

Day 06 – 2/12/14

Student Learning Objectives

By the end of this class you will be expected to understand:

- The purpose and mechanism of codons
- The two steps of protein synthesis (transcription and translation)
- The purpose and process of removing introns
- The major components of transcription and translation and their functions
- The terminology and function of amino acid chains

Support videos:

- Protein Synthesis
 - <http://www.youtube.com/watch?v=itsb2SqR-R0>
- DNA and Proteins (Khan Academy) (Warning: very long)
 - http://www.youtube.com/watch?v=-vZ_g7K6P0
- Dancing Hippies (Warning: The 70s)
 - <http://www.youtube.com/watch?v=u9dhO0iCLww>

Assigned reading:

- Chapter 2, pages 39-43
- Chapter 17, pages 408-411

Vocabulary:

- Genome
 - Gene
- Amino Acid
- Peptide bond
- Codon
- Transcription
 - RNA Polymerase
 - mRNA
 - Promoter
 - Intron
 - Exon
- Translation
 - rRNA
 - tRNA
 - Anticodon
- Protein folding