

## CHM 341 Prerequisites

### Mathematics

- Basic differential calculus
  - Sum rule, product rule, chain rule
  - Derivative as a slope
  - Conditions for maximum, minimum and inflection points.
- Basic integral calculus
  - Integrals of simple functions
  - Integral as an area

### Chemistry and Physics

- Ideal gas law and applications
- Law of partial pressures
- States of matter: solid, liquid and gas; phase transitions.
- Heats of chemical reactions
- Solutions: solubility, boiling point, etc.
- Elementary chemical kinetics
- Newton's laws and the concept of force.
- Pressure
- Energy and work
- Temperature, heat and their measurement
- Ohm's law and application