Linearly Polarized Light on Linear Polarizer (Law of Malus)

$$E_{tranmitted} = E_{incident} \cos(\theta)$$

$$S_{transmitted} = S_{incident} \cos^2(\theta)$$

θ is the angle between the incoming light's polarization, and the transmission axis

Transmission axis **Incident E** $E_{\text{Transmitted}} = E_{\text{incident}} \cos(\theta)$