

## CURRICULUM MAPPING

COURSE ANATOMY

INSTRUCTOR \_\_\_\_\_

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
<b>STANDARDS</b>					
<b>CONTENT</b>	Dissectional terms (5) Cavities terminology Biochem	→	Integument (4)	Skeletal (4)	Muscles (3)
<b>SKILLS</b>	Gummi bear lab Torso model (mini)		Microscope labs	Chicken bone lab	Weight room visit Body builder/ Power lifter
<b>ASSESSMENT</b>	Online quizzes Careers project Career day		Brochures of skin disorders Diseases, tattoos poster PowerPoint presentation	Lab practical poster project: disorders diseases surgeries	Cancer project

**NOTES:**

## CURRICULUM MAPPING

COURSE ANATOMY

INSTRUCTOR \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	5.10.2.15 5.10.2.44	5.10.2.15 5.10.2.47	5.10.2.15 5.10.2.48 5.10.2.49	5.10.2.15 5.10.2.58 5.10.2.51 5.11.1.91	5.10.2.15 5.10.2.46 5.11.2.8
<b>CONTENT</b>	Brain & nervous system (5 weeks) Spinal cord Peripheral nerve Structure of nerves	Cardiovascular and blood (3)	Respiratory (2) Digestive (3) Nutrition	Genitourinary (3) Reproduction	Endocrine (poss.) Immunity
<b>SKILLS</b>	Sheep brain dissection Cow eyeball dissection Scene of a crime lab	Heart field trip Blood labs Mammalian heart dissection Heart disease brochures	Lung models Seminar speaker Newspaper articles Nutrition diary	Urinalysis lab Case histories Presentations	Epidemic Simulation lab
<b>ASSESSMENT</b>	Lab write-up Quizzes Test	Lab reports Brochures using rubrics Quizzes Tests	Article review using rubric Presentation using rubric Lab reports Quizzes Tests	Presentation using rubric Lab reports Quizzes Tests	Presentation of culminating project: Fitness Changes in body w/ diet & exercise Benefits of exercise: Homeostasis, diet pills

**NOTES:**

## CURRICULUM MAPPING

**COURSE:** ANATOMY

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Lab Safety 5.9.1.2 5.9.1.3 5.10.1.1 5.12.2.2	Anatomical Positions 5.10.2.15	Integumentary System 5.10.2.41	Skeletal System 5.10.2.41	Skeletal System 5.10.2.41
<b>CONTENT</b>	Equipment Procedures Safety Contract	Anatomical Positions, Regions, Cavities, Orientation	Structures, Functions, Layers of dermis & epidermis	Oseteo-blasts, Clasts & cytes; Bone structure & function Main classifications & disorders	Oseteo-blasts, Clasts & cytes; Bone structure & function Main classifications & disorders
<b>SKILLS</b>	Safety Use of Equipment	Lab Skills	Lab Skills  Microscopic ID Coordination of Models Id of structures on diagrams, models & specimens.	Lab Skills  Microscopic ID Coordination of Models Id of structures on diagrams, models & specimens	Lab Skills  Microscopic ID Coordination of Models Id of structures on diagrams, models & specimens
<b>ASSESSMENT</b>	Safety Skills Safety Test Labs	Lab Practicals Labs Tests Quizzes Research Projects	Lab Practicals Labs Tests Quizzes Research Projects	Lab Practicals Labs Tests Quizzes Research Projects	Lab Practicals Labs Tests Quizzes Research Projects

**NOTES:**

## CURRICULUM MAPPING

**COURSE** ANATOMY

**INSTRUCTOR** \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Neuro-Muscular System 5.10.2.43 5.10.2.44	Respiratory System & Cardiovascular System 5.10.2.47 5.10.2.48	Digestive 5.10.2.49	Urogenital System 5.10.2.5	Urogenital System 5.10.2.5
<b>CONTENT</b>	Muscle type Structure & Function Gross & microscopic; Types of contractions Divisions, function & structure of nerves, brain and cord	Structure & Function of heart, blood, vessels; structure & function of lungs; volumes; disorders of both	Major Organs Structure & Function Diseases of the digestive system	Major organs Location, structure & function of urinary & reproductive systems; Related hormones Disorders	Major organs Location, structure & function of urinary & reproductive systems; Related hormones Disorders
<b>SKILLS</b>					
<b>ASSESSMENT</b>					→ CRT

**NOTES:**

## CURRICULUM MAPPING

**COURSE** BIOLOGY (Honors)

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Safety methods introduced and stressed throughout year. 5.9.1.2 5.9.1.3 5.10.1.1 5.12.2.2	Scientific method Ecology Metric 5.12.1.1 2.10.1.5 5.9.1.1	Biochemistry 5.10.2.12 5.10.2.25 5.10.2.52	Begin cells 5.10.2.12	Cell Structure 5.10.2.12
<b>CONTENT</b>	Equipment procedures Volume, mass, length Safety contrast	Graphing Data interpretation Steps of Sci. method	Atoms Carbohydrates, proteins, lipids Enzymes Balance equations Respiration Photosynthesis	Microscope Use Types of cells Types of cell parts and functions	Microscope Use Types of cells Types of cell parts and functions
<b>SKILLS</b>	Safety Use of equipment	Build all types of graphs Gather data Form Hypothesis Analysis of data Interpret graphs Measure accurately: mass, volume, length	Labs Vocabulary	Labs Identify cell organelles Use microscope Make wet mount slides	Labs Identify cell organelles Use microscope Make wet mount slides
<b>ASSESSMENT</b>	Safety skills Safety test Labs	Measurement practicals Perf. asses. Rubric Labs	Labs Written test Quizzes	Microscope lab CRT Written final Quizzes	Microscope lab CRT Written final Quizzes

**NOTES:** Involves More Depth Than Regular Biology.

## CURRICULUM MAPPING

COURSE   **BIOLOGY (Honors)**  

INSTRUCTOR \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Cells Osmosis/diff 5.9.1.3 5.10.2.12 5.10.2.52 5.12.1.1	DNA Mitosis 5.10.2.14 5.12.1.1	Genetics 5.10.2.14 5.13.1.1 5.13.2.1	Classification 5.10.1.1 12A.1B 12A.4A Evolution 5.11.1.1 2.10.1.7	Ecology 5.10.2.7 5.10.2.8 5.10.2.11 5.11.2.5
<b>CONTENT</b>	Vocabulary Osmosis/diff. Mitosis Meiosis	Vocabulary Cell growth & repro. DNA/RNA Nucleic acid Begin Genetics	Vocabulary Mendeleev Test cross - Mono - Di - Sex linked - JNC Dom. - Nondisjunction Traits Meiosis	Taxonomy structure Binomial nomenclature Dichotomous Key Earth science Classification Timeline Vocabulary Human Evolution	Biomes Resources Greenhouse effect Vocabulary Graphing, energy flowcharts
<b>SKILLS</b>	Wet mount microscope Lab skills Prediction Identification	Lab skills Comparing DNA building Karyotype	Lab skills Prediction Punnett squares	Lab skills Comparative anatomy Read dichotomous key	Vocabulary Labs Comparing skills Graphing Climatograms
<b>ASSESSMENT</b>	Edible lab Written test Lab	Written test Mitosis cartoon	Personal pedigree Creating a life lab simulation Written test	Create dichotomous key Model of ancient earth	Labs Written test Quizzes

**NOTES:**     Involves More Depth Than Regular Biology

## CURRICULUM MAPPING

**COURSE** BIOLOGY (Reg)

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Safety methods introduced and stressed throughout year. 5.9.1.2 5.9.1.3 5.10.1.1 5.12.2.2	Scientific method Metric 5.12.1.1 2.10.1.5 5.9.1.1	Biochemistry 5.10.2.12 5.10.2.25 5.10.2.52	Begin cells 5.10.2.12	Cell Structure 5.10.2.12
<b>CONTENT</b>	Equipment procedures Volume, mass, length Safety contrast	Graphing Data interpretation Steps of Sci. method	Atoms Carbohydrates, proteins, lipids Enzymes Balance equations Respiration Photosynthesis	Microscope Use Types of cells Types of cell parts and functions	Microscope Use Types of cells Types of cell parts and functions
<b>SKILLS</b>	Safety Use of equipment	Build all types of graphs Gather data Form Hypothesis Analysis of data Interpret graphs Measure accurately: mass, volume, length	Labs Vocabulary	Labs Identify cell organelles Use microscope Make wet mount slides	Labs Identify cell organelles Use microscope Make wet mount slides
<b>ASSESSMENT</b>	Safety skills Safety test Labs	Measurement practicals Perf. asses. Rubric Labs	Labs Written test Quizzes	Microscope lab CRT Written final Quizzes	Microscope lab CRT Written final Quizzes

**NOTES:**

## CURRICULUM MAPPING

COURSE   BIOLOGY (Reg)  

INSTRUCTOR \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Cells Osmosis/diff. 5.9.1.3 5.10.2.12 5.10.2.52 5.12.1.1	DNA 5.10.2.14 5.12.1.1	Genetics 5.10.2.14 5.13.1.1 5.13.2.1	Classification 5.10.1.1 12A.1B 12A.4B. Evolution 5.11.1.1 2.10.1.7	Ecology 5.10.2.7 5.10.2.8 5.10.2.11 5.11.2.5
<b>CONTENT</b>	Vocabulary Osmosis/diff. Mitosis Begin meiosis	Vocabulary Cell growth & repro. DNA/RNA Nucleic acid Begin genetics	Vocabulary Mendel Test cross - Mono - Di - Sex linked - JNC Dom. - Nondisjunction Traits Meiosis Test cross	Taxonomy structure Binomial nomenclature Dichotomous key Earth science Classification Timeline Vocabulary	Biomes Resources Greenhouse effect Vocabulary Graphing, energy flowcharts
<b>SKILLS</b>	Wet mount microscope Lab skills Prediction Identification	Lab skills Comparing DNA building Karyotype	Lab skills Prediction Punnett squares	Lab skills Comparative anatomy Read dichotomous key	Vocabulary Labs Comparing skills Graphing Climatograms
<b>ASSESSMENT</b>	Edible lab Written test Lab	Written test Mitosis cartoon	Personal pedigree Creating a life lab simulation Written test	Create dichotomous key Model of ancient earth	Labs Written test Quizzes

**NOTES:**

## CURRICULUM MAPPING

**COURSE:** CHEMISTRY IN THE COMMUNITY

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Lab safety	Scientific Method Metric notes	Water Liquid measurement	Chemical reactions % Composition	% Composition pH Balance equations
<b>CONTENT</b>	Lab equipment Lab safety Fire safety	Scientific Method Algebraic expressions Conversions	Water supply Water demand Water pollution Physical properties Density	Balance equations Solubility Periodic table	Balance equations Ratios pH scale % Composition
<b>SKILLS</b>	Prevent/respond to accidents Location/use of equipment	Conversion math Daily use of scientific method	Utilities water filtration Density lab	Be able to balance equation Be able to recognize ratio from equation Know groups or table	Know the pH scale Recognize base/acid Calculate % comp from equation
<b>ASSESSMENT</b>	Lab safety test Contract signed	Pendulum lab Metric worksheets Metric measure activity	Love water lab Various liquid measurement skills Water diary	Metal lab Periodic table activity CP	CRT pH lab Equation activity

**NOTES:**

## CURRICULUM MAPPING

COURSE CHEMISTRY IN THE COMMUNITY

INSTRUCTOR \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Air SI units for pressure force area etc.	Gas laws Radiation	Acids in atmosphere Acids & bases	Air pollution	Chemistry of nitrogen Periodic table
<b>CONTENT</b>	Contents of air Pressure Molecules in motion	Boyles Charles Temp & pressure Radiation sp.	Acid rain analysis Distinguish differences between acid & bases Buffers	Air pollution Causes and effects	Chemistry of nitrogen in air, products, fertilizers Periodic table
<b>SKILLS</b>	Recognize the components of air you breathe. Calculate pressure using force/area	Know relationships press v. vol. temp v. vol. press. v. temp. Radiation spectrum	Know how to distinguish acid/base Make acid rain environment	What causes air pollution. How to control or prevent pollution.	What is in fertilizers Know the nitrogen cycle Groups of periodic table
<b>ASSESSMENT</b>	Graphing pressure v. vol	Labs for gas law Quiz	Making acid rain lab Acid/base lab Test	Clean air lab Pollution paper	Periodic table activity Nitrogen lab

**NOTES:**

## CURRICULUM MAPPING

COURSE CHEMISTRY (Reg)

INSTRUCTOR \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Safety Algebra review	Use of balances Metric system Scientific Method Sig. digits Lab reporting/ graphing	Understanding the periodic table Classification	Atomic radii Electron configuration	Chemical bonding 2 types of bonding Review for final
<b>CONTENT</b>	Chemical safety Lab safety Personal safety Algebra review	Matter/energy Density Atomic structure	Periodic table Dobereiner Mendeleev Periodicity Properties of elements	Ionic/covalent Octet rule	Ionic compounds Molecular substances
<b>SKILLS</b>	Accident prevention Lab behavior Accident behavior Location & use of equipment	Measuring Graphing	Recognizing trends	Recognizing trends using the periodic table	Compare and contrast types of compounds
<b>ASSESSMENT</b>	Flinn test Contract Algebra test	Tests Lab report Homework Density performance measurement	Tests Laboratory effects Homework	Testing Labs Homework problems Graphing composition vs. rubric	Test Reading strategy models Final

**NOTES:**

## CURRICULUM MAPPING

COURSE CHEMISTRY (Reg)

INSTRUCTOR \_\_\_\_\_

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
<b>STANDARDS</b>	Formulas & names of Ionic compounds Interpreting formulas Formulas & names of molecular substances	Reactions	Stoichiometry	Gas laws	Acids & Bases
<b>CONTENT</b>	Oxidation numbers Oxidation charts	Completing equations Balancing equations Conservation of mass	Molar mass Stoichiometry Molar volume Theoretical & actual yield	Boyle's Law Charles' Law Combined gas law	Properties pH scale strong acids & bases weak acids & bases
<b>SKILLS</b>	Reading charts Balancing charges	Balancing Measuring	Calculations	Calculations Temperature Volume Pressure	Using the pH scale
<b>ASSESSMENT</b>	Molecular model building Tests	Quantitative lab	Test Stoichiometry problems	Test Problems Boyle's Law lab	PH lab Test

**NOTES:**

## CURRICULUM MAPPING

**COURSE:** CHEMISTRY (Honors)

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13
<b>CONTENT</b>	Safety, Lab Procedures	Metrics, Sig. Figs. Scientific Method	Elements, Period Table Nomenclature	Atomic Theory Bonding	Mole
<b>SKILLS</b>	Safety Use of Equipment	Use scientific method to solve problems Change between units	Naming all types of compounds Trends	Understand non polar covalent and polar covalent ionic bonds	Mole conversion Mass to mole Mole to mole Volume to mole to mass
<b>ASSESSMENT</b>	Labs Test	Metric challenge Density challenge Test	Design your own table Graph trends Labs Quizzes	Build models Identify shapes Test	Problem solving Lab (Stoichiometry) Tests

**NOTES:**

## CURRICULUM MAPPING

**COURSE** CHEMISTRY (Honors)

**INSTRUCTOR** \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13	State Goals 11, 12, 13
<b>CONTENT</b>	Reactions Stoichiometry	States of Matter Solutions	Gas Laws Equilibrium	Kinetics Acid Base	Redox, etc
<b>SKILLS</b>	Balance equations Calculate amount from limited reactant Hess's Law	Properties of phases Molarity Molality Concentration	Distinguish between all gas laws $K_{eq}$ of reactions	Speed of reactions Kinetic theory of matter	Balance equations Determine redox numbers
<b>ASSESSMENT</b>	Tests Labs	Making solutions Calculations Titration	Labs Tests	Labs Tests	Lab Tests

**NOTES:**

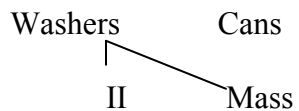
## CURRICULUM MAPPING

**COURSE:** CHEM/PHYS

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Metrics	Motion	Newton's Laws	Momentum & Energy	Fluids
<b>CONTENT</b>	Measurement Metric Conversion Safety	Speed Velocity Acceleration	Free Fall 1 <sup>st</sup> Law 2 <sup>nd</sup> Law 3 <sup>rd</sup> Law	$P=M\Delta v$ $PE=mgh$ $KE=1/2 M\Delta v^2$ Collisions	Density Pressure Floatation
<b>SKILLS</b>	Conversions	Physics/Chemistry Lab Equipment CBL'S	→	Comeback Can	Surface Area Hot Air Balloon
<b>ASSESSMENT</b>	Measurement Challenge				

**NOTES:**



## CURRICULUM MAPPING

COURSE CHEM/PHYS

INSTRUCTOR \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Structure Nuclear Chemicals	Chemicals Elements of Chemistry	Periodic Tables Trends Chemical Bonds	Naming Rev. Chemical Reactions Mole Conversions	Mole Conversions Acid: Bases
<b>CONTENT</b>	13.1→13.4 Structure of the Atom Nuclear Chemicals 14.1 → 14.6	14.1 → 14.6 15.1 → 15.5	16.1 → 16.5 17.1 → 17.5	5 types of balances Conversions Assorted Sources	I.D. Aces & Bases 20.1 → 20.5
<b>SKILLS</b>	Nuclear Eq.'s	Nomenclature Use Periodic Table	Nomenclature Use Periodic Table  Determine Dolarity	Lab	Titration
<b>ASSESSMENT</b>	Decay Process ID parts of an atom		Acme Molecules	Lab Test	Titration

**NOTES:**

## CURRICULUM MAPPING

**COURSE** EARTH SCIENCE (Reg. & Applied)

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Lab safety 5.9.1.2 5.9.1.3 5.10.1.1 5.12.2.2	Lab reports Lab skills/group Scientific method Science math Basic Chemistry 5.12.1.1 2.10.1.3 5.9.1.1 5.13.1.1 5.13.1.30	Astronomy 5.10.2.2 5.10.2.1	Astronomy 5.10.2.2	Changing Surface of the Earth 5.10.2.4 5.11.1.1
<b>CONTENT</b>	Chemical safety Personal safety Electrical safety Fire safety	Scientific method Utilizing graphs Interpreting maps Lab reports Use of lab equipment	Solar system/planets Stars/constellations Exploration Earth/Moon/Sun		Minerals Rocks Landforms Maps Erosion Deposition
<b>SKILLS</b>	Prevent/respond to accidents Location/use of equipment	Map/graph analysis Practicing proper lab report format Daily use of scientific method Use of equipment	Identify/describe planets HR diagram Understand formation & function of stars Timeline of explorations How the Earth/Moon/Sun effect each other		Grow/ID crystals ID minerals/rocks Read maps ID landforms ID glacial deposits
<b>ASSESSMENT</b>	Lab safety test and contract signed	Lab reports Length, mass, density Performance Assessment	Diverse project ex. constellation mobile/newspaper Labs Traditional tests Exploration timeline	Planet Project Field Trip (Adler)	Labs Mineral/rock ID Test

**NOTES:**

## CURRICULUM MAPPING

**COURSE** EARTH SCIENCE (Applied)

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	Lab safety 5.9.1.2 5.9.1.3 5.10.1.1 5.12.2.2	Lab reports Lab skills/group Scientific method Science math 5.12.1.1 2.10.1.3 5.9.1.1 5.13.1.1 5.13.1.30	Astronomy 5.10.2.2 5.10.2.1	Astronomy Introduce weather & climate 5.10.2.2	Changing Surface of the Earth 5.10.2.4 5.11.1.1
<b>CONTENT</b>	Personal safety Electrical safety Fire safety Chemical safety	Use instruments Sci. method Graphing Collect, organize data Interpret data	Atoms/Matter Periodic table Minerals Rocks	Landforms Maps Weathering Soil Erosion forces	Erosion Gravity Ice Water Wind Processes that shape Earth
<b>SKILLS</b>	Prevent accident in labs Treat injuries	Use instruments Use sci. method Graphs-all types	Identify parts of atoms Density Periodic table Crystal formation Mineral identification	Identify landforms Mountain building processes Location/directions Scales Contour lines	Understanding gravity (mass wasting) Identify glacial deposits
<b>ASSESSMENT</b>	Safety test Labs	Performance assessment Length, mass, density Labs/reports	Labs Mineral/rock identification	Map work Diagram of landforms Diagram of soil profile Soil analysis	

**NOTES:**

## CURRICULUM MAPPING

**COURSE** EARTH SCIENCE (Reg & Appl.)

**INSTRUCTOR** \_\_\_\_\_

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	Internal process 5.10.2.0 5.10.2.10	→ 5.10.2.10	Earth's history 5.10.2.5 5.10.2.9	Oceanography 2.10.1.2	Weather & Climate 2.10.1.11 5.10.2.3
<b>CONTENT</b>	Earthquake Volcano	Plate tectonics	Earth history Evolution Fossils Rock Id. Aging of rocks	Currents Tides El Nino Erosion Life-ocean	Weather prediction Measurements (relative humidity, cloud types..) Climate patterns Extreme weather
<b>SKILLS</b>	Charts & diagrams Locate epicenter Triangulation Impact on climate/ communities/islands	→	Clues to interpret past Sort Forensic Inference Index or guide fossil Timelines Scale model	Charts & graphs Mapping Ocean floor map	Reading/interpreting/creating weather & climate maps Taking measurements Cloud type vs. meaning Key features/response to extreme weather
<b>ASSESSMENT</b>	Lab – locate CRT Tests	→ Labs on relationships between plate boundaries, earthquakes and volcanoes	CRT Labs Tests	CRT Labs Tests	Projects Labs CRT Test

**NOTES:**

## CURRICULUM MAPPING

**COURSE:** HORTICULTURE

**INSTRUCTOR** \_\_\_\_\_

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
<b>STANDARDS</b>	26.A.4e; 27.B.4a	31.B.42  12.A.4B	12.A.4B  25.A.4; 31.B.7	26.B.4d  25.A.4; 26.B.4d; 31.B.7	2B.4d; 25.a.4; 31.B.7; 27.A.4b 6.B.4; 31.B.39
<b>CONTENT</b>	<b>Unit I: History of Floral Design</b> Characteristics of major floral periods Modern design Examples of flowers & foliage per period Examples of containers per period Types of accessories	<b>Unit II: International Flower Market</b> Areas of floral production Importer/exporter Harvesting process Distribution process Packing process <b>Unit III: Plant Physiology</b> Flower & leaf anatomy Types of leaves & flowers Respiration, transpiration, photosynthesis Plant hormones & tropisms	<b>Unit IV: Care &amp; Handling of Flowers</b> Flower requirements Causes of deterioration Conditioning flowers Chain of Life <b>Unit V: Principles &amp; Elements of Design</b> Characteristics of design principles/elements Focal point 1 ½ to 2 times rule Balance Color harmonies	<b>Unit VI: Mechanics &amp; Tools in Design</b> Floral tools Types of containers, foams and adhesives <b>Unit VII: Design Corsages &amp; Boutonnieres</b> Wiring/taping techniques Types/sizes of ribbon Design mechanics of flowers to wear Design techniques— spraying, dying, accessories	<b>Unit VIII: Designing Basic Floral Work</b> Principles/elements of design Floral shapes Selection of flowers Steps in designing <b>Unit IX: Pricing Work</b> Effective buying practices Types of pricing methods Use of leader pricing
<b>SKILLS</b>	Identify period characteristics Identify past in modern styles Compare/contrast floral periods	Explain different roles Trace flower distribution Describe harvesting and shipping methods Identify flower & leaf types/arrangements Compare/contrast Photosynthesis & respiration Identify hormone effects	Describe floral needs Demonstrate proper care & handling of flowers Identify storage needs Explain Chain of Life Identify design principles/elements Illustrate proportion Critique floral design Identify color harmonies	Identify different types of foams Select appropriate container for a design Select appropriate cutting tools for work Demonstrate use of adhesives	Design single/multi flower bud vase Arrange dozen flowers Produce a design with each floral shape Identify design shapes Calculate prices using various methods Price an entire order Prepare a floral order
<b>ASSESSMENT</b>	Creation of a personal floral design style	Letter to president of Farm Direct  Visual aid for plant science students	Visual aid for customers about conditioning tips  Floral design critique	Summary of container characteristics  Dr. Seuss competition	Design reflection  Price justification

**NOTES:** - <sup>1</sup>Revised 12/07

## CURRICULUM MAPPING

**COURSE:** HORTICULTURE


**INSTRUCTOR** \_\_\_\_\_

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
<b>STANDARDS</b>	26.B.4d; 31.B.7  27.A.4a; 6.B.4	25.A.4; 27.A.4a  26.A.4e	25.A.4; 25.a.5; 26.A.4e; 12.A.4b	25.A.4	6.B.4; 6.C.4; 12.A.4b; 25.A.4; 26.A.4e 12.A.4b; 12.A.5a
<b>CONTENT</b>	<b>Unit I: Landscape Design</b> Careers in landscaping Purpose of design Benefits of landscaping <b>Unit II: Analyzing the Residential Landscape</b> Difference between plans Tools used in design Difference between views Soil texture & structure Native vs. ornamental plants Architect's scale	<b>Unit III: Designing the Landscape</b> Areas of residential landscape Elements of areas Rules applied to public & private areas Points of emphasis <b>Unit IV: Starting with a Plan</b> Bed patterns Goose egg plan Deciduous vs. evergreens Effect of tree location	<b>Unit V: Selecting Plants</b> Different types of plants Annual, biennial, perennial Naming of plants Hardiness zones Use of flowers & shrubs Common landscape plants Landscape symbols	<b>Unit VI: Applying Principles of Art</b> Principles of design Characteristics of design qualities Use of design qualities Examples of design principles in landscapes	<b>Unit VII: Landscape Construction</b> Interpret landscape plan Types of tools Steps for improving beds Harvesting techniques Planting methods Elements of plant growth <b>Unit VIII: Landscape Maintenance</b> Plant physiology Watering practices Types of fertilizers & mulches Pest controls
<b>SKILLS</b>	Describe various careers within the industry Identify benefits of landscaping Describe differences between plans and views Use an architect's scale Compare/contrast micro and macroclimate Complete site analysis	Identify activities in each design area List rules of design for each landscape area Highlight areas of interest Draw goose egg plans Apply bed patterns Place trees appropriately	Identify a variety of local plant material Describe ways plants enhance the landscape Use a scale & compass to draw plant symbols Describe difference between annuals, etc Select appropriate plants for residential design	Explain principles of design Explain impact of line & form in a design Describe how texture & color affect the design	Identify components of plan Describe ways to amend soil structure & nutrient Compare/contrast harvest methods Identify tools Identify/describe watering & mulching techniques Recognize need for pruning Describe types of pest controls Describe types of turf
<b>ASSESSMENT</b>	Personal critique of knowledge & skills  Site analysis of school entrance	Public area critique  Goose egg and bed pattern plan	Resource list of plant types	Base plan design for major project	Symptom awareness  Landscape maintenance plan

## CURRICULUM MAPPING

**COURSE:** PLANT SCIENCE

**INSTRUCTOR** \_\_\_\_\_

	<b>AUGUST</b>	<b>SEPTEMBER</b>	<b>OCTOBER</b>	<b>NOVEMBER</b>	<b>DECEMBER</b>
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>▪ Safety</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plant taxonomy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plant taxonomy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Soils</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plant growth factors (part 1)</li> </ul>
<b>CONTENT</b>	<ul style="list-style-type: none"> <li>▪ Proper use of lab equipment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Taxa categories</li> <li>▪ Leaf, stem, root anatomy</li> <li>▪ Monocot vs. dicot</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fruit &amp; seed anatomy</li> <li>▪ Plant cells &amp; mitosis</li> <li>▪ Plant tissues</li> </ul>	<ul style="list-style-type: none"> <li>▪ Soil texture, properties &amp; analysis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Soil testing &amp; recommendations.</li> <li>▪ Chemistry of soil and fertilizers</li> </ul>
<b>SKILLS</b>	<ul style="list-style-type: none"> <li>▪ TLW correctly respond to emergency situations and properly use laboratory equipment</li> </ul>	<ul style="list-style-type: none"> <li>▪ TLW use dichotomous key to correct id unknown plant species.</li> </ul>	<ul style="list-style-type: none"> <li>▪ TLW correctly use a microscope to analyze plant cells and tissue types.</li> <li>▪ TLW identify structures and functions of plant parts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ TLW collect a soil sample, prepare a profile, determine % of composition, then use a soil triangle to determine soil texture.</li> <li>▪ TLW identify structures and functions of plant parts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ TLW analyze a soil sample and recommend what will improve soil texture.</li> </ul> <div style="text-align: center;">  </div>
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>▪ Lab Safety Practical</li> <li>▪ Lab practical using basic laboratory equipment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Laboratory quizzes—</li> <li>1. Plant Taxa</li> <li>2. Leaves, Stems &amp; Roots.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lab Practicals—</li> <li>1. Flower &amp; Fruit Id</li> <li>2. Cell Structures</li> <li>3. Tissue Id</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lab Practical</li> <li>▪ Soil Profile</li> <li>▪ Determine % of Composition</li> <li>▪ Analysis of Soil</li> <li>▪ Sample to determine pH, N, P, &amp; K Levels</li> </ul>	

**NOTES:**

## CURRICULUM MAPPING

**COURSE PLANT SCIENCE**

**INSTRUCTOR \_\_\_\_\_**

	<b>JANUARY</b>	<b>FEBRUARY</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>▪ Plant Growth Factors II</li> </ul>	<ul style="list-style-type: none"> <li>▪ Biological Interactions</li> <li>▪ Interior Landscaping</li> </ul>	<ul style="list-style-type: none"> <li>▪ Interior Landscaping</li> <li>▪ Plant Propagation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plant Propagation</li> <li>▪ Biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>▪ Biotechnology</li> <li>▪ Turf grass Landscaping Careers</li> </ul>
<b>CONTENT</b>	<ul style="list-style-type: none"> <li>▪ Diffusion &amp; Osmosis</li> <li>▪ Effects of light, temperature, moisture on plant growth</li> <li>▪ Transpiration</li> <li>▪ Photo periodism</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weed ID</li> <li>▪ Weed Control</li> <li>▪ Life cycles of common weeds</li> <li>▪ Plant hormones</li> <li>▪ Insects &amp; plant disease</li> </ul>	<ul style="list-style-type: none"> <li>▪ ID common houseplants</li> <li>▪ Transplanting (proper)</li> <li>▪ Indoor lighting</li> <li>▪ Disease of common houseplants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Genetics</li> <li>▪ Meiosis</li> <li>▪ Vegetative vs. sexual plant propagation (cloning)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Types of grasses</li> <li>▪ Maintenance techniques</li> <li>▪ Jobs in the industry</li> </ul>
<b>SKILLS</b>	<ul style="list-style-type: none"> <li>▪ TLW be able to describe the nature of light and its effect on plant growth.</li> <li>▪ TLW list the role of water in plants including transpiration, osmosis &amp; diffusion</li> </ul>	<ul style="list-style-type: none"> <li>▪ TLW be able to describe the nature of light and its effect on plant growth.</li> <li>▪ TLW list the role of water in plants including transpiration, osmosis &amp; diffusion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Propagate different houseplants</li> <li>▪ Identify light/water requirements of houseplants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tissue culture technique</li> <li>▪ Propagate plants sexually and asexually</li> </ul>	<ul style="list-style-type: none"> <li>▪ ID different grasses</li> <li>▪ Knowledge of proper turf grass maintenance</li> </ul>
<b>ASSESSMENT</b>	<p>Lab Exercises:</p> <ul style="list-style-type: none"> <li>▪ Osmosis &amp; Diffusion</li> <li>▪ Effects of light on plant growth (photoperiodism &amp; phototropism)</li> </ul>	<p>Lab Practical</p> <ul style="list-style-type: none"> <li>▪ Weed ID</li> <li>▪ Diseases of common plants</li> <li>▪ Insect ID matched with disease</li> <li>▪ TLW recommend disease prevention method</li> </ul>	<p>Lab Practical</p> <ul style="list-style-type: none"> <li>▪ ID 12 common houseplants</li> <li>▪ ID common diseases of houseplants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Graph data &amp; analyze</li> </ul>	<ul style="list-style-type: none"> <li>▪ ID different grasses</li> </ul>

**NOTES:** \*\*Optional Units: 1) Floral Design, 2) Oleiculture (vegetable production), 3) Agronomy.