This talk describes (and provides resources for) an interdisciplinary course grounded in the biographies and work of ten women mathematicians (Hypatia to Emmy Noether). The course aimed to engage students in mathematical topics related to the women’s mathematical work and to address gender equity in mathematics education and mathematics-related careers in the US. Many of the themes that emerge from examining the lives and work of these historical figures remain relevant today. The course encouraged students, some of whom were future K–12 teachers, to adopt a more expert view of mathematics as a study of patterns, rather than of numbers. The students also encountered 21st century role models for women doing mathematics and the future teachers gained knowledge of equitable classroom practices and resolve to incorporate these into their teaching. A follow-up study of those who became teachers revealed implications for undergraduate teaching practice and teacher preparation programs that will be shared. (Received September 14, 2020)