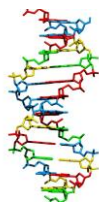


ODESSA SCIENCE DEPARTMENT BIOLOGY SYLLABUS

Textbook: Biology: Principles & Explorations
Author: Johnson & Raven (Holt)

<u>WEEK</u>	<u>UNIT</u>	<u>CONCEPTS</u>	<u>SUGGESTED READING</u>	<u>SUGGESTED HOMEWORK</u>	<u>EALR & GLE</u>
1-3	Course Intro	Contracts, Safety, Sci	Chpt. 1	Pg. 19-20 (1-21, 24)	111-116-121-123
	Microscopes	Method, Life, Cells,	Pgs. 5-21		126-211-212-213
	Measurements	Microscopes, Units		Introduction	214-215-221-222
	EXAM 1: Week 1Q-W3				223-.311-312-313
4-6	Cell Nature	Cell Theory, History,	Chpts. 2-3	Pg. 49-51 (1-19, 22, 23)	111-121-126-138
	Cell Enviro	Organelles, Plant vs	Pgs. 5-66	Pg. 69-71 (1-21,23)	211
	Model Molecule	Animal, Organic Molecules, Acid/Base, Solutions			Microbiology I
EXAM 2: Week 1Q-W6					
7-9	Cell Energy	Enzymes, Glycolysis,	Chpts. 4-5	Pg. 89-91 (1-29, 32)	111-121-122-126
	Photosynthesis	Krebs Cycle, Dark-Light Reactions,	Pgs. 74-138	Pg. 113-115 (1-22,26,27)	127-211-138
		Electron Chain			Microbiology II
EXAM 3: Week 1Q-W9 (end of 1st Quarter)					
10-12	Genetics	Characteristics	Chpts. 6-9	Pg. 135-137 (1-22,25,28)	111-116-121-126
	Alleles	Laws of Heredity	Pgs. 118-200	Pg. 159-161 (1-19, 23)	127-211-311-312
	Punnett Squares	Traits		Pg. 177-179 (1-24, 30)	324
	Mutations			Pg. 197-199 (1-27, 32)	Genetics I
EXAM 4: Week 2Q-W3					
13-15	INDEPENDENT STEM RESEARCH				211-212-213-214
					215-221-222-223
					224-225-311-312
2nd QUARTER RESEARCH PROJECT					313-322-323-324
EXAM 5 in form of PAPER & POWERPOINT PRESENTATIONS: Week 2Q-W6					
16-18	Mitosis/Meiosis	Cell Division	Chpts. 6-9	Pg. 135-137 (1-22,25,28)	111-116-121-126
	DNA/RNA	Protein Synth	Pgs. 118-200	Pg. 159-161 (1-19, 23)	127-211-311-312
	Replication,	Transcription,		Pg. 177-179 (1-24, 30)	324
		Translation		Pg. 197-199 (1-27, 32)	Genetics II
EXAM 6: Week 2Q-W9					
1st SEMESTER FINAL: Week 2Q-W9					



ODESSA SCIENCE DEPARTMENT BIOLOGY SYLLABUS

<u>WEEK</u>	<u>UNIT</u>	<u>CONCEPTS</u>	<u>SUGGESTED READING</u>	<u>SUGGESTED HOMEWORK</u>	<u>EALR & GLE</u>
19-21	Origin of Life Evolution Earth Life Human Evol	Models, Darwin, Macro-Micro Evolution, Extinctions, Fossils, Early Hominids	Chpts. 11-14 Pgs. 224-311	Pg.239-241 (1-22), 28 Pg.267-269 (1-22), 28 Pg.289-291 (1-27), 30 Pg.309-311 (1-22), 27	115-116-127-133 134-135-139-211
<u>EXAM 7: Week 3Q-W3</u>					Evolution
22-24	Biomes Ecology Earth's Place Earth's Systems	Diversity Ecosystems Niches, Zones, Earth / Human Activity	Chpts. 15-18 Pgs. 314-333 Pgs. 336-356 Pgs. 360-383 Pgs. 388-407	Pg.332-333 (1-16, 25) Pg.355-356 (1-16, 27) Pg.383-384 (1-17, 29) Pg.407 (1-9, 22)	121-122-131-211 212-311-312-313 322-323-324
<u>EXAM 8: Week 3Q-W6</u>					Ecology
25-27	Classify KPCOFGS Bio-engineering Design	Kingdom, Phylum, Class, Order, Family, Genus, Species, Taxonomic Nomenclature	Chpts. 19 Pgs. 416-451	Pg.449-451 (1-18, 29)	116-121-139-211
<u>EXAM 9: Week 3Q-W9 (end of 3rd Quarter)</u>					Classification / Bio-Engineering
28-30	Revisit Ecology Quantitative Qualitative	Data Collection Observer Bias Technology in the Field	OnLine Resources Outdoor Laboratory		121-122-131-211 HS-ESS3 HS-LS2
<u>EXAM 11: Week 4Q-W3</u>					Field Study
31-33	Reproduction Hormones Endocrinology	Hormones, Feed- back, Glands, Male, Female, Cycles, STD	Chpts. 41-42 Pgs. 967-1011	Pg.986-987 (1-17, 21) Pg.1010-1011 (1-17, 22)	116-121-122-128 211
<u>EXAM 10: Week 4Q-W6</u>					Human A & P : Reproduction
34-36	Immune System Allergies HIV	Cell Types, Transportation, Infection Rate	Chpt. 39 Pgs. 920-955	Pg.934-935 (1-15, 25)	121-122-126-128 211-311-322-323
<u>EXAM 12: Week 4Q-W9</u>					Human A & P : Immunology

2nd SEMESTER FINAL: Week 4Q-W9

Biology: Grade 10, 1 Semester Credit

Biology studies life. This inquiry course will be an in depth study of the cell and its importance to all of life. Through student-driven research-based laboratory investigation microorganisms, invertebrates, and vertebrates characteristics and environments will be studied. Students investigate the genetics and relationships between various organisms, and finish with a comparison of human anatomy, physiology, ecology, and behavior with other species.