

## Chapter 24 – Genes and Chromosomes

### 24.1 Chromosomal Elements

- All sub-sections are important

### 24.2 DNA Supercoiling

The following sub-sections are important:

- The Introduction
- Topoisomerases Catalyze Changes in the Linking Number of DNA. There is more detail in this section than you need to know, the lecture notes and the homework on topoisomerases contains all the info you need to know on topoisomerases.
- DNA Compaction Requires a Special form of Supercoiling

### 24.3 The Structure of Chromosomes

The following sub-sections are important:

- The Introduction
- Chromatin Consists of DNA and Proteins
- Histones are Small, Basic Proteins
- Nucleosomes are Fundamental Organizational Units of Chromatin
- Nucleosomes are Packed into Highly Condensed Chromosome Structures
- Condensed Chromosome Structures Are Maintained by SMC Proteins