

SCIENCE, TECHNOLOGY, ENGINEERING & MATH EDUCATION (STME)

STME 5001 - Planning for Learning in Mathematics and Science (3 Credits)

This course explores aspects of complex curriculum and instructional concepts through the lens of mathematics and science educators. A focus will include: Socio-cultural learning theory in Math and Science; standards-based instruction; instructional design; formative & summative assessment, and differentiation so that meaningful instruction becomes accessible to all students. Cross-listed with STME 4001. Max hours: 3 Credits.

Grading Basis: Letter Grade

STME 5051 - STEM Capstone: Secondary Education (3 Credits)

This course provides Secondary STEM Education students with a capstone learning experience that integrates knowledge of STEM content, students, and school context into socially-just and culturally responsive practices. Cross-listed with STME 4051. Restriction: Restricted to students in the Teacher MA or undergraduates in the BAMA. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: TCHR-MA plan or BMA subplan.

STME 7010 - Community-Engaged STEM Leadership (3 Credits)

In this learning opportunity, we will explore ways to think about informal and formal learning spaces with a lens of STEM Leadership. Restriction: Restricted to EDHD-PhD and LDRE-EDd majors within the School of Education and Human Development. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to EDHD-PhD and LDRE-EDd majors within the School of Education and Human Development.

Typically Offered: Fall.

STME 7020 - Power of Data (3 Credits)

In this course we will focus on uncovering the biases in research and data, support students in using data for public good, and employ methodological frameworks which help make sense of the complex intersectionalities between race, gender, and socioeconomic class. Max hours: 3 Credits.

Grading Basis: Letter Grade

Typically Offered: Spring.

STME 7030 - Decolonizing STEM spaces: Beyond Equity and Access (3 Credits)

In this course we will extend the equity and access conversations in educational spaces including STEM education by focusing on indigenous knowledge systems and ways of knowing. We will explore the epistemological frameworks and knowledge claims within this space. Max hours: 3 Credits.

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Grading Basis: Letter Grade