

Sophomore Biology

Course Schedule 2009-2010

1st Quarter

Date	Topic	Pages	Assignment
20-Aug	Introduction to the class	-	Signature Form - Due Mon 8/25
21-Aug	Grade "Home Metrics"/Books/Labs/Study Guide	-	
Unit 1 - CH 1&2: "Safety and Chemistry"			
24-Aug	APP B "Science Safety"	1066-1068	Safety Map / Lab Skills 1 "Lab Safety"
25-Aug	APP C "Metric System"	1069	Lab Skills 3/CH1 "Metric Measurements"
26-Aug	1-1 "What is Science?"	3-7	Lab Skills 3/CH1 "Metric Measurements"
27-Aug	1-2 "How Scientists Work"	8-15	Lab Skills 2 "Lab equipment"
28-Aug	Review 1-1	-	VOCAB QUIZ
31-Aug	1-3 "Studying Life"	16-22	Lab Skills 5 "Using a microscope"
1-Sep	1-4 "Tools and Procedures"	24-28	Lab Skills 5 "Using a microscope"
2-Sep	2-1 "Nature of Matter"	35-39	"Super Saturated Candy" Lab
3-Sep	Review 1-2	-	VOCAB QUIZ
4-Sep	2-2 "Properties of Water"	40-43	CH2 Part A "Organic Compounds"
7-Sep	NO SCHOOL		LABOR DAY
8-Sep	2-3 "Carbon Compounds"	44-48	CH2 Part B "Organic Compounds"
9-Sep	2-4 "Chemical Reactions and Enzymes"	49-53	CH2 Part C "Organic Compounds"
10-Sep	Exam Review Game	-	Grade Lab
11-Sep	Exam Unit 1	-	CI-1; SG1
Unit 2 - CH 3&4: "Ecosystems"			
14-Sep	3-1 "What is Ecology"	63-65	CH C3 / IA 62 "Ecosystem Interaction"
15-Sep	3-2 "Energy Flow"	67-73	CH C3 "Terrariums"
16-Sep	LAB DAY	-	"Building a Food Web"
17-Sep	3-3 "Cycles of Matter"	74-80	Pfisteria Movie / CH C3
18-Sep	NO SCHOOL		STAFF TRAINING
21-Sep	Review 2-1	-	VOCAB QUIZ
22-Sep	3-3 "Cycles of Matter"	74-80	AD 79 "Farming in the Rye" / Prelab C4
23-Sep	LAB DAY	-	C4 "Niches"
24-Sep	4-1 "The Role of Climate"	87-89	IA 86 "Ecosystem Relationships"
25-Sep	4-2 "What Shapes an Ecosystem?"	90-97	Biome Map
28-Sep	4-3 "Biomes" / Review	98-105	VOCAB QUIZ
29-Sep	4-4 "Aquatic Ecosystems"	106-112	AD 111 "Ecosystem Productivity"
30-Sep	LAB DAY	-	Movie "Blue Planet: Ocean Deep"
1-Oct	Exam Review Game	-	Grade Movie Essays
2-Oct	Exam Unit 2	-	CI-2; SG2
Unit 3 - CH 5&6: Humans in the Biosphere"			
5-Oct	5-1 "How Populations Grow"	119-123	AD 123 / IA 118 "Poplution Growth"
6-Oct	5-2 "Limits to Growth"	124-132	IB 128 "Gray Wolf Protection" / Prelab B5
7-Oct	LAB DAY	-	CH B5 "Sampling Plant Community"
8-Oct	6-1 "A Changing Landscape"	139-143	Movie "Hydrogen Hopes"
9-Oct	NO SCHOOL		STAFF TRAINING
12-Oct	Review 3-1	-	VOCAB QUIZ
13-Oct	6-2 "Renewable and NonRenewable"	144-149	CH B6 "Water/Land Pollution"
14-Oct	6-3 "Biodiversity"	150-160	CH B6 "Water/Land Pollution"
15-Oct	Exam Review Game	-	Grade Lab

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2nd Quarter

Date	Topic	Pages	Assignment
Unit 4 - CH 7&10: "Cells"			
19-Oct	7-1 "Life is Cellular"	169-173	IA 168 "What is a Cell"
20-Oct	7-2 "Eukaryotic Cell Structure"	174-181	Prelab CH7
21-Oct	<i>LAB DAY</i>	-	CH7 "Observing Osmosis"
22-Oct	7-3 "Cell Boundaries"	182-189	QL 180 "Drawing a cell model"
23-Oct	NO SCHOOL		PARENT / TEACHER CONFERENCE
26-Oct	Review 4-1	-	VOCAB QUIZ
27-Oct	7-4 "The Diversity of Cellular Life"	190-193	VL 3 "Diffusion through a membrane"
28-Oct	<i>LAB DAY</i>	-	QL 242 / IA 240 "Cell Growth"
29-Oct	10-1 "Cell Growth"	241-243	AD 188 "Crossing Membrane"
30-Oct	10-2 "Cell Division"	244-249	AD 249 "Life Span of Human Cells"
2-Nov	Review 4-2	-	VOCAB QUIZ
3-Nov	10-2 "Cell Division"	244-249	CH10 "Modeling Cell Cycle"
4-Nov	10-3 "Regulating the Cell Cycle"		CH10 "Modeling Cell Cycle"
5-Nov	Exam Review Game	-	VOCAB QUIZ
6-Nov	Exam Unit 4	-	CI-4; SG4
Unit 5 - CH 8&9: "Cell Energy"			
9-Nov	8-1 "Energy and Life"	201-203	VL 8-2,3 "Chromatography"
10-Nov	8-2 "Photosynthesis: An Overview"	204-207	Prelab 8A
11-Nov	<i>LAB DAY</i>	-	8A "Effects of Light Intensity"
12-Nov	8-3 "The Reactions of Photosynthesis"	208-214	OSU Video / AD 213 "Rates of Photosynthesis"
13-Nov	NO SCHOOL		STAFF TRAINING
16-Nov	Review 5-1	-	VOCAB QUIZ
17-Nov	8-3 "The Reactions of Photosynthesis"	208-214	Prelab C5
18-Nov	<i>LAB DAY</i>	-	C5 "Cell Respiration and Fermentation"
19-Nov	9-1 "Chemical Pathways"	221-225	IA 220 "Release Energy"
20-Nov	9-2 "The Krebs Cycle and ETC"	226-232	QL 231 "Exercise and Respiration"
23-Nov	Exam Review Game	-	VOCAB QUIZ
24-Nov	Exam Unit 5	-	CI-5; SG5
Unit 6 - CH 11&12: "DNA & RNA"			
30-Nov	11-1 "The Work of Gregor Mendel"	263-266	IA 262 "How are traits inherited"
1-Dec	11-2 "Probability and Punnett Squares"	267-269	Punnet Squares and Probability
2-Dec	<i>LAB DAY</i>	-	CH11 / QL 268 "Inherited Traits and Dimples"
3-Dec	11-3 "Mendelian Genetics"	270-274	PS 271 "True-Breeding Seeds"
4-Dec	Review 6-1	-	VOCAB QUIZ
7-Dec	11-4,5 "Meiosis & Gene Maps"	275-280	EX 281 "Modeling Meiosis"
8-Dec	12-1,2 "DNA & Repair"	287-299	EX 281 "Modeling Meiosis" / Prelab 11
9-Dec	<i>LAB DAY</i>	-	CH11 "Modeling DNA Replication"
10-Dec	12-3 "RNA and Protein Synthesis"	300-306	QL 303 "Interpreting DNA"
11-Dec	12-4,5 "Mutations & Regulation"	307-308	ML7-7 "Mutations"
14-Dec	Exam Review Game	-	VOCAB QUIZ
15-Dec	Exam Unit 6	-	CI-6; SG6
16-Dec	FINAL EXAMS		

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3rd Quarter

Date	Topic	Pages	Assignment
Unit 7 - CH 13&14: "Genetic Engineering"			
4-Jan	13-1 "Changing the Living World"	319-321	"Extract DNA from Split Peas"
5-Jan	13-2 "Manipulating DNA"	322-326	QL 326 "Restriction Enzymes"
6-Jan	<i>LAB DAY</i>	-	CH13 "Gel Electrophoresis"
7-Jan	13-3 "Cell Transformation"	327-329	Movie "DNA Interactive"
8-Jan	Review Day	-	VOCAB QUIZ
11-Jan	13-4 "Applications of Genetic Engineering"	331-333	IB330 "Genetically Modified Foods"
12-Jan	14-1 "Human Heredity pt.1"	341-348	Personal Pedigree Charts
13-Jan	NMSBA For Sophomores		
14-Jan	NMSBA For Sophomores		
15-Jan	Review Day	-	Personal Pedigree Charts
18-Jan	NO SCHOOL	-	PRESIDENTS DAY
19-Jan	14-1 "Human Heredity pt.2"	341-348	Autosomal Disorder Report
20-Jan	<i>LAB DAY</i>	-	CH14 "Karyotypes"
21-Jan	Review Day	-	VOCAB QUIZ
22-Jan	14-2 "Human Chromosomes"	349-353	QL 351 "Colorblindness"
25-Jan	14-3 "Human Molecular Genetics"	355-360	IB354 "Who Controls your DNA"
26-Jan	<i>LAB DAY</i>	-	RW361 "DNA Probes"
27-Jan	Exam Review Game	-	
28-Jan	Exam Unit 7	-	CI-7; SG7
29-Jan	NO SCHOOL	-	STAFF TRAINING
Unit 8 - CH 15&16: "Evolution"			
2-Feb	15-1 "The Puzzle of Life's Diversity"	369-372	Movie "Evolution: Darwin"
3-Feb	15-2 "Ideas that Shaped Darwin's Thinking"	373-377	IA 368 "Lima Bean Variation"
4-Feb	<i>LAB DAY</i>	-	A15 "Adaptations of Birds"
5-Feb	15-3 "Darwin Presents His Case pt. 1"	378-386	EX 387 "Modeling Adaptation"
6-Feb	15-3 "Darwin Presents His Case pt. 2"	378-386	EX 387 "Modeling Adaptation"
9-Feb	Review Day	-	VOCAB QUIZ
10-Feb	16-1 "Genes and Variation"	393-396	IA 392 "Genotype Ratios" / Prelab 15A
11-Feb	<i>LAB DAY</i>	-	15A "Bird Beak and Evolution"
12-Feb	NO SCHOOL	-	PARENT / TEACHER CONFERENCE
15-Feb	NO SCHOOL	-	MARTIN LUTHER KING JR. DAY
16-Feb	16-2 "Evolution as Genetic Change"	397-402	QL 401 "Environment & Survival"
17-Feb	16-3 "The Process of Speciation"	404-410	CH17 "Modeling Coevolution"
18-Feb	Exam Review Game	-	VOCAB QUIZ
19-Feb	Exam Unit 8	-	CI-8; SG8
Unit 9 - CH 17&18: "Classification"			
22-Feb	17-1 "The Fossil Record"	417-422	QL 420 "Half-Life"
23-Feb	17-2 "Earth's Early History"	423-428	Geologic Time Scale 421
24-Feb	17-3 "Evolution of Multicellular Life"	429-434	MC 431 - "Eras and Periods"
25-Feb	<i>LAB DAY</i>	-	CH 18 - "Dichotomous Keys"
26-Feb	17-4 "Patterns of Evolution"	435-440	AD 438 - "Marine Families"
1-Mar	18-1 "Finding Order in Diversity"	447-450	IA 446 "Classify Fruits"
2-Mar	18-2 "Modern Evolutionary Classification"	451-455	QL 453 "Cladograms"

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4th Quarter

Date	Topic	Pages	Assignment
15-Mar	20-1,2 "Kingdom Protista & Protozoans"	497-505	IA 496 "What are Protists"
16-Mar	20-3,4 "Algae"	506-515	AD 508 "Fertilizers and Algae"
17-Mar	<i>LAB DAY</i>	-	20A "Comparing Movement of Protists"
18-Mar	Review Day	-	VOCAB QUIZ
29-Mar	20-5 "Fungus-like Protists"	516-520	Movie "Planet Earth: Jungles"
30-Mar	Junior SBA		
31-Mar			
1-Apr			
2-Apr	NO SCHOOL		EASTER BREAK
5-Apr	21-1 "The Kingdom Fungi"	527-529	IA 526 "What are mushrooms made of"
6-Apr	21-2 "Classification of Fungi"	530-536	QL 531 "Bread Mold"
7-Apr	21-3 "Ecology of Fungi"	537-542	Finish Movie
8-Apr	Exam Review Game	-	VOCAB QUIZ
9-Apr	Exam Unit 10	-	CI-10; SG10
Unit 11 - CH 22-25: "Plants"			
12-Apr	22-1,2,3 "Bryophytes and Seedless Plants"	551-562	22B "Roots and Root Hairs"
13-Apr	22-4,5 "Seed Plants and Angiosperms"	564-572	22A "Plant Anatomy"
14-Apr	<i>LAB DAY</i>	-	Movie "Planet Earth: Caves"
15-Apr	23-1,2 "Roots"	579-588	23A "Growth Zones"
16-Apr	Review Day	-	VOCAB QUIZ
19-Apr	23-3,4 "Stems and Leaves"	589-602	AD 593 "Tree History"
20-Apr	24-1 "Cones and Flowers"	609-616	QL 613 "Flower Structure"
21-Apr	<i>LAB DAY</i>	-	CH25 "Germination Inhibitors"
22-Apr	24-2 "Seed Development"	618-621	AD 620 "Seed Temp" / TS 617 "Desing Flowers"
23-Apr	Review Day	-	VOCAB QUIZ
26-Apr	25-1 "Hormones and Plant Growth"	633-638	IA 632 "Plant Adaptations"
27-Apr	<i>LAB DAY</i>	-	Movie "Death Trap"
28-Apr	25-2,3 "Plant Response and Adaptation"	639-646	IB 647 "Herbal remedies"
29-Apr	Exam Review Game	-	
30-Apr	Exam Unit 11	-	CI-11; SG11
Unit 12 - CH 26-32: "Animals"			
3-May	26 "Sponges and Cnidarians"	657-675	IA 626 / QL 662 "Animals and Symmetry"
4-May	27-1,2,3 "Worms"	683-699	Micro lab on worms
5-May	27-4 "Mollusks"	701-708	AD 707 "Raising Clams"
6-May	Review Day	-	Vocab Quiz
7-May	28-1,2,3 "Arthropods"	715-733	QL 714 "What is an arthropod"
10-May	28-4 "Echinoderms"	734-738	Movie "Life in Undergrowth: Web Spinners"
11-May	30-1,2 "Fishes"	767-781	Movie "Life in Undergrowth: Web Spinners"
12-May	<i>LAB DAY</i>	-	Movie "Blue Planet: Deep Sea"
13-May	Review Day	-	Vocab Quiz
14-May	30-3 "Amphibians"	782-789	AD 787 "Amphibian Populations"