The Plateau problem concerns the existence and regularity of minimal surfaces given a boundary constraint. In recent years there has been renewed interest in this old problem, concerning generalizations to ambient metric spaces, axiomatization of collections of competitors, and minimization of elliptic integrands. In this talk we shall give an overview of the problem's history and describe some of the key tools used in its study. In particular, we shall discuss the Federer-Fleming projection theorem and Reifenberg's isoperimetric inequality.