UNIVERSITY OF MARYLAND GLOBAL CAMPUS (UMGC)
DEPARTMENT OF EDUCATION

Conceptual Framework (CF) Alignment: UMGCôs professional education unit instills in all candidates the belief that all students can learn and learn at high levels, and that they as teachers and teacher candidates are instrumental in ensuring that this learning occurs. This transcript review form is used for MAT admissions in conjunction with Key Assessments 2 ï Description of transcript analysis process, which aligns with CF Learning Objective 1: Teaching for Learning ï The candidate acts upon academic content, professional and pedagogical knowledge, and understanding of students to maximize student achievement. The use of this transcript review form also aligns with the Departmentôs Professional Dispositions category 1: Relationship with students through curriculum and instruction.

MAT TRANSCRIPT R

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Quantitative reasoning and relationships that include ratio, rate, and proportion and the use of units in problem situations Vector and matrix operations, modeling, and applications Historical development and perspectives of number, number systems, and quantity			
Knowledge of Algebra Algebraic notation, symbols, expressions, equations, inequalities, and proportional relationships Function classes Functional representations Patterns of change in linear, quadratic, polynomial, and exponential functions and in proportional and inversely proportional relationships Linear algebra Historical development and perspectives of algebra including contributions of significant figures and diverse cultures	College Algebra Linear Algebra		
Knowledge Geometry and Trigonometry Euclidean geometry in two and three dimensions and two-dimensional non-Euclidean geometries Transformations Congruence Right triangles and trigonometry Periodic phenomena and trigonometric identities Two- and three-dimensional objects	Trigonometry Analytical Geometry		

Geometric constructions, axiomatic reasoning, and proof Analytic and coordinate geometry including algebraic proofs Historical development and perspectives of geometry and trigonometry including contributions of significant figures and diverse cultures			

Sequences and series; Multivariate functions Applications of function, geometry, and trigonometry concepts to solve problems involving calculus Historical development and perspectives of calculus including contributions of significant figures and diverse cultures			
Knowledge of Discrete Mathematics Discrete structures Enumeration Propositional and predicate logic Applications of discrete structures such Historical development and perspectives of discrete mathematics including contributions of significant figures and diverse cultures	Discrete Mathematics		
		Total Credits:	

Note: Applicants may qualify to enter the MAT program with a content specialization in Mathematics if they have an undergraduate major in the certification area, or if they have completed 30 credit hours of coursework in Mathematics.

Secondary Mathematics, 7-12 Grade Teacher Certification

Full standards are available at NCTM: http://www.nctm.org/Standards-and-Positions/CAEP-Standards/