**U.S. INTERNATIONAL CHRISTIAN ACADEMY**

**

**is an independent, international autonomous global high school institution**

Serving students since 2001

***Owned and Operated by Teachers***

*25 years of experience in Teaching and Administration*

[**www.USICAhs.org**](http://www.USICAhs.org)

[**admin@USICAhs.org**](mailto:admin@USICAhs.org)

****

****

**http://www.usicahs.org/Library.html**

**http://www.usicahs.org/Curriculum.html**

|  |  |  |  |
| --- | --- | --- | --- |
| **USICA Course Outline/Syllabus** | | | |
| **Grade/Course: CHEMISTRY I 2003340** | | | |
| **Grade Level:** 12thHigh School | | | |
| **A)TEXT BOOK: CHEMISTRY REVISED 5 EDITION STUDENT EDITION 2002C [Hardcover]ADDISON WESLEYPRENTICE HALL (Author)**  **ISBN-10: 0130543845 | ISBN-13: 978-0130543844** | | | |
|  | | | |
|  | | | |
| **Order No.:** 1 |  | **Code:**CHE2003 | **Class Type:**Online |
| **Resources:**  Text book  Teacher works CD Teacher interactive online  Links |  |  | **Instructional Supports:**  Textbook, Magazines, Journals, Websites Links, Conference, Comprehensive Reading Plan |
| Sky Conference |  | **Length:** 1 year |  |
| **Area:**Science |  | **Credits:** 1 | **Total Numbers of class hours**:300 hrs |
| **Type:** Mandatory |  | **Standards:**  Florida Sunshine State Standards | **Prerequisite:**  Students must have successfully passed a Science class in middle/high school. |
|  |  |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| |  | | --- | | **B) Description:** | | |
| This one-year course of emphasizes the study of the properties and nature of matter and energy. This course explores the periodic table, chemical bonding and including chemical equations, reaction kinetics, and the processes of reactions.This course offers a solid understanding of the fundamentals concepts of chemistry. Problem solving is presented logically one step at a time. | |

|  |  |  |
| --- | --- | --- |
| |  | | --- | | **C) Objectives:** | | |
| 1. To develop in all students an appreciation and solutions to all types of Chemistry based interactions and problems. 2. topromote in all students an introduction to the study of Chemistry. 3. to promote the technology tools designed to inspire today’s chemistry students. | |
| **D) Contents** | |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| Chapter 1 Introduction to Chemistry  Chapter 2 Matter and Change  Chapter 3 Scientific Measurement  Chapter 4 Problem Solving in Chemistry  Chapter 5 Atomic Structure and the Periodic Table  Chapter 6 Chemical Names and Formulas  Chapter 7 Chemical Quantities  Chapter 8 Chemical Reactions  Chapter 9 Stoichiometry  Chapter 10 States of Matter  Chapter 11 Thermochemistry Heat and Chemical Change  Chapter 12 The Behavior of Gases  Chapter 13 Electrons in Atoms  Chapter 14 Chemical Periodicity  Chapter 15 Ionic Bonding and Ionic Compounds  Chapter 16 Covalent Bonding  Chapter 17 Water and Aqueous Systems  Chapter 18 Solutions  Chapter 19 Reaction Rates and Equilibrium  Chapter 20 Acid and Bases  Chapter 21 Neutralization  Chapter 22 Oxidation- Reduction Reactions  Chapter 23 Electrochemistry  Chapter 24 The Chemistry of Metals and Nonmetal  Chapter 25 Hydrocarbon Compounds  Chapter 26 Functional Groups and Organic Reactions  Chapter 27 The Chemistry of Life  Chapter 28 Nuclear Chemistry | |  |  |
|  |  | |  |
|  |  | |  |
|  |  | |  |

**E. Methodology**

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | **E)Academic Methodology:** | |  | | |
| Tests | 30% |
| Writing Reports | 20% |
| |  | | --- | | Homework | | 5% |
| Class Work | 20% |
| |  | | --- | | Reading Assignment | | 25% |

|  |  |
| --- | --- |
| **F) Book Reference:** | |
|  |
|  |

1.Chemistry: Concepts and Problems: A Self-Teaching Guide (Wiley Self-Teaching Guides) [Paperback]

Clifford C. Houk and Richard Post (Authors)

2.Homework Helpers: Chemistry [Paperback] Greg Curran (Author)

3.Chemistry [Hardcover] by Steven S. Zumdahl (Author)

4.Chemistry, Grades 9 - 12 (The 100+ Series) Paperback – January 15, 1999 by Joan Distasio (Author)

**H) Web Reference:**

[**www.acs.org**](http://www.acs.org)

[**www.Chemistry.com**](http://www.Chemistry.com)

[**www.chemistry24.com**](http://www.chemistry24.com)

[**www.sciencespot.net/Pages/kdzchem.html**](http://www.sciencespot.net/Pages/kdzchem.html)

[**www.chemtopics.com/links.htm**](http://www.chemtopics.com/links.htm)

[**www.iv.ac.uk/Chemistry/Links/links.html**](http://www.iv.ac.uk/Chemistry/Links/links.html)

[**www.tvmuse.eu/tv-shows/Chemistry\_26950**](http://www.tvmuse.eu/tv-shows/Chemistry_26950)

[**www.chem.ucla.edu/chempointers.html**](http://www.chem.ucla.edu/chempointers.html)

[**www.chemtopics.com/wwwchem.htm**](http://www.chemtopics.com/wwwchem.htm)

[**www.101science.com/Chemistry.htm**](http://www.101science.com/Chemistry.htm)

**I. Journals:**

American Scientist

Science

Scientific American

Chemistry Today

**J.Magazines:**

Smithsonian magazine, published by the Smithsonian Museum

American Scientist magazine

Discover magazine

**K.Organizations**

Science Foundation

National Chemistry Association

Association of Chemistry Teachers

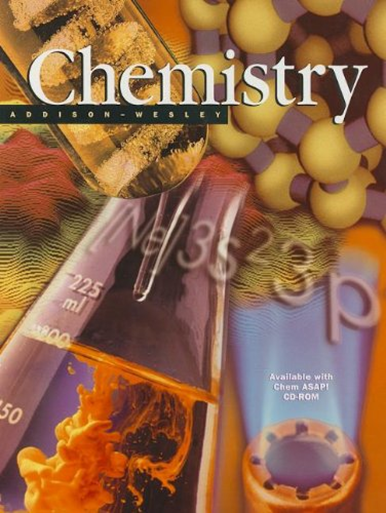
**M. Comprehensive Reading Plan**

Students are required to read at least 1 book or their equivalent during each class

as independent reading at-home. Students must also read for 30 minutes at home as part of their daily homework assignment in all subjects. Check your Class Reading Assignment at [www.USICAhs.org/CURRICULUM](http://www.USICAhs.org/CURRICULUM) and check free ebooks at [www.openlibrary.org](http://www.openlibrary.org) .

**Text Book Description**

Publication Date: February 1, 2001 | ISBN-10: 0130543845 | ISBN-13: 978-0130543844 | Edition: 5th. The #1 choice for high school Chemistry



**ACADEMIC MISCONDUCT:**

Academic misconduct includes cheating (using unauthorized materials, information, or study aids in any academic exercise), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any and all other actions that may improperly affect the evaluation of a student’s academic performance or achievement, or assisting others in any such act or attempts to engage in such acts. Academic misconduct in any form is inimical to the purposes and functions of the school and therefore is unacceptable and prohibited.

Any faculty member, administrator or staff member may identify an act of academic misconduct and should report that act to the department head or administrative supervisor.

Students violating the standards of academic honesty are subject to disciplinary action including reduction of a grade(s) in a specific course, assignment, paper, or project; a formal or informal reprimand at the professorial, dean, or academic vice president level; expulsion from the class in which the violation occurred; expulsion from a program; or expulsion from the school.

U.S. International Christian Academy © 2013

**Revised on JUNE 21, 2013 USICA Copyright**