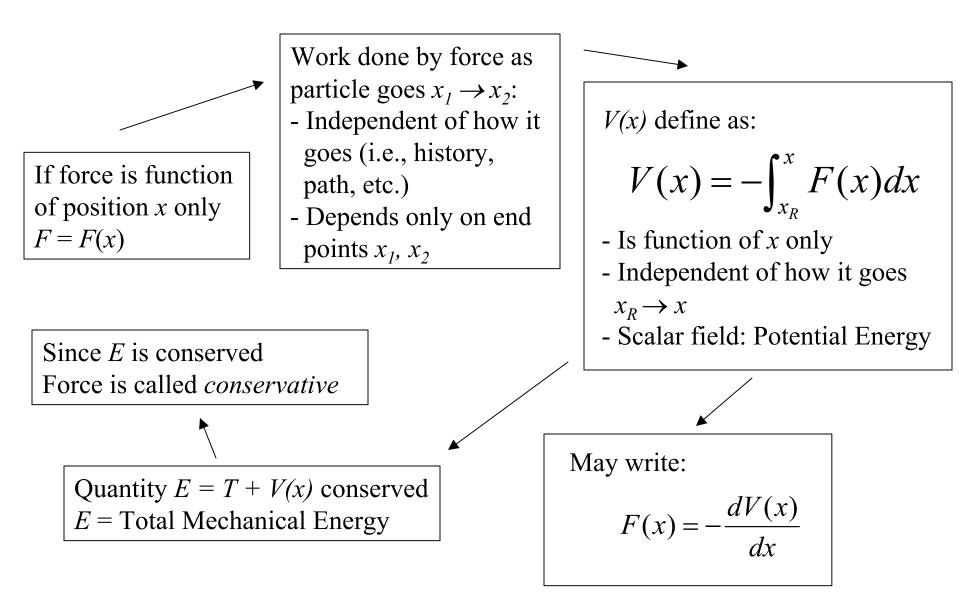
## For particle motion in one dimension



## Non-conservative forces

- Total Mechanical Energy is NOT conserved
- Work depends on the how the particle goes  $x_1 \rightarrow x_2$  (i.e., Work depends on history, path, etc.)
- NOT possible to define scalar field Potential Energy function that is path independent and that depends only on position.