UMBC UGC Change in Existing Course: EDUC 426 - Mathematics in the Secondary School

Date Submitted: February 17, 2019   Proposed Effective Date: Fall 2019

	Name	Email	Phone	Dept
Dept Chair or UPD	Jonathan Singer	jsinger@umbc.edu	5-2465	Education
Other Contact	Linda Oliva	oliva@umbc.edu	5-2382	Education

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)	EDUC 426	EDUC 426
X	Formal Title	Mathematics in the Secondary School	Methods of Teaching Mathematics in the Secondary School
X	Transcript Title (≤30c)	Math In Secondary School	Methds Teach Math in Sec Schl
	Recommended Course Preparation	None	None
X	Prerequisite **NOTE:** Unless otherwise indicated, a prerequisite is assumed to be passed with a "D" or better.	EDUC 412	EDUC 412 with a B or better
	# of Credits Must adhere to the UMBC Credit Hour Policy	3	3
	Repeatable?	Yes X No	Yes X No
	Max. Total Credits		**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.
X	Grading Method(s)	X Reg (A-F) X Audit XPass-Fail	X Reg (A-F) X Audit Pass-Fail

EDUC 426 - Mathematics in the Secondary School
(3.00)

This course introduces mathematics teaching at the middle and high school levels, including: (1) secondary school mathematics content, (2) understanding and developing students' mathematical thinking; (3) designing, selecting, and sequencing mathematical tasks and assessments; and (4) your beliefs about mathematics learning and teaching and mathematics itself. The course emphasizes teaching for understanding; discovery learning; and representing mathematics with manipulatives, graphing calculators, Geometer's Sketchpad, and other technologies. Topics include innovative curricula for learning and teaching mathematical reasoning, problem solving, and proof; proportional reasoning; algebraic thinking; trigonometry; spatial reasoning, geometry, and measurement; and probabilistic thinking. A semester-long, one-day per week field experience is required. Students in this course also enroll in Phase I of the 100 day internship.

Course ID: 53516
Consent: Department Consent Required
Components: Lecture
Prerequisite/Corequisite: You must complete EDUC 412.

PROPOSED CATALOG DESCRIPTION (Approximately 75 words in length. Please use full sentences**):**

This course introduces mathematics teaching in Grades 7-12. Special emphasis is placed on college and career readiness. Students will explore methods for teaching mathematics equitably, teaching for conceptual understanding, thinking and reasoning, problem solving, appropriate use of tools and manipulatives including technology, assessment, and interdisciplinary connections. Field experiences are required for this course.

Course ID: 53516
Consent: Department Consent Required
Components: Lecture
Prerequisite/Corequisite: You must complete EDUC 412 with a B or better.

RATIONALE FOR CHANGE: The name change reflects a consistent listing of methodology courses. This description more accurately reflects the course content and scope.