

University of Maryland University College (UMUC)
Department of Education

Conceptual Framework (CF) Alignment: UMUC’s 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 – Description of transcript analysis process, which aligns with CF Learning Objective 1: Teaching for Learning – 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 Department’s Professional Dispositions category 1: Relationship with students through curriculum and instruction.

MAT Transcript Review Form for Secondary Earth and Space Science, 7-12 Grade Teacher Certification - NSTA Standards 2003

NSTA Assessment Standards for Certification	Typical Courses Aligned with Standards (Course Samples)	Courses Completed (Include Prefix, number, and Name)	# of Credits
Demonstrate knowledge in characteristics of land, atmosphere, and ocean systems on Earth	<ul style="list-style-type: none"> • Physical Geology • Meteorology • Oceanography 		
Demonstrate knowledge of properties, measurement, and classification of earth materials	<ul style="list-style-type: none"> • Structural Geology • Mineralogy 		
Demonstrate knowledge of Changes in the Earth including land formation and erosion	<ul style="list-style-type: none"> • Environmental Geology • Study of Sedimentology & Stratigraphy 		
Demonstrate knowledge of earth and space sciences (ex. courses global climate change, energy flow, evolution, land, atmosphere, objects in universe)	<ul style="list-style-type: none"> • Earth and Planetary Fluid • Global Environmental Change 		

Demonstrate knowledge of hydrological features of the Earth	<ul style="list-style-type: none"> • Intro to Urban Watersheds • Hydrogeology 		
Demonstrate knowledge of the applications of the Earth and Space sciences and related technologies in society, business, industry and health fields	<ul style="list-style-type: none"> • Intro to Space, Science, & Technology • Intro to Astronomy 		
Demonstrate knowledge of origin, evolution, and planetary behaviors of the universe	<ul style="list-style-type: none"> • Stars & Stellar Systems • Collisions in Space: The Threat of Asteroid Impacts 		
Demonstrate knowledge of the practices of biology, chemistry, and physics (relating to evolutionary theory, electrochemistry, and thermodynamics)	<ul style="list-style-type: none"> • Biology/ Physics/ Chemistry Mathematics • Thermodynamics/ Electrochemistry 		
		Total Credits:	

Note:

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

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Full standards are available at NSTA: <http://www.nsta.org/preservice/docs/NSTASTandards2003.pdf>