Let $\varphi$ be an analytic self-map of open unit disk $\mathbb{D}$. The operator given by $(C_\varphi f)(z) = f(\varphi(z))$, for $z \in \mathbb{D}$ and $f$ analytic on $\mathbb{D}$ is called a composition operator. Let $\omega$ be a weight function such that $\omega \in L^1(\mathbb{D}, dA)$, where $dA$ denotes the normalized area measure on $\mathbb{D}$. The generalized weighted Nevanlinna class $\mathcal{N}_\omega$ consists of all analytic functions $f$ on $\mathbb{D}$ such that $\|f\|_\omega = \int_{\mathbb{D}} \log^+(|f(z)|)\omega(z)dA(z)$ is finite; that is, $\mathcal{N}_\omega$ is the space of all analytic functions belong to $L^1_{\log^+}(\mathbb{D}, \omega dA)$. In this talk we investigate the boundedness, compactness and the essential norm of these composition operators on the space $\mathcal{N}_\omega$. (Received February 22, 2015)