

## Syllabus: Chemistry 33 Weeks

Teacher: Mark Campbell

### Text:

Text for the course is *EXPLORING CREATION WITH CHEMISTRY* published by Apologia, 3rd edition (ISBN 9781940110257) plus articles and excerpts from other sources as may be assigned by the teacher.

<u>Week</u>	<u>Unit</u>	<u>Topic</u>
1-2	1	Introduction, Measurement, Units, The Scientific Method, Labs & Reports
3	2	Atoms & Molecules
4-7	3-5	Atomic Structure, Molecular Structure, Polyatomic Ions & Molecular Geometry
8-9		Review & Test 1
10-11	6	Changes In Matter & Chemical Reactions
12-13	7	Describing Chemical Reactions
14-15	8	Stoichiometry
16-17		Review & Test 2
18-19	9	Acid/Base Chemistry
20-21	10	The Chemistry Of Solutions
22-23	11	The Gas Phase
24-25		Review & Test 3
26-27	12	Energy, Heat, & Temperature
28-30	TBD	Select From Remaining Topics: 13/Thermodynamics, 14/Kinetics, 15/Equilibrium, 16/Redox Reactions
31-32		Review & Test 4
33		Last Class

**This 33 week course will meet for 1.5 hours/week.**

Certain labs will be incorporated into class time or an entire class may be devoted to lab work. There will typically be weekly homework which may include chapter questions and/or an assigned lab report. Four tests are anticipated. The teacher may change the schedule and revise, add, or eliminate topics based on the needs of the class.

### **Required Tools & Supplies**

Calculator with square root and basic trig functions (sine, cosine, tangent)

Ruled transparent straightedge, about 12" long (English + Metric is best)

Notebook & lab notebook for the class (tear-out spiral bound for labs is NOT OK)

Mechanical Pencil (recommend 0.7mm or 0.5 mm)

Optional: Drawing Triangle (30-60-90 or 45-45-90, about 6" long)