UMBC UGC Instructions for Change in Existing Course Form (Revised 2/2015)

Course number & title: Enter the current course number and title of the course at the top of the page.

Date submitted: The date that the form will be submitted to the UGC.

Effective date: The semester that the change will be effective, if approved.

Contact information: Provide the contact information of the Chair or UPD of the department housing the course. If the course is not housed in a department or program, then provide the same information for the head of the appropriate academic unit. (See UGC Procedures.) If another faculty member should also be contacted for questions about the request and be notified about UGC actions on the request, include that person's contact information on the second line.

Course information: Provide all of the current information for this course. Check the "change" column for aspects of the course that will be changed by this proposal and provide the specific changes. Unchanged fields may be left blank under the "proposed" column. *Note: all 300- and 400-level courses must have prerequisites or recommended preparation.*

Course number: For cross-listed courses, provide all the numbers for the course.

Transcript title: Limited to 30 characters, including spaces. Leave the current transcript title blank if this is not known.

Recommended Course Preparation: *Please note that all 300 and 400 level courses should have either recommended course preparation(s) or prerequisite(s) and that 100 or 200 level courses may have them.*
Here fill in what previous course(s) a student should have taken to succeed in the course. These recommendations will NOT be enforced by the registration system. Please explain your choices in the "rationale" (discussed below).

Prerequisite: *Please note that all 300 and 400 level courses should have either recommended course preparation(s) or prerequisite(s)* Here fill in course(s) students need to have taken before they enroll in this course. These prerequisites will be enforced through the registration system.   Please explain your choices in the "rationale" (discussed below).

NOTE: Please use the words "AND" and "OR", along with parentheses as appropriate, in the lists of prerequisites and recommended preparation so that the requirements specified will be interpreted unambiguously.

NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a "D" or better.

Maximum total credits: This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.

Grading method(s): Check all that apply.

Current catalog description: Provide the course description as it appears in the current undergraduate catalog or since the last UGC-approved change.

Proposed catalog description: If this proposal involves a change in the course description, provide the exact wording of the course description as it will appear in the next undergraduate catalog. Course descriptions should be a) no longer than 75 words, b) stated in complete sentences, and c) avoid reference to specific details that may not always pertain (e.g., dates, events, etc.). Leave blank if this proposal does not change the course description. Course descriptions should not repeat information about prerequisites (which are always listed alongside the course description).

Rationale: Provide a brief explanation for the need for the proposed changes.

Cross-listed courses: Requests to change cross-listed courses must be accompanied by letters of support via email from all involved department chairs. Proposals for the addition of a cross-listing to an existing course must include as a part of the rationale the specific reason why cross-listing is appropriate. Email from all involved department chairs is also required when cross-listing is removed and when a cross-listed course is discontinued.   Please note that Special Topics cannot be cross-listed.

Note: the UGC form is a Microsoft Word form. You should be able to enter most of the information by tabbing through the fields. The document is protected. In the rare case that you need to unprotect the document, use the password 'ugcform'. Beware that you will lose all the data entered in the form's fields if you unlock and lock the document.

UMBC UGC Change in Existing Course: CMPE451 Capstone II

Date Submitted: 3/6/2019 revised 4/2/2019   Proposed Effective Date: Fall 2019

	Name	Email	Phone	Dept
Dept Chair or UPD	E. F. Charles LaBerge	elaber1@umbc.edu	5-5684	CSEE
Other Contact	Anupam Joshi	joshi@umbc.edu	5-2733	CSEE

COURSE INFORMATION: (please provide all information in the "current" column, and only the information changing in the "proposed" column)

change		current	proposed
☐	Course Number(s)	CMPE451	
☐	Formal Title	Capstone II	
☐	Transcript Title (≤30c)	Capstone II	
☐	Recommended Course Preparation	[no change]	
☐	Prerequisite **NOTE:** Unless otherwise indicated, a prerequisite is assumed to be passed with a "D" or better.	[no change] Note: SA is correct, but the catalog is wrong as of 1/31/2019	
☒	Credits	2	3
☐	Repeatable?	☐ Yes ☒ No (not for add'l credit, but student may take twice)	☐ Yes ☐ No
☐	Max. Total Credits	[n/a]	**Max. Total Credits:** This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.
☐	Grading Method(s)	☒ Reg (A-F) ☐ Audit ☐ Pass-Fail	☐ Reg (A-F) ☐ Audit ☐ Pass-Fail

CURRENT CATALOG DESCRIPTION:

The computer engineering capstone course is unique in that it comprises two separate modules called CMPE 450 and CMPE 451, with these modules being taken during the consecutive Fall and Spring semesters. The course is designed to allow students completing the computer engineering curriculum to engage in a complete project design experience. This will help them to integrate the various technical concepts they have learned in the prior courses they have engaged. The course aims to impart a foundation in team leadership and project management ability that will allow graduates to move with purpose, positively impacting the concerns they soon will join. Engineers in industry solve problems that simultaneously resolve budgetary, time, technical and sometimes social, ethical and environmental constraints. Students will enjoy an experience that closely matches the aforementioned environment.

PROPOSED CATALOG DESCRIPTION (no longer than 75 words**):** leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.)
This is the second half of a two-semester capstone experience, taken in consecutive Fall and Spring semesters. Students to engage in a complete project design experience over two semesters, integrating the technical concepts learned in prior courses. Entrepreneurship, team leadership and project management skills are emphasized. Students function in a classroom environment that closely simulates professional and entrepreneurial practice including budgetary, time, technical and sometimes social, ethical and environmental constraints.

Note to UGC: This wording was approved at the same time as the CMPE450 wording was updated (April 2016), but the revised wording has never appeared in SA or the Course Catalog.

RATIONALE FOR CHANGE:

The proposal is to change the number of credits for CMPE451 Capstone II from two (2) credits to three (3) credits.

Capstone II has long been a two credit course, despite the fact that it is scheduled for four hours per week. As originally constituted, the course was principally a lab-based, project-oriented course, with limited lecture content. While it still has a significant lab/design-based element, over recent years it has been expanded to included lectures on design process, entrepreneurship, project management, engineering ethics and professional practice. It expects a significant amount of out-of-classroom effort. With the additional content, it should be a three credit course. There is ample precedent for it being a three credit class.

CMPE212 is a four credit courses scheduled for four hours per week.
CMPE306 is a four credit courses scheduled for four hours per week.
CMPE310 is a four credit courses scheduled for four hours per week.
CMPE314 is a four credit courses scheduled for four hours per week.
CMPE315 is a four credit courses scheduled for four hours per week.
CMPE323 is a four credit courses scheduled for four hours per week.
CMPE471 is a lab-based three credit course scheduled for three hours a week.
ENME444 (the ENME Capstone course) is a three credit course scheduled for four hours a week.

This proposal is a companion proposal to changing CMPE450 Capstone I to three credits as well.

Changing both CMPE450 and CMPE451 to three credits brings the total number of credits required for the B.S. CMPE degree to 127, one less than the maximum of 128 approved by UGC in November 2010.

If approved, these changes will eliminate the difficulty to senior CMPE students imposed by the recent change of the Physical Education requirements.

Our request is that these changes be effective in Fall 2019, despite the fact that they will not be approved in time for initial Fall 2019 registration. Once approved for Fall 2019 implementation, they can be announced to the rising seniors in time to permit schedule adjustment as necessary.

This change was approved by the Undergraduate Program Committee for Computer Engineering on March 6, 2019.