

**KAP Biology Course Syllabus
2014-2015
Ms. Nord / Independence H.S.**

Unit	Topic	Readings
1	Life and Cells; Amino Acids	The Pillars of Life Article Chp. 1 through section 1.4 Chp. 7 through section 7.1 Chp. 28 (pp. 496-497) Pg. 280 Bioskills 3 (found in back of book) Chp. 2 (sections 2.1, 2.2, 2.4) Bioskills 6 Chp. 2.3 Chp. 3 (pp. 38-45, 51-54, 56) Chp. 4 Chp. 6 (through pg. 93) Chp. 7 (sections 7.2 and 7.3) Chp. 29 (pp. 526-533) Chp. 7.6
2	Cell Respiration, Carbohydrates, ATP, Redox, Metabolic Pathways, Photosynthesis, Plant Nutrition, Biogeochemical Cycles	Chp. 5 Chp. 9 (pp. 148-154) Chp. 3 (sections 3.4-3.5) Review pH pp. 25-26 Bioskills 7 Chp. 9 (sections 9.3-9.7) Chp. 28 (pp. 506-509) Chp. 10 (pp. 172-174) Chp. 10 (sections 10.2-end of chapter) Chp. 38 Chp. 54.2 Chp. 9.8 Pp. 509-512
3	Cell Signaling, Protein Targeting, Animal Hormones, Plant Light Sensing, Membranes, Neurons, Nervous System, Sensory Systems, Animal Behavior	Chp. 8 (sections 8.2-8.3) Chp. 47 (pp. 929-935, 937-938, and section 47.4) Chp. 7 (sections 7.4-7.5) Bioskills 9 Chp. 43.4 Chp. 47.3 Chp. 39 (pp. 755-762) Chp. 6 (section 6.3, pp. 94-99) Chp. 45.1-45.4) Chp. 46 (sections 46.1 and 46.4) Chp. 51 (pp. 1019-1020) Chp. 41 (pp. 803-804, sections 41.3 and 41.5) Chp. 46.5
4	Plant Diversity and Structure, Ecology, Populations, Community Ecology, Extinction and Species Conservation	Chp. 30 (pp. 546-555) Chp. 36.3 Chp. 37 Chp. 42 (sections 42.1-42.3)

		<p>Chp. 50 through section 5.1 Chp. 52.1 Chp. 52 (sections 52.2-52.4) Chp. 53 (sections 53.1-53.3) Chp. 54 (sections 54.1 and 54.3) Chp. 50.3 Chp. 55 (sections 55.3-55.4)</p>
5	<p>Genetics, DNA Structure and Replication, Gel Electrophoresis, Mitosis, Meiosis, Inheritance</p>	<p>Chp. 15 Chp. 4 (sections 4.1-4.2) Chp. 7 (pp. 103 and 107-108) Bioskills 6 Chp. 18.2 Bioskills 9 Chp. 14 (through section 14.4) Chp. 11 (through section 11.2) Chp. 12 (all sections except 12.3) Fig. 26.8 (pg. 466) Chp. 13 (pp. 230-240) Bioskills 13 Chp. 13 (pp. 241-244) Box 13.1 (pg. 246)</p>
6	<p>Gene Mapping and Pedigrees, Genes, Transcription, Translation, DNA Mutations and Sequencing</p>	<p>Chp. 13.6 Chp. 19.4 Chp. 13.5 Chp. 15 (through section 15.4) Chp. 4.3 Chp. 16 (through section 16.2) Chp. 14.5 Chp. 15.4 Chp. 19 (through section 19.3) Summary Table 19.1, pp. 352-353</p>
7	<p>Natural Selection, Evolutionary Processes, Speciation, Phylogenies</p>	<p>Chp. 1.3-1.4 Chp. 25 (through section 25.5) Chp. 26 (sections 26.1-26.4) Chp. 27 (through section 27.4) Bioskills 7 Bioskills 3 Pp. 368-369 Pg. 328 Chp. 16 (sections 16.3-16.5) Bioskills 3</p>
8	<p>Prokaryotic Gene Expression, Eukaryotic Gene Expression, Measuring Gene Expression</p>	<p>Chp. 17 (through section 17.4) Chp. 18 (pg. 319 and section 18.3-18.5) Chp. 20.4 Pp. 329-330 Chp. 21 (section 21.2-end) Pg. 369</p>

Taken directly from syllabus by Kathy Gillen.