Based on symmetry principles, we determine the most general Hamiltonian for the low energy physics of Bi$_2$Se$_3$, including contributions due to a static electric field and strain. The full three-dimensional model is projected into the surface states at k=0, giving an effective two-dimensional Hamiltonian for the surface states. Contributions from the strain tensor break the anisotropy of the surface state spectrum, giving an elliptical Dirac cone. Within this model, we calculate the absorption spectrum for an ultra-thin film. We show that the fundamental absorption edge can be effectively tuned by application of uniaxial strain.