Jacqueline M. Dewar* (jdewar@lmu.edu), Department of Mathematics, Loyola Marymount University, Los Angeles, 90045, and Lily S. Khadjavi and Alissa S. Crans. Using the History of Women in Mathematics to Address Gender Equity and Prepare Future Teachers.

This talk will describe the content and outcomes of an interdisciplinary course on Women and Mathematics. The course uses the lives and contributions of women mathematicians throughout history to engage students in mathematical topics related to the work of these women, and to address gender equity issues from kindergarten to doctoral level experiences in mathematics education and in mathematics-related careers. Common themes emerge from examining the lives and work of women mathematicians past, which are still relevant today. We will address how the course encourages students, some of whom are future K-12 teachers, to adopt a more expert view of mathematics as a study of patterns (rather than of numbers), provides them with an opportunity to do math in a supportive environment, and prepares them to discuss the current national situation regarding women’s ability and participation in mathematics. The future teachers learn about role models for women doing mathematics, gain knowledge of equitable classroom practices, and resolve to incorporate these into their teaching. A TENSOR-MAA Women and Mathematics grant supported a team-teaching effort by the course originator to mentor two other faculty teaching this course. (Received September 21, 2011)