Abstract: Let $S$ be a surface of genus $g$ with $n$ punctures. Let $\text{Teich}(S)$ be the Teichmüller space of $S$ and $M(S)$ the quotient moduli space by the action of the mapping class group. One of the mapping class group invariant metrics on $\text{Teich}(S)$ is the Weil-Petersson metric which is intimately connected with the hyperbolic geometry of the surface. The metric is negatively curved but not pinched and the quotient moduli space is not complete. I will discuss the following theorem which is joint work with Keith Burns and Amie Wilkinson. Theorem: The Weil-Petersson geodesic flow is ergodic on the moduli space.