

## UMBC UGC Instructions for Change in Existing Course Form (Revised 4/2016)

**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.

**# of credits:** To determine the appropriate number of credits to assign to a course please refer to the [UMBC Credit Hour Policy](#) which articulates the standards for assignment and application of credit hours to all courses and programs of study at UMBC regardless of degree level, teaching and learning formats, and mode of instruction.

**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):** Please review the [grading methods document](#) (this link can be found on the UGC forms page) before selecting a grading option. Please do not select all three grading options by default.

**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 including a pedagogical justification to any changes in course level:** 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: MATH 132 Math for Elem Tchrs II**

Date Submitted: 11/12/2019

Proposed Effective Date: Spring 2020

	Name	Email	Phone	Dept
Dept Chair or UPD	Bradford E. Peercy	<a href="mailto:bpeercy@umbc.edu">bpeercy@umbc.edu</a>	5-2436	Math/Stat
Other Contact	Janet Burgee	<a href="mailto:jburgeon@umbc.edu">jburgeon@umbc.edu</a>	5-2401	Math/Stat

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

change		current	proposed
<input type="checkbox"/>	Course Number(s)	MATH 132	
<input checked="" type="checkbox"/>	Formal Title	Mathematics for Elementary Teachers II	Mathematics for Elementary and Middle Grades Teachers II
<input checked="" type="checkbox"/>	Transcript Title (≤30c)	Math for Elem Tchrs II	Math for Elem/Middle Tchrs II
<input type="checkbox"/>	Recommended Course Preparation		
<input type="checkbox"/>	Prerequisite <b>NOTE:</b> Unless otherwise indicated, a prerequisite is assumed to be passed with a “D” or better.	You must have completed MATH 106 or MATH 106Y with a grade of “C” or better or scored a 3 on the LRC MATH placement exam to enroll in this course.	
<input type="checkbox"/>	# of Credits Must adhere to the <a href="#">UMBC Credit Hour Policy</a>	4	
<input type="checkbox"/>	Repeatable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	Max. Total Credits	4	<b>Max. Total Credits:</b> 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.
<input type="checkbox"/>	Grading Method(s)	<input checked="" type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail	<input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail

**CURRENT CATALOG DESCRIPTION:**

Continuation of MATH 131.

**PROPOSED CATALOG DESCRIPTION** (Approximately 75 words in length. Please use full sentences): leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.)

Topics include core concepts of Euclidean and non-Euclidean geometry, transformations, congruence, similarity, scaling, right triangles, trigonometry, geometric formula rationale, geometric constructions, axiomatic reasoning and proof, statistical variability, randomness, creation and implementation of surveys and statistical designs, data distributions, empirical and theoretical probability, and probability distributions. Note Enrollment is intended primarily for students pursuing teacher certification.

**RATIONALE FOR CHANGE:**

The new Middle Grades STEM Education BS degree includes MATH 132 as part of the mathematics course sequence. Based on feedback from the Maryland State Department of Education, the courses are being revised to better balance elementary and middle grades mathematics. Because the middle grades teacher certification is for Grades 4-9, the inclusion of elementary mathematics remains appropriate for the new program. The revision to include more emphasis on middle school mathematics makes the course even more appropriate for middle grades teachers and remains relevant for elementary teachers. Also, while Math 131 precedes Math 132 numerically they are in fact independent courses that may be taken in either order or simultaneously.