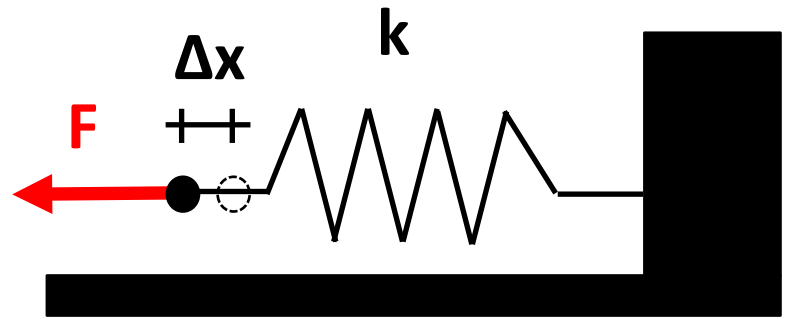**Hooke's law**

$$F = k\Delta x$$

1-D (stress-strain) Hooke's law

$$\sigma = E\varepsilon$$

Generalized Hooke's law

$$\underline{\underline{\sigma}} = \underline{\underline{\underline{C}}}\,\underline{\underline{\varepsilon}}$$