynn D’Agostino

Second: Soumitra Basu

Discussion: Presented by Nirajan Mani.

The course requires individual effort that is overseen by the course instructor (Thesis Advisor). The preparation and defense of master’s thesis is the culminating experience in the M.S. in Construction Management Program. Students are expected to work with a high level of self-motivation. Successful students exercise initiative and exhibit strong communication skills in working with their advisors and committee members. There will be a 3-person committee formed to review the students work.

There was a question as to whether or not this aligned to Plan 1. Is this organized like a course? Do students need to complete within the semester? It was confirmed that students can complete all 6 credits in one semester or complete 3 credits across 2 semesters. This will be a friendly amendment of making this course a 3 and/or 6 credit option.

There was a question as to whether or not students can choose their thesis members or does the program director decide? It was confirmed that a student can ask a faculty member from the department who has background in Construction Management, can they choose that person as their advisor or program member? Nirajan confirmed that the chair must be from the Engineering and Technology Department but any faculty member at the University could serve as a member if they have a related background to the thesis

Item #7 in the rationale there is a type. It was recommended to make an update “contribute to the body of knowledge”.

There was also a friendly amendment to add the research methodology course as a pre-req for this course.

Motion to Approve: Amy McGlothlin

Second: Deborah Stone

Vote: Unanimous Approval

### **GCE 21-22-43 New Course –Building Information - Engineering Technology**

Motion to Review: Deborah Stone

Second: Becky Copper-Glenz

Discussion: Presented by Nirajan Mani.

his course focuses on the skills and information needed to effectively use an existing Building Information Model (BIM) for construction engineering and management practices. This is a project-based course where students gain knowledge on the implementation of BIM concepts throughout the lifecycle of a building, from planning and design, to construction and operations.

Motion to Approve: Lynn D’Agostino

Second: Amy D'Agostino  
Vote: Unanimous Approval

**GCE 21-22-44 New Course –Research Methodology CM- Engineering Technology**

Motion to Review: Lynn D'Agostino  
Second: Soumitra Basu

Discussion: Presented by Nirajan Mani.

This course introduces and discusses approaches, strategies, and data collection methods relating to research in engineering and construction management. Students will consider how to select the appropriate methodology for use in a study to be performed. Students will learn how to collect data based on different data collection methods, construct these tools, and pilot them before they become ready for use. This course elucidates the requirements for an academic work, considering aspects related to language, writing style, and lay-out. To culminate this final stage, students will learn to write a comprehensive research proposal (thesis and/or special project report) that may be conducted in the future.

There was a question as to why this was an 8000 level vs 9000. Nirajan confirmed because this course is a foundational course to prepare students to do the thesis.

There was a question if quality metrics will be part of this courses as well and Nirajan confirmed it will.

It was confirmed there are no pre-reqs for this course.

Motion to Approve: Amy McGlothlin  
Second: Becky Copper-Glenz  
Vote: Unanimous Approval

**GCE 21-22-45 New Course –Improvement in Construction- Engineering Technology**

Motion to Review: Lynn D'Agostino  
Second: Deborah Stone

Discussion: Presented by Nirajan Mani.

This course includes a comprehensive systems approach to construction productivity management; labor productivity; improved methods in construction; various techniques of work sampling and productivity measurement; and current innovations in the construction industry for increasing efficiency.

It was confirmed that no pre-reqs are required.

Motion to Approve: Becky Copper-Glenz  
Second: Lynn D'Agostino  
Vote: Unanimous Approval



**GCE 21-22-46 New Course –Construction Scheduling- Engineering Technology**

Motion to Review: Becky Copper-Glenz

Second: Lynn D’Agostino

Discussion: Presented by Nirajan Mani.

This course provides the in-depth knowledge and skills in project scheduling and resource optimization. It covers short-interval scheduling, Gantt charts, linear, matrix scheduling formats, and network techniques including CPM and PERT concepts and calculations. Students will learn computer-based scheduling and resource optimization skills.

It was confirmed that there are no pre-reqs for this course.

Item #4 under rationale/expected outcomes, recommend adding an explanation regarding what the acronyms stand for.

Motion to Approve: Amy McGlothlin

Second: Deborah Stone

Vote: Unanimous Approval

**GCE 21-22-47 New Course –Construction Cost Analysis - Engineering Technology**

Motion to Review: : Lynn D’Agostino

Second: Soumitra Basu

Discussion: Presented by Nirajan Mani.

This course provides the in-depth knowledge of principles and procedures used in estimating construction projects and cost analysis. It covers application of quantity determination, estimate pricing, specifications, subcontractor and supplier solicitation, risk assessment and risk analysis, and final bidding preparation. Students will learn computer-based estimating skills through a semester project.

Are all of the courses independent or are there any pre-reqs? Nirajan confirmed only 2 courses have pre-reqs.

Motion to Approve: Lynn D’Agostino

Second: Soumitra Basu

Vote: Unanimous Approval

**GCE 21-22-48 New Program – Construction Management**

Motion to Review: Lynn D’Agostino

Second: Amy McGlothlin

Discussion: Presented by Nirajan Mani.

The online M.S.C.M. program is comprised of advanced courses in construction management with two plan options: plan 1 (Thesis Option) and plan 2 (Special Project Option); for a total of 30 credits. Students must be admitted and confirm their intent to enroll in order to register for these 15-week courses. If students are able to pass courses as per suggested plan of study, they will be able to graduate within three semesters.

There was a question about electives and it was confirmed that some there are several options available for students to pursue an area of interest.

There was a question about pre-reqs for admission into the program. There are no specific requirements for admission.

Motion to Approve: Soumitra Basu

Second: Lynn D'Agostino

Vote: Unanimous Approval

#### **GCE 21-22-49 New Course —SPED 8031 – Special Education**

Motion to Review: Deborah Stone

Second: Lynn D'Agostino

Discussion: Presented by Anne Howard

We have a graduate certificate program in Autism which was developed in alignment with the state endorsement requirements for teachers of students with autism. Our certificate has to include a 150 hours of fieldwork to align with the state requirements. This 150 hour fieldwork requirement is very difficult for all students to get and some students do not want the endorsement but just want the content. There are 3 courses that could be offered without the fieldwork requirement; therefore those 3 courses will be alerted to eliminate the fieldwork but will be cross-listed with those courses that require the fieldwork so all students in these courses will receive the same content, but only those that need the fieldwork will have that requirement. SPED 8031 is one of those courses.

There is a friendly amendment to update that title of the Proposal to match the Syllabus.

Motion to Approve: Deborah Stone

Second: Lynn D'Agostino

Vote: Unanimous Approval

**New Business** –. No other new business.

**Motion to Adjourn:** Everyone

Second: Everyone