

## CHEMISTRY SYLLABUS 2011-2012

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**In the beginning God created... All things were made through Him. Nothing was made without Him. There are things about God that people cannot see – His eternal power and all the things that make Him God. But since the beginning of the world those things have been easy to understand. They are made clear by what God has made... It is by faith that we understand that the whole world was made by God's command. This means that what we see was made by something that cannot be seen. (Gen 1:1; John 1:3; Rom 1: 20; Heb 11:3) [International Children's Bible]**

### **I. Course Objectives:**

- A. Increase in wisdom and revelation knowledge of the Divine Creator
- B. Know and understand chemistry and chemical principals
- C. Master the Scientific Method of investigating
- D. Be reminded of the fact that:
  1. There is a purpose for **YOUR** existence
  2. God has made provision for **YOUR** purpose
  3. God has empowered **YOU** for greatness

### **II. Course Outline:**

- A. First Nine Weeks: Chapters 1-5
- B. Second Nine Weeks: Chapters 6-9
- C. Third Nine Weeks: Chapters 10, 12-13
- D. Fourth Nine Weeks: Chapters 14, 16, 18

### **III. Course Requirements:**

- A. Required Texts: *Chemistry, BJU press 3rd Edition*
- B. Supplies: Calculator

### **IV. Course Grading System:**

- A. Classwork/Homework – 15%
- B. Laboratory Reports and Special Projects – 20%
- C. Quizzes – 20%
- D. Tests – 45%

**V. Course Expectations:**

- A. Homework policy – Homework assignments will receive a grade of 100 if turned in on time. If an assignment is incomplete or not turned in, it will receive a grade of 0. If the assignment is turned in completed when the class meets again, the grade will be changed to a 50.
- B. Extra Credit work – No extra credit for students who have chosen not to attend class, not to participate in class, not to study or do homework, nor perform well on tests.
- C. Final Exam – The final exam will be comprehensive and will count for 20% of the final grade.
- D. Make-up – Quizzes will not be made up. Excused absences on a test day will allow a make-up test.
- E. Prompt and Prepared – Students are graded on being on time, and being prepared (having needed supplies and assignments) before class starts.
- F. Expect a QUIZ daily!

# Chemistry Syllabus

## First Semester

### First 9 Weeks

Week 1:	Ch 1: Foundations of Chemistry
Week 2:	Ch 2: Matter
Week 3:	<u>Test 1</u> and Ch 3: Measuring and Calculating
Week 4:	Ch 3: Measuring and Calculating
Week 5:	Ch 3: Measuring and Calculating Review
Week 6:	<u>Test 2</u> and Ch 4: Atomic Structure
Week 7:	Ch 4: Atomic Structure
Week 8:	Ch 5: Elements
Week 9:	Ch 5: Elements and <u>Test 3</u>

### Second 9 Weeks

Week 10:	Ch 6: Chemical Bonds
Week 11:	Ch 7: Bond Theory and Molecular Geometry
Week 12:	<u>Test 4</u> & Ch 8: Chemical Composition and Reactions
Week 13:	Ch 8: Chemical Composition and Reactions
Week 14:	Ch 8: Chemical Composition and Reactions
Week 15:	<u>Test 5</u> and Ch 9: Chemical Calculations
Week 16:	Ch 9: Chemical Calculations
Week 17:	Ch 9: Chemical Calculations
Week 18:	Semester Exam: Ch 1-9 and <u>Mole Project</u>

# Chemistry Syllabus

## Second Semester

### Third 9 Weeks

Week 19: Ch 10: Gases

Week 20: Ch 10: Gases

Week 21: Test 6 and Ch 12: Solutions

Week 22: Ch 12: Solutions

Week 23: Ch 12: Solutions

Week 24: Test 7 and Ch 13: Chemical Thermodynamics

Week 25: Ch 13: Chemical Thermodynamics

Week 26: Ch 13: Chemical Thermodynamics

Week 27: Ch 13 cont'd and Test 8

### Fourth 9 Weeks

Week 28: Ch 14: Chemical Kinetics

Week 29: Ch 14: Chemical Kinetics

Week 30: Test 9 & Ch 16: Acids, Bases and Salts

Week 31: Ch 16: Acids, Bases and Salts

Week 32: Ch 16: Acids, Bases and Salts

Week 33: Test 10 and Ch 18: Organic Chemistry

Week 34: Ch 18: Biochemistry

Week 35: Chemistry Course Review

Week 36: Final Comprehensive Exam

