



**Robert W. Helmick-I.B. CHEMISTRY I**  
**SYLLABUS 2007-08**

PRIMARY TEXT: **MODERN CHEMISTRY**- DAVIS, FREY, SARQUIS, & SARQUIS  
SUPPLEMENTAL TEXTS: 1) **CHEMISTRY WILBRAHAM**, STALEY, MATTA, & WATERMAN  
2) **SOLVING PROBLEMS IN CHEMISTRY**; SMITH, **HIMES**, SMOOT.

**TOPICS**

Topic Number- See Last Column for PCSB Sequence	Topic	Chapter- TEXT- (Wilbraham)	Chapter NEW TEXT- MODERN CHEMISTRY (Davis)	Chapter- (Himes)	SUNSHINE STATE STANDARDS	Homework (D)-Davis (H)-Himes-Odd Problems	Required Days/Sequence Number
1	Chemical Math, Measuring & Calculating	1, 3, 4, (9)	1,2 MATH TUTOR (SPECIAL SECTION IN CHAPTER)	1, 2 + (Extra Guide) +APPENDIX B (SUPP)	SCH 1.4.1.-SCH 1.4.7.	Chapter 1 (Page 25); Q 1-13  Math Tutor (pages 24, 62, 92, 256, & 295)	Essential Science Skills-15 days (1)
2	Chemistry Skills, Energy and Matter	2	1,2	3	SCH 2.4.1., 2.4.2.	Chapter 2 (Pages 59-61) Q 4-23; 47-51	Essential Science Skills-15 days (1)
3	Atomic Structure	5	3	7	SCA 1.4.1, SCA 1.4.3 SCA 2.4.1., 2.4.3., 2.44	Chapter 3 (Pages 89-91) Q 1-31	Atomic Structure- 15 days (2)
3	Electron Configurations	5, 13	4	8	SCA 1.4.1., SCA 2.4.1.	Chapter 4 (Pages 124-126) 1-41	Atomic Structure- 15 days (2)



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4	Groups of Elements, The Periodic Table; The Periodic Law	5, 14, 24	5	9,10, 11	SCA 2.4.5.	(D)-Even Assigned Prolems	Periodicity-10 days (3)
5	Chemical Formulas and Bonding	6,7,9, 15, 16	6,7	4,12	SCA 1.4.2.- 1.4.5. SCC 2.4.2.- 2.4.5.	(D)-Even Assigned Prolems	Bonding-15 days (4)
5	The Mole	7	3,8,9	5	SCA 2.4.5.	(D)-Even Assigned Prolems	Moles-15 days (5)
6	Molecular Shape	15,16 (Bond)	6	13	SCA 1.4.2.	(D)-Even Assigned Prolems	Bonding-15 days (4)
6	Chemical Reactions and Equations	8	8	6	SCA 2.4.2. SCB 1.4.2.	(D)-Even Assigned Prolems	Chemical Equations-20 days (6)
6	Stoichometry: The Mathematics of Chemical Equations	9	9	6	SCA 2.4.2. SCB 1.4.2.	(D)-Even Assigned Prolems	Stoichiometry-20 days (7)

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12	Heat in Chemical Reactions	11	17	15, 20	SCB 1.4.1. SCB 1.4.2. SCA 1.4.4.	(D)-Even Assigned Prolems	Chemical Equations – 20 days (6)
7	Gases & Laws	12	11 (10)	18, 19	SCB 1.4.3.	(D)-Even Assigned Prolems	Gases – 15 Days (8)
8	Liquids and Solids		10	16, 17	SCA 1.4.3.	(D)-Even Assigned Prolems	Changes of State – 15 days (9)
9	Water, Solutions	17, 18	12	21, 22	SCA 1.4.2.	(D)-Even Assigned Prolems	Solutions – 20 days (10)
10-11	Acids and Bases	20, 21	15	24	SCA 1.4.2.	(D)-Even Assigned Prolems	Acids and Bases- 11 Days (11)
10-11	Equilibrium	19	18	23, 25	SCA 1.4.4., SCG 2.4.2.	(D)-Even Assigned Prolems	Chemical Equations – 20 days or not included (6)
13	Oxidation and Reduction	22, 23	19	26, 27	SCA 2.4.2. , SCB 1.4.2.	(D)-Even Assigned Prolems	Organic/REDOX – 10 days (12)
13	Electrochemistry	23	20	27	SCC 2.4.2., SCC 2.4.5.	(D)-Even Assigned Prolems	Not Included in Outline
14	Nuclear Chemistry	28	21	28	SCA 2.4.3., SCC 2.4.4.	(D)-Even Assigned Prolems	Not included in Outline

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15	Organic Chemistry	25, 26	22	29	SCA 2.4.5., SCA 1.4.2.	(D)-Even Assigned Problems	Organic/REDOX- 10 days (12)
16	Chemistry of Life	27	23	30	SCA 2.4.5., SCA 1.4.2.	(D)-Even Assigned Problems	Not Included in Outline