

This sheet will provide a general outline of the topics covered by **Radiometric & Geothermal Methods** course

Radiometric

- Understanding the Periodic Table:
 - ✓ Components of an atom: protons, neutrons and electrons
 - ✓ Atomic number
 - ✓ Atomic Mass (weight)
- Basic concepts of radioactivity:
 - ✓ Isotopes
 - ✓ Half life
 - ✓ Decay constant
 - ✓ Radioactivity series
 - ✓ Characteristics of Alpha and Beta Particles, Gamma radiation
- Basic principles of radioactivity
- Disintegration (decay) laws
- Half life Calculations
- Radiometric dating calculations
- Classification of radioactive materials
- Instrumentation
- Field procedures and measurements
- Interpretation

Geothermal

- Sources of geothermal heat
- Method of heat transfer
- Basic geothermal concepts: geothermal gradients etc..
- Geothermal surveys: integration of
 - ✓ Geophysical methods
 - ✓ Geological methods
 - ✓ Geochemical methods
- Geothermal resource classification
- Geothermal resources types
- Uses of geothermal energy
- Types of geothermal systems