

# Key

## Bio 212 SI F09 Vocab. #1

1. DNA → RNA → Protein central dogma of molecular biology
2. Two molecules with the same chemical formula, but with a different covalent arrangement. structural isomers
3. An electrostatic interaction between the H-atom of one molecule and an electronegative atom of another. Hydrogen bond
4. A type of covalent bond in which there is unequal sharing of electrons. Polar bond
5. A very polar and extremely reactive functional group characterized by an Oxygen double bonded to a Carbon. carbonyl group  
~~carbonyl group~~
6. In the ionization of a carbonic acid (weak acid), dissociation increases when pH is 7 or above.
7. In the ionization of ammonia (weak base), binding of H<sup>+</sup> ions decreases when pH is 7 or above.
8. When two molecules have the same chemical formula, but are mirror images of spatial arrangement, they are known as enantiomers.
9. A substance <sup>that</sup> minimizes the change in pH of an aqueous solution. buffer
10. The property of water that is responsible for supporting water bugs on the surface of water. surface tension
11. When the exposed nuclear region of one molecule attracts the neighboring molecule's electron shell due to unequal distribution of the electron shell around the nucleus, this is known as a Van der Waals interaction
12. Example of structural isomers: starch / cellulose
13. Central theme of this course: relationship of structure / function
14. Electrostatic charge due to unequal sharing of electrons dipole moment in a polar covalent bond.
15. Cohesion involves molecules of water interacting with each other due to H-bonding, and when water molecules hydrogen bond to polar surfaces, it is known as adhesion.

covalent - natural consequence or result  
i.e. changing structure causes a change in function