

Honors Biology Final Exam Topics

Bacteria, Viruses and the Immune system

- Antibiotics
- Antibodies
- B-Cells
- Bacteria Shapes
- Bacterial Conjugation
- Infection
- Inflammatory response
- Macrophages
- Skin
- T-Cells
- Vaccine
- Virus structure
- Zone of inhibition

Cells

- Eukaryotic vs Prokaryotic
- Homeostasis
- Organelles
- Plant vs animal cells

Cell Division

- Crossing over
- Meiosis
- Mitosis

Chemistry and Energy

- Cellular respiration
- Fermentation
- Photosynthesis
- Polar molecules

DNA-RNA-Protein

- Amino acids
- Anticodons
- Chromosomes
- Codons
- mRNA
- Mutations
- Nucleotide
- Replication
- Transcription
- Translation
- tRNA

Ecology

- Bacteria
- Competition
- Consumers
- Decomposers
- Ecosystems
- Flow of energy
- Food web
- Fungi
- Predator
- Prey
- Producers
- Succession
- Trophic levels

Enzymes

- Factors that influence reaction rates
- Rate of reaction

Evolution, Natural Selection, Classification

- Binomial nomenclature
- Biogeography
- Comparative biochemistry
- Darwin's Theory
- Homologous structure
- Natural selection
- Phylogenetic trees
- Resistance
- The three domain system

Genetics

- biotechnology
- blood types
- dominant/recessive alleles
- genotype
- GMOs
- heterozygous
- homozygous
- Law of segregation
- pedigree
- phenotype
- probability

Populations

- Birth rate/Death rate
- Carrying capacity
- Limiting factors