

October 28, 2019
MSE 2101 topics

- The Tree of Life: archea, bacteria, eukarya
 - we are closer to slime molds than bacteria are to each other!
 - true diversity revealed
- Cells and metabolism
 - the role of cells
 - the role of enzymes
 - the role of water: mobility, transport, metabolism
- Materials and energy
 - photo/chemo–auto/hetero–trophs
 - ATP → ADP → ATP → ADP → ...
- DNA (and RNA) – the structure
 - backbone (C)
 - bases: adenine (a), guanine (g), cytosine (c) and thymine (t)
- Genes, chromosomes, the noncoding DNA, genomes
- The genetic code
- DNA replication and heredity
- Mutations: the fat cat ate the rat.