1. Introduction
   A. Course is an intensive introduction to Biochemistry.
   B. Biochemistry is very broad field.
      Categories:
      - Structural Biology, structure/function relationships.
      - Molecular Biology: information storage & retrieval.
      - Metabolism & Enzymology
         Chemical reactions that interconnect energy & macromolecules & biochemicals.
         - Enzyme catalysis, regulation, etc.
      - Bioenergetics
         Energy flow in living systems.
2. Foundations.

A. 4 nucleotides in DNA.

- Adenine (A)
- Guanine (G)
- Cytosine (C)
- Thymidine (T)

- Connected via phosphodiester linkage.
2 strands base pair to make helical structure.

- lines represent base pairs: A:T, G:C
- singly lines represent backbone.

3. DNA serves as information storage.
- linear sequence (structure) codes the information.
- base pairing represents mechanism to copy or read the information.

Illustrates how structure informs about function.