COURSE SYLLABUS

**Chemistry**

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| Instructor’s Name: Dr.Saadi  Office Hours: By appointment  Email: saadiChanez76@hotmail.fr |
| **Course Description**  This course covers fundamental principles and laws of chemistry. Topics include measurement,  atomic and molecular structure, periodicity, chemical stoichiometry, covalent bonding chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of the fundamental chemical laws and concepts as needed in CHM 152. Laboratory experiments and computer-based exercises augment and reinforce the basic principles discussed in lecture as well as provide practical examples. |
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| **Textbook, Readings and Additional Sources**  General and organic chemistry Mourad Amara  Chemistry the central science , 10th edition Theodore L.Brown H. Eugene LeMay, Jr and Bruce E. Brusten.  Chemistry the central science , 12th edition Theodore L.Brown H. Eugene LeMay, Jr and Bruce E. Brusten. | | | |
| **Course Outline** | | | |
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| **Topic** | **Chapter** | **Tentative Hours** | |
| Atoms, compounds and Ions | 1 (1.1-1.7) | 2 | |
| Chemical Formulas and Equations | 2 (2.1 – 2.6) | 3 | |
| Aqueous solutions and reactions | 3 (3.1 – 3.3) | 3 | |
| Periodic table and its properties | 4 (4.1 – 4.5) | 4.5 | |
| Molecular structures and orbitals | 4( 4.6-4.9) | 3 | |
| Chemical bonds : covalent vs ionic | 1. (5.1 – 5.3) 2. (6.1) | 4.5 | |
| The geometry of molecules and chemicals bonds | 7 (7.1 – 7.4 & 7.6) | 3 | |
| The electronic structure of atoms and molecules | 8 (8.1 – 8.5) | 3 | |
| Gasses, liquids and solids | 9 (9.1 – 9.8) | 4.5 | |
| **Assessment and Attendance policy**  *Your grade for the course will be based on your homework, quizzes, midterm and final exam scores.*     1. Class Performance and Assignments\* 10% 2. Two Mid-term Exams\*\* 60% 3. Final Exam 30% 4. Quizzes (bonus) 5%   ***Total 100% + 5%BONUS***    \**The lowest 2 homework scores will be dropped.*  *\*\*The highest and lowest midterms will account for 45% and 15% of the total grade respectively.*    **1. Class Performance and Assignments (10%)**     * students are expected to attend class **ON TIME** and to maintain an orderly conduct throughout the class. Classroom doors will be closed once I am in and latecomers will **NOT** be allowed in. Students may not normally receive credit for a course if more than **three weeks** of classes are missed. * Students are encouraged to actively participate in class discussions. | | | |
| Each professor will be responsible for scheduling his/her homework. This means that the assignments will appear to students on certain dates and a due date will be given for students to submit their solutions online.   1. **Mid-term Examinations (60%)**     Midterm 1  Saturday, March 4th – 10:00 to 11:15  Midterm 2  Saturday, April 1st – 10:00 to 11:15  **Final Examination (30%)**    Time and location to be announced through the University     1. **Quizzes (5% - BONUS)**     Pop-quizzes will be given randomly covering material discussed in class. | | | |