

GRAYCE WICALL GAUTHIER PROFESSORSHIP PRESENTS:

UBIQUITOUS LEARNING/STEM EDUCATION SERIES

TECHNOLOGY AS A VEHICLE FOR TRANSFORMING SCIENCE, ENGINEERING, & MATH EDUCATION



DR. ROXANA MORENO

ASSOCIATE PROFESSOR,
EDUCATIONAL PSYCHOLOGY,
UNIVERSITY OF NEW MEXICO

WHERE:

22 EDUCATION BUILDING

WHEN:

WEDNESDAY, May 13th 11-12:30PM

HOW MIGHT TECHNOLOGY SERVE THE GOAL OF PROMOTING THE TEACHING AND LEARNING OF SCIENCE, ENGINEERING, AND MATH EDUCATION?

This lecture will offer an answer to this question by reviewing the findings of a research program aimed at testing a cognitive-affective theory of learning with media. Based on this theory, Dr. Moreno makes the case for the need to **design instructional technology that reduces extraneous processing and increases essential and generative processing**. A corresponding set of principles for the design of interactive and non-interactive multimedia environments that has found empirical support will be presented.

Under the light of the results, Dr. Moreno will discuss the relation between **minds-on and hands-on activity** and the conditions under which technology-based environments might **promote students' learning and positive learning perceptions**. Finally, she will offer some productive directions for future instructional technology research and development.