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An interdisciplinary course, Women and Mathematics, examines the lives of women mathematicians throughout history, engages students in mathematical topics related to the work of these women, and addresses gender equity in K-to-doctoral-level mathematics schooling and careers. A TENSOR-MAA Women and Mathematics grant is supporting a team-teaching effort by the course originator to mentor two faculty in teaching this course. From the course we present a typical lesson: one that connects the life and work of Sonia Kovalevsky to an exploration of geometric series from historical, numerical, algebraic, visual and kinesthetic perspectives. The lesson also plumbs Kovalevsky's life and career for barriers to education, problems in finding work and work-family issues that continue to plague women in the 21st century. 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 numbers), provides them with an opportunity to "do math" in a supportive environment, and prepares them to discuss the current US situation regarding women's ability and participation in mathematics. The future teachers gain knowledge of equitable classroom practices and resolve to incorporate these into their teaching. (Received August 28, 2010)