Chemistry 101 – General Chemistry (0463 and 0465)
Lecture TTh 8:00 am – 9:30 am Room SCC-150
Lab TTh(0463) 10:00 am – 1:00 pm Room SCC-320 (Arias)
Lab TTh(0465) 7:00 pm – 10:00 pm Room SCC-318 (Latifzadeh)

Instructor: Dr. Arias
Phone: (310) 233-4511
Office: SCC-259
E-mail: ariasjj@lahc.edu

Course Webpage: www.lahc.edu/classes/chemistry

Textbooks and Supplies:
LA Harbor Laboratory Manual (available on course webpage)
Laboratory Notebook (with duplicate sheets)
Laboratory safety glasses/goggles
Scientific Calculator (non-programable)
**Chemistry Materials Fee ($10 paid for at the bookstore by the end of the second week).

Prerequisites: Satisfactory completion (C or better) of Chemistry 065 or the equivalent and Math 123C. Eligibility for English 101 or concurrent enrollment in English 28.

Course Description: This course is a 5 unit course transferable to both the UC and CSU systems. The topics covered will include the following: physical measurements, atomic theory, stoichiometry, chemical reactions, quantitative analysis, gas laws, thermochemistry, quantum theory, electron configuration, chemical periodicity, molecular bonding, VSEPR theory, valence bond theory, molecular orbital theory, states of matter, and solutions.

Grading: 
<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Homework</td>
<td>50</td>
</tr>
<tr>
<td>Laboratory</td>
<td>200</td>
</tr>
<tr>
<td>Quizzes</td>
<td>50</td>
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<tr>
<td>Exams</td>
<td>300</td>
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<tr>
<td>Final</td>
<td>200</td>
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<tr>
<td>Total</td>
<td>800</td>
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Scale: A 90 – 100%
B 80 – 89%
C 70 – 79%
D 60 – 69%
F 0 – 59%

Homework: 10 homework assignments will be collected during the semester. Each homework assignment is worth 5 points. Late homework will be accepted for half credit. A student solution manual is available at the library reference desk or for sale in the bookstore (limited supplies).

Quizzes: There will be 7 quizzes during the semester. The lowest 2 scores will be dropped. No make-up quizzes will be given. The solutions will be posted on the course webpage.

Exams: There will be 3 examinations given during the semester. Each exam will be worth 100 points. No make-up exams will be given unless you have proof of a medical emergency. The exam dates are: Exam 1 (3/13), Exam 2 (4/24), Exam 3 (5/22).

Final: The final examination is worth 200 points and is cumulative. You must take the final examination to receive credit for the class. June 3, 8:00 – 10:00 am.
Course Syllabus

Course Content:

Chapter 2. Atoms and Elements.
Chapter 3. Molecules, Compounds, and Chemical Equations.
Chapter 4. Chemical Quantities and Aqueous Reactions.
Chapter 5. Gases.
Chapter 6. Thermodynamics.
Chapter 7. Quantum Mechanics.
Chapter 8. Electron Configuration.
Chapter 10. Valence Bond and Molecular Orbital Theory.
Chapter 11. Liquid, Solids, and Intermolecular Forces.
Chapter 12. Solutions.

Academic Dishonesty: Cheating and or plagiarism will result in an F for the assignment and may result in an F grade for the course. The dishonest student may then be reported to the administration for further disciplinary action. All forms of communication with others are considered cheating during an exam. Cell phones, text messengers, and programmable calculators may not be used during an exam. http://www.lahc.edu/classes/Academic_Policy.html

Attendance Policy: It is the responsibility of the student to attend lectures and labs. Failure to attend lecture may result in zeros on homework, quizzes, and exams due on those days. Failure to report to lab may result in no credit for the course. Attendance is worth 5 points per day for each lab session. Showing up late or leaving before the experiment is complete will result in a loss of points.

Laboratory: In order to pass the class, you must complete all laboratory assignments with a satisfactory score. Failure to pass the laboratory with a C or better will result in an F for the class. Bring safety glasses/goggles and closed toed shoes to every lab section. Lab fee covers breakage/lost equipment plus on-line laboratory manual.

Bring a laboratory notebook (with duplicate pages) to each lab session. Leave the first few pages for a table of contents. The table should include the title of the experiment and the page number of the experiment. The lab notebook will include all pre-lab and raw data. One copy of the pre-lab assignment will be turned in to the lab instructor at the end of lab for each new experiment. A copy of the raw data will also be collected at the conclusion of each experiment.

Pre-lab: The pre-lab assignment should be completed before each new lab. The pre-lab should contain your name, date, title of the experiment, experiment objective, and flow-chart. The pre-lab will be signed at the beginning of each new lab.

Lab Data: At the conclusion of each lab period, the instructor will sign the raw data collected that day. Unsigned data will not receive credit. Data should include the title of the experiment and the date. The proper units for all measurements should also be included.

Lab Reports – Laboratory reports will be typed using a word processor (Word). All graphs must be done with an appropriate graphing program (Excel).