This course will provide an interdisciplinary approach to integrating STEM into practice across the disciplines. The course will involve the participation in problem-based and project-based learning activities, mathematics and science learning tasks, and using technology to gain and display information. Project-based learning is becoming increasingly important in engaging today’s relevancy-oriented students. Use calculator controlled robot cars and NASA activities to apply math and science concepts to direct robots through a variety of challenges, collect motion data, explore rates of change and make predictions. Collect data with probes, sensors, the Calculator-Based Ranger 2™ data collection devices (CBR 2™) and the use of the TI-Nspire™ technology. Find mathematical models to describe the data sets and make essential connections between mathematics and science. Students love to see how math is connected to science and the real world. Participants will design and develop their own STEM learning activity.

Instructor: JoAnn Miltenberg has been in teaching for over 30 years, the last 20 at Farmingdale High School. She was trained in 2000 by NYSUT and Texas Instruments to give technology related professional development to teachers. As a T^3 (Teachers Teaching with Technology) Instructor, Miltenberg has lead professional development workshops, conference presentations and in-service training locally, statewide and internationally. She has received the following honors: Long Island University Teacher of the Year Award (2005), United States Department of Education American Star of Teaching Award for New York State (2005), Town of Oyster Bay Women of Distinction in Education Award (2006).