October 23, 2015
AST 1078 topics

- Natural selection: timescales and molecular basis
- Chemical bonds – single, double, triple
- Carbon-based? What do you mean carbon-based?
- Non-carbon based life?
- Aminoacids
  - amino group (-H$_2$N) and carboxyl group (-COOH)
- Chirality (handedness)
- The legos of life
  - carbohydrates
  - lipids
  - proteins
  - nucleic acids
- Classification by appearance
  - *flora, fauna*
  - *flora, fauna, protista, monera, fungi*
  - *prokaryotes, eukaryotes*
- The Tree of Life: archea, bacteria, eukarya
  - we are closer to slime molds than bacteria are to each other!
  - true diversity revealed